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ABSTRACT

This individualized transition plan manual can be used by special and vocational educators in developing a curriculum plan for handicapped or special needs learners based on career goals and job selection. The introductory sections provide a description of the individual transition planning model, an outline of communication skills, and a list of definitions. Individual planning sections are given for 18 curriculum areas: horticulture, apparel assembly, carpentry, food service, plumbing, masonry, sales, cosmetology, electrical, welding, graphic arts, machine tools, scientific data processing, automotive mechanic, residential construction, refinishing and upholstery, computer maintenance and repair, and diesel and heavy equipment maintenance. Each planning section includes an individualized transitional preparation form; check lists for competency in job, safety, mathematics, and vocabulary skills; and a curriculum planning form. (KC)

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ED 330 868

Title: A Vocational/Special Education Individualized Transitional Planner
(School to Work)

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PREFACE

This Transitional Planner is the result of funding from the Bureau of Vocational and Adult Education, Dept. of Education, Harrisburg, Pa. Twelve of eighteen vocational occupational areas were developed from a direct grant from the Bureau to Bloomsburg University. However, six of the vocational areas were the fruition of a cooperative agreement with Temple University, Dept. of Curriculum Instruction Technology in Education, Center for Vocational Personnel Preparation. Dr. Richard Adamsky, Center Director, and Dr. Edward Brower, Coordinator of Inservice Activities, at Temple University articulated this cooperative agreement. Temple University and Bloomsburg University have for several years collaborated in the delivery of special needs services in the Temple University service area. The six additional vocational areas will increase the educational usefulness of the Planner and is the effect of this coadunate fiscal support by the Vocational Professional Development Center at Temple University.

This Planner represents a partnership between Temple University and Bloomsburg University. It will be used in conducting workshops, short-term inservice and consultations with school districts. Its purpose is to modify vocational and special education curriculum and provide a more effective transition from school to work for special needs learners. The following vocational-technical schools should be recognized for their participation in the development of the Planner: Hazleton Area Vo-Tech School, Columbia/Montour Vo-Tech School, and Wilkes-Barre Area Vo-Tech School.

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MANUAL

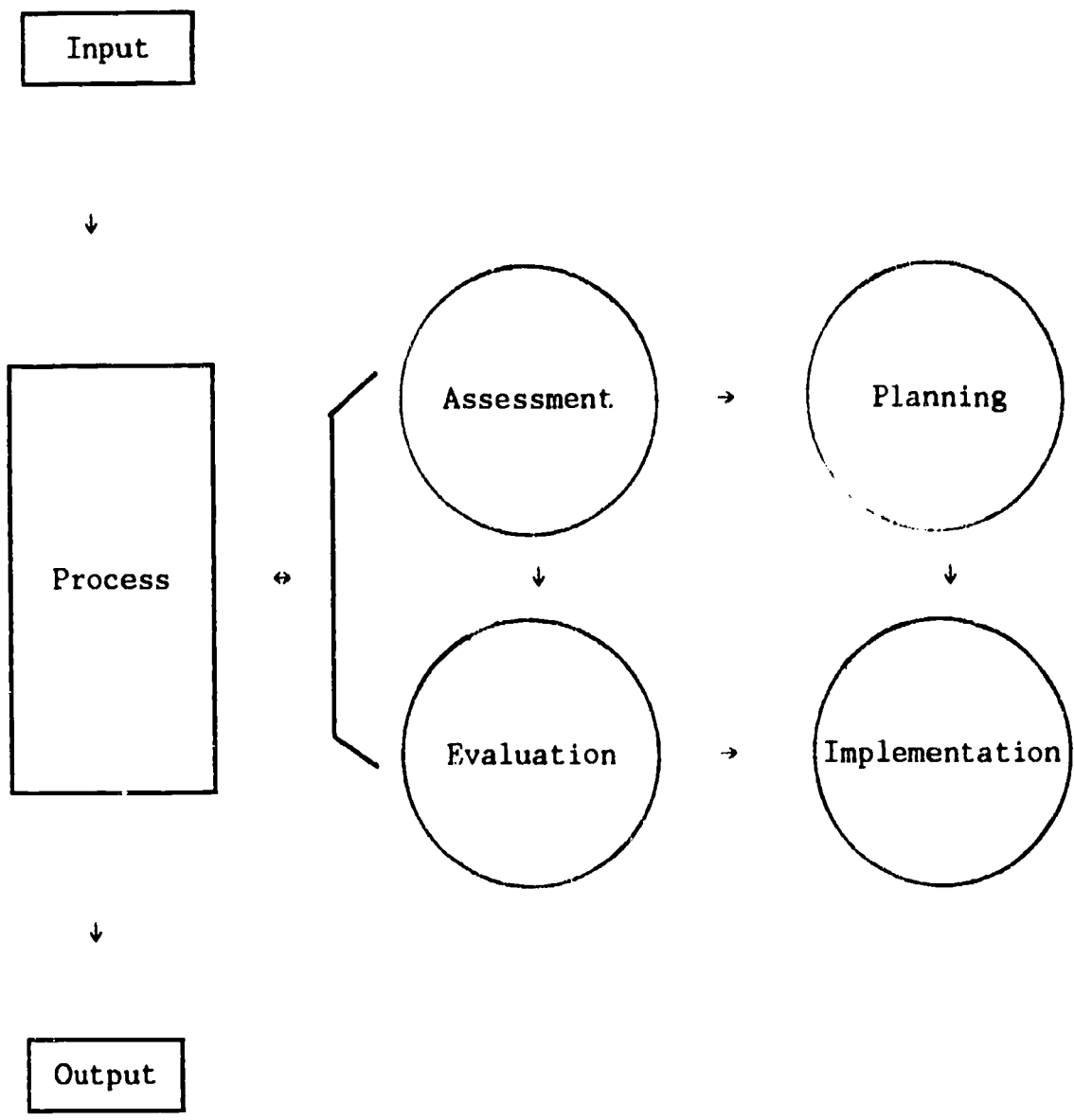
The eventual goal all handicapped students hope to achieve is successful job employment. It is the role of the school to initiate programs and develop plans that will achieve this purpose. For the past two years, Bloomsburg University, Department of Communication Disorders & Special Education has been involved in a project to develop more realistic curriculum planning for handicapped students. A product of this project was an IEP Planner that could be used by both the special educators and the vocational educators in developing a curriculum plan for the handicapped/special needs learner.

During the fiscal year of 1985-86, this Planner was expanded and pilot tested in several counties in Pennsylvania. A major finding was that the Planner could serve as a critical model in planning the transition from school to work. The displayed model describes the process that impacts students as they prepare to bridge the gap from school to work.

The plan which Bloomsburg University has developed and implemented follows the transition-enhancing process. That is, the plan interfaces knowledge with performance skill and provides a process for immediate evaluation. The process brings special educators and vocational educators together to jointly develop a curriculum plan for the special needs learner based on career goals and job selection. It pairs basic skill development with occupational development. The format for this procedure is an I.T. planning booklet.

Typical Educational Processes

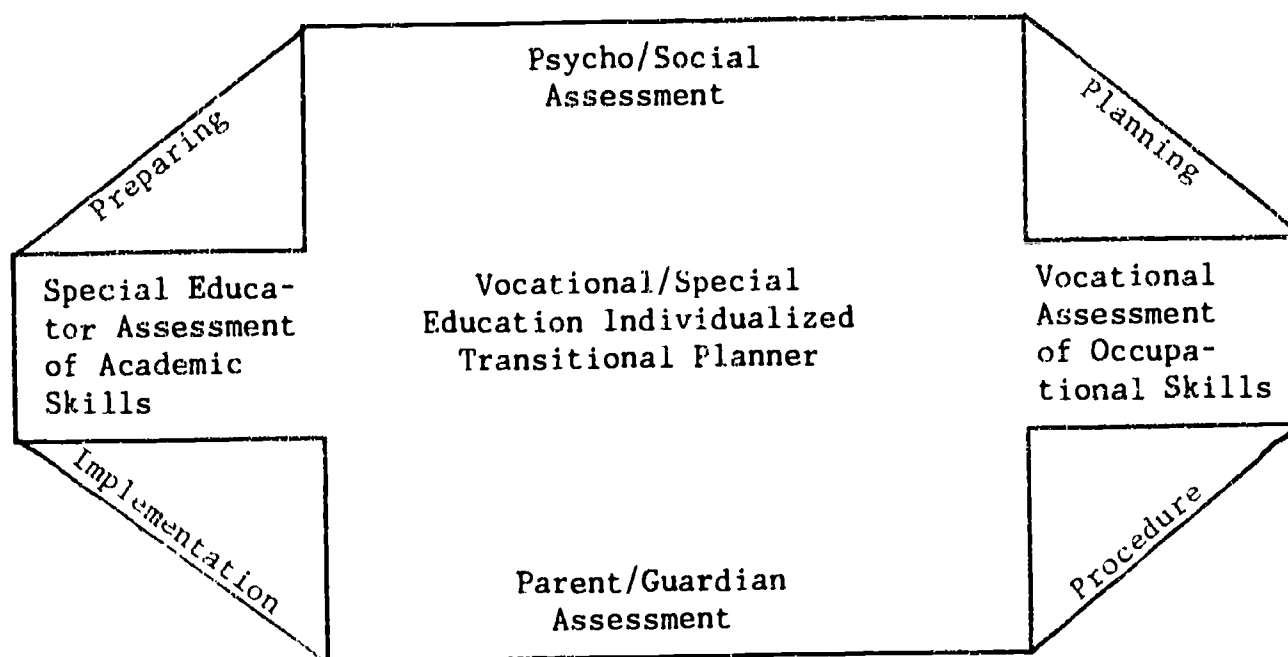
Transition-Enhancing Processes



The relationship of transition-enhancing processes to the overall educational process.

Brown, James & Kayser, Terrence. The Transition of Special Needs Learners into Postsecondary Vocational Education. Department of Vocational & Technical Education, University of Minnesota/Minnesota State Department of Education, 1982 (p. 76).

I.T. PLANNING MODEL



Preparing: The Planner is implemented once collected data from the psychologist, social worker, educators and parents is compatible with the career goal/job selection of the special needs students. Once the process of data collection/analysis has been accomplished, the Vocational/Special Education Individualized Transitional Planner becomes operational. The first step would be to complete the Individual Transitional Preparation Form.

Planning: The special educator would receive task analysis sheets in the academic areas of vocabulary and mathematics relevant to appropriate shop areas. Concurrently, the vocational educator would receive task analysis sheets in the shop and safety areas. Each would proceed to identify appropriate learning tasks based on data from the Individual Transitional Preparation Form. Once this was accomplished, the Curriculum Planning Form would be completed jointly by the vocational and special educators.

Implementation: Both the special educator and vocational instructor would begin to independently develop teaching strategies for exposing the special needs learner to tasks designed to achieve a job placement. As tasks are accomplished at an employment level they would be recorded by the instructor. If adjustments are necessary during the learning period, changes would be appropriately made and recorded in the Planner.

Procedure: The Planner creates an environment in which special educators and vocational instructors must work together to provide the most effective process of preparing handicapped and special needs learners for the world of work. By both educators signing the Curriculum Planning Form, the form becomes a learning achievement contract needed for job placement.

**COMMUNICATION STRATEGIES
FOR SPECIAL EDUCATORS AND VOCATIONAL INSTRUCTORS**

1. **Team Approach** - Special educators and vocational instructors meet with appropriate pupil services personnel during the assessment phase. This would provide for the most effective communication process.
2. **Counseling Approach** - The counselor, acting as a mediator, could meet with the special educator and vocational instructor individually and have them complete the task analysis and curriculum forms.
3. **Dual Approach** - Release time would be given to both the special educator and vocational instructor to meet with each other to evaluate the data and jointly plan the curriculum and tasks for the special needs learner.
4. **Individual Approach** - The individual transitional preparation form would be completed by educator(s) in the district, and the form would be forwarded independently to both the special educator and vocational instructor. The data would be analyzed, task identified, and the curriculum planning form completed by each. This process would provide a minimum of communication and would weaken the planning and implementation process.

This Planner has been pilot tested, and suggested changes are reflected in this latest edition. The Vocational/Special Education Individualized Transitional Planner is an attempt to develop a practical approach to the problem of bridging the gap from school to work.

In general, this model was developed to be used as an addendum to an IEP.

Definition of Terms:

Objective - Specific knowledge to be learned in order to perform occupational skills.

Exposure - Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training - Performs entire task with direct assistance. Prompting is needed.

Production - The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable - The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

Word Recognition - Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling - Ability to correctly spell a word.

Word Understanding - Ability to comprehend the meaning of a word.

Content Use of Word - Ability to use a word correctly in both verbal and written communication associated with a job task.

Frustration Level - Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level - Ability to perform objective under the guidance of the instructor (training level).

Independent Level - Can transfer knowledge to related situations with independence and proficiency (production level).

Vocational/Special Education

I.T. Planner

Vocational Area: **Horticulture**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: Horticulture

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

✗ indicates that student is working on this objective

Horticulture Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean seed					
Plant seed					
Plant bulbs					
Plant shrubs					
Plant bare-root trees					
Plant ball & burlapped trees					
Plant containerized trees					
Plant lawn and turf grasses					
Remove cuttings from stock plants					
Stick cuttings in rooting medium					
Transplant seedlings to pots or flats					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Apply rooting hormone powders					
Label planted specimens					

Sterilize soil					
Cultivate planting beds					
Fertilize crops					
Fertilize potted plants					
Prune plants					
Water plants					
Control placement of plants					
Apply mulches					
Remove diseased plants					
Check plants for insects and diseases					
Remove faded flowers from plants					
Apply lime and fertilizer according to soil test					
Haul and spread topsoil					

Operate power mower					
Operate hand sprayer					
Operate power sprayer					
Mow and trim lawn					
Apply fertilizer with centrifugal spreader					
Apply fertilizer with hopper spreader					
Use soil probe or auger					

Clean and sharpen hand tools					
Clean and sharpen garden tools					
Replace handles on tools					
Clean mower blades					
Sharpen mower blades					
Thoroughly clean spraying equipment					
Service small gasoline engines					
Paint lawn and garden furniture					

Knows characteristics of a good leader					
Knows origin and history of FFA					
Knows purposes of FFA organization					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Knows meaning of FFA colors and parts of emblem					
Knows FFA motto and pledge					
Reads FFA publications					
Knows FFA offices and their duties					
Knows how to use parliamentary procedure					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: Horticulture

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Horticulture Safety Skills					
Wear appropriate shop clothing. Loose sleeves, aprons, neckties, and dangling clothing are dangerous					
Do not disturb others while they are operating power equipment					
Keep mind on work					
Keep and use guards on all equipment					
Keep shop clean and free of rubbish and surplus tools					
Stop all power machines before making adjustments					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Always wear protective goggles when grinding					
Tool rest is kept adjusted and close to the wheel					
Do not hold with pliers any round or spherical objects					
Keep wheel properly trued up by frequent dressing					
Use the face and not the side of the wheel when taking heavy cuts					
Do not grind on wheel while it is coasting to a stop					
Check stone for cracks or flaws					
Do not use a grinding wheel if it is worn to less than half its original diameter. It should be replaced					

Secure all work with clamp, vise or other means before drilling					
Check to make sure the chuck grips the bit tightly					
Be sure chuck key is removed before starting the drill					
Use a center punch large enough to receive the point of drill					
Use proper lubricant when drilling metal					
Avoid forcing the drill bit					
Keep the long end of the stock to your left when possible					
Support the ends of long stock with a stand					
Adjust the drill press to the proper speed for the material being drilled					
Do not attempt to stop a revolving piece of wood or metal in which the bit is caught					
Clean chips off work and table with a brush to avoid slivers in hands					
Withdraw bit frequently if it goes deeper than flutes, so flutes can be cleaned of shavings					
Reduce pressure when bit begins to break through bottom of work					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not rip uneven stock unless one edge has been jointed					
Adjust saw so that teeth will extend 1/8" to 1/4" above work					
Don't attempt to cut long boards without assistance					
Keep floor around saw free of blocks and trash					
Use a push stick when ripping narrow pieces					
Never use the rip fence as a gauge in crosscutting short pieces					
Do not place hands over or in front of the blade					
Use saw guard on all work where possible					
Be sure saw table is free of material and tools and that all adjustments are tightened before turning on power					
Stand slightly to one side when operating saw, and be sure others are out of the way					
Hold material against ripping fence when ripping, and against miter gauge when crosscutting					
Do not use a dull blade or one with inadequate set. Such a blade is likely to cause a kickback					

Make sure blade is properly chucked and is clear before turning on					
Set blade to cut on down stroke					
Set upper blade guide just above material being cut					
Use speed and blade type corresponding to material being sawed					
Feed material into blade slowly. Be especially careful when sawing small circles					
Plan cuts to avoid "backouts" whenever possible					
Never use a cracked or kinked saw blade					
Test blade for tension before starting saw					



	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Use welding helmet when welding and clear goggles when chipping					
Wear heavy leather gloves and apron					
Wear trousers without cuffs, but long enough to prevent metal from falling into operator's shoes					
Make sure electrode holder and all electrical connections are properly insulated					
Do not use welder in damp location					
Never strike an arc until you are sure everyone nearby is protected from the arc rays					
Prevent cables from coming in contact with hot metal or sharp objects					
If electrode becomes stuck to work, shut off power and remove with pliers					

Fasten cylinders so they cannot tip over					
Check for leaks around connections with soapy water, never an open flame					
Do not turn acetylene or propane on until ready to light torch					
Use goggles, gloves and other protective clothing					
Keep all oil and grease away from welding equipment					
Stand to one side when opening cylinders					
NEVER use more than 15# pressure on acetylene line					
Keep face a reasonable distance away from work					
Never allow end of tip to get into molten puddle					
Close acetylene valve first when shutting down torch					
Never weld or cut metal where sparks will drop onto concrete					
ALWAYS use regular friction lighter to light torch					
Keep hot metal and flame away from hose					
Keep tip pointed away from everyone to prevent saturating clothes with gas before lighting torch					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Keep acetylene or propane cylinder in an upright position when welding to prevent liquid in tank from being forced out of hose					
When welding or cutting galvanized iron, avoid breathing fumes. Use forced ventilation or do the job out of doors					
Close tank valves tightly when welding is completed and bleed out hoses					

Use guard over cutterhead on all jobs that will permit its use. The fence should be set as near the operator as its width of stock will permit					
Use a push stick when surfacing thin stock					
Do not attempt to surface stock that is less than 10" in length					
Stand to the left of the jointer, never directly in back of it					
Do not attempt to take too heavy a cut					
See that the "clamping screws" on the fence are screwed down securely, so that the fence cannot slip while in use					
Do not let your fingers extend over either end of a board being planed					
Do not attempt to plane stock material that cannot be held securely against the fence					
Change position of the hands so they will never be directly over the jointer when passing work over the jointer					
Do not joint end grain, feed stock with the grain					
See that the material run over the jointer is sound and free of knots and splits					

Use only blades that are sharp and in good condition					
Be sure the blade guides are adjusted to almost touch the blade at the back edge and at the sides when it is running free and not cutting					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Stand slightly to one side of the line of sawing, and feed the work only as fast as the saw will take it					
Always keep hands away from blade while it is in operation					
Plan work, if possible, so that it will not be necessary to back the saw out of the cut					
Keep upper guide set down close to the work, particularly when sawing thick material					
In sawing irregular work, saw as near the line as possible the first time through. If necessary, make a second cut to finish certain parts					
Tilt table to cut bevels					
In cutting several pieces to the same length, the ripping fence may be used as a gauge					
If blade tends to lead off to one side, it may be dull or unevenly set, or the guides may be improperly set					

Do not wear loose, floppy clothing					
Always check to be sure stock is securely mounted, then spin set-up by hand before starting lathe					
Do not make adjustments or any measurements when lathe is running					
Be sure stock has no loose knots, insecurely glued joints or chucked ends					
Adjust tool rest so it is slightly above center of stock and close to stock					
Operate lathe at slow speed until stock is cylindrical; regulate speed according to size and length of stock					
Clamp tailstock firmly in place, and lock tailstock spindle before starting lathe					
Keep tools sharp; place tools in rack when finished to keep sharp					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Be careful to keep fingers away from sanding surface					
Do not apply too much pressure to object you are sanding					
Do not keep object you are sanding at the same position on the belt or disc for too long a time					
Sand with rotation of wheel or belt					

Because of danger of shock, portable tools should always be grounded while in use					
Always remove plug from outlet before changing blades, belts, etc., or before lubricating or inspecting					
Never carry or drag tools around by the cord					
Keep cord free from grease and oil					
Small pieces of wood or metal which are to be worked on should be placed in a vise or fastened securely to the bench					
Be sure switch is off before inserting plug in outlet					
Make sure all nails or other pieces of metal are removed before starting to work on wood with portable tools					
Make sure electric cord is out of the way before starting tool					

Do not overheat soldering copper					
Never lay a hot soldering copper on a regular bench top					
When using an open flame, make sure it is pointed in the proper direction					

Keep paints tightly covered when not in use					
Keep brushes clean and store them properly					
Protect nearby objects and persons when painting					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Make sure all cans of turpentine, gasoline, kerosene, etc., are covered (capped) when not being used					
Do not use a dull tool; sharpen it					
Use proper tool for the job, especially hand tools					
Always shut off power tools before leaving them					
Do not use mushroomed tools or tools with loose handles					
Do not use tools that are not properly fitted					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Horticulture**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Horticulture Mathematics Skills	O b j e c t i v e d e	F r u s t r u c t i v e n e s s l	I n s t r u c t i v e n e s s l	I n d e p e n d e n t l
Read inch ruler to nearest sixteenth				
Read measuring tape for feet				
Read feeler gauge to nearest thousandth				
Read spark plug gauge - .025, .035, etc.				
Read micrometer to nearest thousandth				
Read pounds per square inch gauge				

	O b j e c t i v e E v i d e n c e	F r u s t r u c t i v e I n s t r u c t i o n s	I n s t r u c t i o n s	I n d e p e n d e n t I n d e v e l o p m e n t
Be able to calculate square inches, square feet, square yards, acres				
Be able to measure teaspoons, tablespoons, cups, pints, quarts, gallons, cubic feet, cubic yards				

Determine 4", 6", 8", 10" planting pots				
Determine standard pot, azalea pot, bulb pan				
Determine nail sizes by penny weight				
Determine wood screw sizes by gauge				

Be able to add, subtract, multiply, divide - fractions, percentages				
Convert fractions by 1/8ths to decimals and vice versa				
Convert fahrenheit to centigrade				
Convert pH scale to degree of acidity or alkalinity				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Horticulture**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Horticulture Vocabulary Skills	R	S	U	C
	e	p	d	o
	c	e	e	n
	o	l	r	t
	g		s	e
	n	W	t	n
	i	l	o	f
		o	i	W
	W	r	o	U
	t	n	r	s
	r	d	n	r
	o	g	d	e
	i		g	d
Soil				
Peat				
Mulch				
Perlite				
Organic				
Inorganic				
Rooting Medium				
Annual				
Biennial				
Perennial				

	R e c o g n i t i o n o r d n	S p e l l o i r n d g	U n d e r s t a n t o i r n d g	C o n t e n t o f W o r d s
Dormant				
Stock Plant				
Transplant				
Seedling				
Bulb				
Corm				
Cutting				
Ground Cover				
Green Manure				
Deciduous Trees				
Evergreen Trees				
Coniferous Trees				
Chlorophyll				
Nutrients				
Photosynthesis				
Transpiration				
Graft				
Crop Rotation				
Pruning				
Harden Off				
Pinching				
Shrub				
Toxic				
Ball & Burlap				
Girdling				
Hardpan				
Leached				
Succulent				
Bare Root				
Complete Fertilizer				
Erosion				
Heading Back				
Loam				
pH				
Sodding				
Thatch				
Topiary				
Weed				
Windburn				

	R e c o g n i t i o n d n	S p e l l o i r n d g	U n d e r s t a n d i n g	C o n t e n t o f W o r k U s e d
Cold Frame				
Drip Line				
Flat				
Humidity				
Irrigation				
Node				
Tuber				
Vermiculite				
Bulb Planter				
Aerator				
Dethatcher				
Duster				
Loppers				
Cutter Mattock				
Rotary Mower				
Reel Mower				
Spade				
Trowel, Planting				
Cultivator, Hand				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Apparel Assembly**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

Hand Movement

	<u>Low</u>	<u>Average</u>	<u>High</u>
P			
E			

Gait

P			
E			

Eye-Hand

P			
E			

Finger Dexterity

P			
E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Apparel Assembly**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Apparel Assembly Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Identify basic machine parts (manufacturer's manual)					
Operate machine for control (unthreaded)					
Thread upper machine					
Thread bobbin or underthreading					
Operate threaded machine to develop control					
Start machine					
Stop machine					
Pivot and turn					
Stitch wavy lines					
Stitch circles					



	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Stitch various seams (listed in text or manual)					
Stitch darts					
Back tack or reverse stitching					
Change needle in machine		1			
Test machine					
Check for quality stitch					
Identify S.P.I. (stitches per inch)					
Change feet					
Operate machine with gauges					
Operate machine with attachments					
Identify with measuring devices fractions to 1/8"					
Sew basic hand stitches (listed in text or manual)					
Identify notches on garment					
Mark and chalk pattern pieces					
Assist in cutting					
Assist in garment construction					
Assist in hand finishing					
Assist in under pressing					
Incorporate pressing safety procedures					
Assist in trimming and cleaning garment					
Select threads to match jobs					
Organize stock and material in shop					
Fill bobbins to match jobs					
Maintain cleanliness in work area					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Apparel Assembly**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Apparel Assembly Safety Skills				
Do not put pins or needles in your mouth				
Do not put open scissors or other sharp objects on machine				
Always concentrate on your own work; don't let your mind wander while operating machine				
Report any accident and treat any injury immediately, no matter how minor				
Keep equipment in proper working condition. Immediately report any broken equipment. Do not attempt to make any adjustments or repairs about which you are not absolutely sure				
Replace burned out light bulbs promptly				

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Turn off motor when machine is not in use					
Learn the location of switches, plug-ins, and fuses					
In case of an emergency, learn how to turn off main switch					
Hold the plug, not the cord, when disconnecting electric cords					
Use extreme care. Carelessness causes accidents. Be sure before you proceed; if in doubt, don't. Caution is still the best safety device known					
Practice good posture					
Keep hands on lap					
Do not start or stop machine by turning the balance wheel with hands					
Lower presser foot and needle and turn off motor when machine is not in use					
Keep hands away from needle					
Do not pull material through machine					
Control speed of the machine; stitch slowly					
Do not use the hand as a brake to stop the machine					
If it is necessary to turn balance wheel by hand, do so only after machine has stopped completely					
Never keep presser foot down when operating machine without fabric					
Be sure to raise presser foot if filling bobbin when not stitching					
Remove all thread ends from bobbin before refilling					
Use both hands to raise head of machine					
Keep both feet off treadle					
Do not place bobbin case in machine when needle is down					
Close bed plate before operating machine					
Keep feet off treadle when replacing needle					
Make only those adjustments you have been trained to do					
Report trouble to the proper person					
Turn off motor when cleaning machine					

	O b j e c t i v e	E x p o s u r e	T r i n i n g	P r o d u c t i o n	E m p l o y a b l e
Never oil machine manually while it is in operation					
Use both hands to raise and lower head of machine					
Be careful not to spill oil on floor					
If some does spill, clean it immediately					
Do not oil or grease motor					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Apparel Assembly**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e e v e n t	F r u s t r a t i v e e v e n t	I n s t r u c t i o n a l e v e n t	I n d e p e n d e n t
Apparel Assembly Mathematics Skills				
6" rule or seam gauge rule				
12" rule				
Yard stick				
72" rule				
60" flexible tape measure				
Set seam gauges using 6" rule to 1/8"				

	O b j e c t i v e E v e n t	F r u s t r a t e g i c a l I n v e n t	I n s t r u c t i o n a l I n v e n t	I n d e p e n d e n t I n v e n t
Inches to the yard				
Feet to the yard				
Inches in $\frac{1}{4}$ yard				
Inches in $\frac{1}{2}$ yard				
Inches in $\frac{3}{4}$ yard				

mm in a cm				
cm in a meter				

44

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Apparel Assembly**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Apparel Assembly Vocabulary Skills	R	S	U	C
	e	p	d	o
	c	e	e	n
	o	l	r	t
	n	o	s	e
	i	i	t	n
	W	W	W	W
	t	l	d	o
	o	o	o	U
	r	r	r	s
	d	n	n	r
	n	d	d	e
	g	g	g	d
Alteration				
Apparel				
Attire				
Basting				
Binding				
Bobbin				
Bodice				
Buttonhole				
Cotton				
Darts				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t s
	W t o r d s	W l o r d s	W d o r d s	W o r d s
Dry Goods				
Fabric				
Facing				
Fasteners				
Fibers				
Foot (Machine)				
Garment				
Grain				
Hems				
Industrial Sewing				
Interfacing				
Iron-On				
Knitted Fabrics				
Lining				
Lockstitch				
Man-Made Fiber				
Nap				
Non-Woven				
Notch				
Notions				
Operation				
Pattern				
Pile				
Pinking Shears				
Plackets				
Sample				
Selvage				
Shears				
Shirring				
Slide Fasteners				
Tape Measure				
Textile				
Underthreading				
Upper threading				
Warp				
Weave				
Wool				
Zipper				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Carpentry**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job
(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Carpentry**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Carpentry Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Build a sawhorse					
Install backing for hanging fixtures and cabinets					
Install bridging between joists					
Install diagonal bracing					
Install fire stops					
Lay subfloors					
Install wall sheathing					
Install roof sheathing					
Install shingles					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Install asbestos siding					
Install aluminum siding					
Install windows					
Install door frames					
Install prefabricated storm door & windows					
Install exterior trim					

Install rock lath					
Install metal lath					
Install plaster grounds					
Cut & install dry wall					
Finish joints & nailheads on dry wall					
Install furring strips					
Assist in installing paneling					
Install strip flooring					
Install block flooring					
Install ceiling tile					
Joint stock with jointer					
Cut irregular shaped pattern					
Rip plywood with portable saws					
Install insulation					

Install base mold					
Install closet trim & shelving					
Install door & window trim					
Install window & door hardware					
Assist with installing cabinets					
Drill holes using portable electric drill					
Sand edges & surfaces with belt & finishing sanders					
Mold straight & curved edges using a router					
Grouting tile					
Install resilient tile					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Carpentry**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Carpentry Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wear shop clothing appropriate to instructional activity being performed					
Confine long hair before operating rotating equipment					
Always wear safety glasses; use suitable helmets & goggles for welding					
Remove ties when working around machine tools or rotating equipment					
Remove rings & other jewelry when working in shop					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Conduct yourself in a manner conducive to safe shop practices					
Use soap & water frequently as a method of preventing skin diseases					

Keep all hand tools sharp, clean and in safe working order					
Report any defective tools, machines or other equipment to instructor					
Retain all guards & safety devices except with the specific authorization of instructor					
Operate a hazardous machine only after receiving instruction on how to operate machine safely					
Report all accidents to instructor regardless of nature or severity					
Operator turns off power & makes certain machine has stopped running before leaving					
Report all accidents to instructor regardless of nature or severity					
Operator turns off power & makes certain machine has stopped running before leaving					
Make sure all guards & barriers are in place & adjusted properly before starting a machine tool					
Disconnect power from machine tools before performing maintenance task of oiling or cleaning					
Use a solvent only after determining its properties, what kind of work it has to do and how to use it					
Use correct, properly fitting wrenches for nuts, bolts and objects to be turned or held					
Keep shop or laboratory floor clear of scraps & litter					
Clean up any spilled liquids immediately					
Oily rags or oily waste should be stored in metal containers					
Clean chips from a machine with a brush - not with a rag or bare hands					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not use compressed air to clean your person or clothing					
Use only approved scaffolding					

Arrange machinery & equipment to permit safe, efficient work practices & ease in cleaning					
Stack materials & supplies safely or store in proper place					
Store tools & accessories safely in cabinets, on racks or in other suitable devices					
Clear working areas & work benches of debris & other hazards					
Clean & free floors from obstructions & slippery substances					
Free aisles, traffic areas & exits of materials & other debris					
Dispose of combustible materials properly or store in approved containers					
Store oily rags in self-closing or spring-lid metal containers					
Know proper procedures to follow in keeping work area clean & orderly					
Keep sufficient brooms, brushes & other housekeeping equipment readily available					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Carpentry**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Carpentry Mathematics Skills	O b j e c t i v e d e	F r u s t r a t i v e n e l	I n s t r u c t i v e n e l	I n d e p e n d e n t i a l
Match symbols used in math problems to their names				
Solve math problems involving addition				
Solve math problems involving subtraction				
Solve math problems involving division				
Solve math problems involving multiplication				
Identify numerator and denominator in a given fraction				
Distinguish between proper, improper and mixed fractions				
Convert mixed numbers to improper fractions				

	O b j e c t i v e E v e n t l	F r u s t r a t e g i c a l i n v e n t l	I n s t r u c t i o n s a l l	I n d e p e n d e n t l
Convert improper fractions to mixed numbers or whole numbers				
Reduce fractions to lowest terms				
Write the place value of each digit in a numeral with three decimal places				
Write numbers in decimal notation				
Write number words as decimal numerals				
Write decimals to the nearest whole number, tenth and hundredth				
Solve problems involving addition of decimals, subtraction of decimals, multiplication of decimals, and division of decimals				
Write fractions as decimals and percents				
Write percents as fractions and decimals				

Identify basic measuring tools				
Read a rule to the nearest one-sixteenth of an inch				
Measure objects				
Draw objects to specified dimensions				
Calculate basic math problems dealing with area				
Calculate basic math problems dealing with volume				
Write the formula for figuring board feet				
Write the formula for estimating concrete				
Compute board feet and cost				
Estimate number of lineal feet of molding required for a job				
Lay out 90° and 45° angle using a framing square				
Lay out various angles using a protractor and sliding T bevel				
Lay out equal spaces using a rule				
Lay out equal spaces using dividers				

O b j e c t i v e	F r u s t r a t e g i c	I n s t r u c t i o n a l	I n d e p e n d e n t
Measure angles using a protractor			
Describe how to check a 90° angle using the 6-8-10 triangle theory			

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Carpentry**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Carpentry Vocabulary Skills	R	S	U	C
	e	p	d	o
	c	e <td>e <td>n </td></td>	e <td>n </td>	n
	o	l <td>r <td>t </td></td>	r <td>t </td>	t
	n		s <td>e </td>	e
	i		t <td>n </td>	n
			a <td>f </td>	f
	W	W	W	W
	t	l	d	U
	o	o	o	s
	r	r	r	r
	o	n	n	e
	r	d	d	d
	d	g	g	e
	n			
Air-drying				
Annular Ring				
Asphalt				
Backblocking				
Backerboard				
Backsplash				
Balloon Framing				
Balustrade				
Band				
Base Cap				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f W o r d s U s e d
Batten				
Bearing Block				
Bearing Partition				
Bifold Door				
Blade				
Blind-nailing				
Blind Stop				
Board and Batten				
Body				
Bow Warp				
Braced Framing				
BTU				
Built-up Roof				
Bypass Door				
Caneboard				
Cantilever				
Cant Strip				
Cement (1)				
Cement (2)				
Clerestory				
Collar Beam				
Conduction				
Convection				
Corner Bead (1)				
Corner Bead (2)				
Cornice				
Cricket				
Crook Warp				
Crossband				
Cross-nailing				
Cross Partition				
Crown				
Cup Warp				
Dead Load				
Dimpling				
Dormer				
Double-cheek Cut				
Double-coursing				
Double-glazing				

	R e c o g n i t i o n d	S p e l l i n g d	U n d e r s t a n d i n g	C o n t e n t o f W o r d s u s e d
Doubler				
Drop				
Dub Off				
Eaves Trough				
Edge-grained				
Edge Joist				
Elevation				
Escutcheon				
Expansion Joint				
Exposure				
Field				
Fillet				
Finger-jointing				
Fire Cut				
Fire-rated				
Firestop				
Flange				
Flashing				
Fly Rafter				
Frieze				
Frost Line				
F.R.R.				
Furring				
Gain				
Galvanic Action				
Glue-laminating				
Grade (1)				
Grade (2)				
Grain				
Gusset				
Header Joist				
Hip				
I.I.C.				
Intermediate Stud				
Isolation Joint				
Joint Treatment				
Keyway				
Kiln-drying				
Knee Wall				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t o f W o r d s
Ladder (1)				
Ladder (2)				
Leader				
Leaf				
Level				
Live Load				
Lockset				
Lookout				
Loose Fill				
Lug				
Module				
Moisture Content				
Mud Sill				
Mullion				
Muntin				
O.C.				
Offal				
Open Time				
Ordinance				
Panel (1)				
Panel (2)				
Parallel Partition				
Parquet				
Parting Strip or Stop				
Party Wall				
Pedestal				
P.E.T.				
Pitch				
Plain-sawed				
Plane				
Plastic Laminate				
Plate				
Plate Cut				
Plot Plan				
Plumb Cut				
Pocket Door				
Polyethylene				
Post				
Post and Beam				

	R e c o g n i t i o r d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f W o r d s u s e d
Purlin (1)				
Purlin (2)				
Pythagorean Theorem				
Quarter-sawed				
R Factor				
Radiation				
Rafter Seat				
Rail (1)				
Rail (2)				
Rake				
Rebar (short for reinforcing bar)				
Regular Rafter				
Return				
Reveal				
Ribband				
Ridgeboard				
Rise (1)				
Rise (2)				
Riser				
Rose				
Rout				
Run (1)				
Run (2)				
Saddle				
Scale (1)				
Scale (2)				
Scarf				
Schedule				
Schematic				
Screed				
Section				
Selvage				
Setback				
Shake				
Shiplap				
Shortening Line				
Shutters				
Sidelight				
Sill				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f W o r d s U s e d
Single-cheek Cut				
Single-coursing				
Sleepers				
Slope (1)				
Slope (2)				
Solid Bridging				
Spaced Beam				
Spacer				
Splashboard				
Splice				
Splice Plate				
Split				
Spreader				
Stack Wall				
Standards				
Station Mark				
S.T.C.				
Stickers				
Stile				
Strike Plate				
Stringer				
Subflooring				
Subrail				
Swaged				
Tab				
Tail				
Tail Joist				
Thickened Edge				
Toe Kick				
Trestle				
Trimmer				
Truss				
Turned-down Slab				
Twist Warp				
Vapor Barrier				
Vertical-grained				
Walers				
Walking Steps				
Wane				

	R e c o g n i t i o n o r d n	S p e l l i n g o r d n	U n d e r s t a n d i n g	C o n t e n t o f w o r d s u s e d
Warp				
Water Table (1)				
Water Table (2)				
Web				
Winder				
Zoning				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Food Service**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

		<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.	_____		
2.	_____		
3.	_____		
4.	_____		
5.	_____		
6.	_____		
7.	_____		
8.	_____		
9.	_____		
10.	_____		
11.	_____		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			



VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Food Service**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

✗ indicates that student is working on this objective

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Food Service Skills					
Takes orders correctly					
Adjusts temperature					
Checks shortening & clears fryer					
Selects food, egg wash or other types of frying mixes					
Orders supplies					
Cleans up greasy spots promptly					
Housecleaning					
Breading					
Seasoning					
Reads recipes					
Check cooking					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Reading recipes					
Prepare fillings					
The use of lettuce					
The use of a knife in cutting					
Bread and usage for canapes and hors d'oeuvres					
Refrigeration & storage					
Spoon or scoop for portion control					
Types of sandwich					
Specifies and orders supplies					
General housecleaning					

Checks & reads recipes					
Mincing, chopping, slicing, dicing					
Tests temperatures					
Selects meat					
Cleans areas of work (housecleaning)					
Use and care of equipment					
General cooking rules & methods					
Selects meats, vegetables & other types of food					
Operate equipment					
Cutting and carving					
Personal ethics					

Reading dough formulas					
The ingredients in dough and their reaction during mixing, proofing and baking					
Scale all ingredients correctly, proofing and baking					
Mix to develop dough					
Knead the dough					
Proof the dough					
Makeup into desired shapes & sizes					
Do not over proof the dough					
Maintains & cleans work area					

Reads recipes					
Ready equipment to be used					
Uses small hand tools					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Mincing, chopping, dicing & slicing					
Cooking vegetables					
Cleaning vegetables					
Sanitation & safety					
Flouring & blending					
Checks time allowed					
Care of equipment & general housecleaning					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Food Service**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Food Service Safety Skills (Edited from National Safety Council on Food Preparation)	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Use dry towels when handling hot skillets					
Avoid splashing grease on top of range					
Remove lids of pots slowly					
Always give notice of "HOT FOOD" when moving a hot container from one place to the other					
Keep towels used for handling hot foods off the range					
Avoid over-filling hot food containers					
Never let long handles of sauce pans or skillets extend into aisles					
Never turn the handle of any pot toward the fire					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Get help in lifting or moving any heavy pots or containers					
Place a lighted match to gas jets before turning on the gas					
Know the location of fire extinguishers					
When placing food in hot grease, always let the item slide away from you					
Keep work station clean at all times					
At all times have your attention focused on the job at hand					
Never have glass near any food					
Never throw any objects in the kitchen					
Treat injuries immediately					

Use the right knife for the job					
Do not grab for falling knives					
Always carry a knife with the tip pointing downward & with the cutting edge turned away from body					
Never talk with a knife in your hand					
Always cut away from body					
Never place a knife in hot water					
Use a cutting board at all times					
Knives should never be placed in drawers					
When cleaning or wiping a knife, keep the sharp edge turned away from body					
Always use a sharp knife					
Use knives for the purpose for which they were designed					
Pick up knives by the handle only. Take a firm grip on a knife handle					
When slicing round objects, cut a flat base					
Never force a meat saw					
When using a cleaver, be sure the item to be chopped is setting solidly					
When grating foods, never work the foods too close to the cutting surface					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Use a wooden stomper when feeding meat					
Before cleaning or adjusting any machine, be sure all electrical switches are in the "OFF" position & pull the plug					
Do not wear rings, wrist watch or a tie when operating electrical power equipment					
Never start a machine until you are sure all parts are in their proper places					
All electrical stationary equipment should be grounded					
Keep hands to the front of the revolving bowl when operating the food cutter					
Never operate any machine unless you have been trained to use it properly					
When using electrical power equipment, always follow manufacturer's instructions and recommendations					

Wear proper shoes					
Wear long sleeves that cling tightly to the arms					
Never wear loose fitting clothing					
Wear aprons at knee length					
Tuck in all apron strings					
Wear the recommended headgear					

Discard any chipped or cracked china & glassware					
Never use glassware in forming or preparing food					
Never force a towel inside a glass to dry it					
Never clean up broken china or glassware with the hands					
Never place glassware in soapy water					
When carrying china & glassware from one place to another, be alert & move cautiously					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
When turning on anything electrical, do not stand on a wet floor					
If anything is spilled on the floor, clean it up immediately					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Food Service**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Food Service Mathematics Skills	O b j e c t i v e d e	F r u s t r a t e i v o e n l	I n s t r u c t i o n a l	I n d e p e n d e n t
Solve math problems involving addition				
Solve math problems involving subtraction				
Solve math problems involving multiplication				
Solve math problems involving division				
Write recipes and/or food formulas				
Tabulate bills				
Tabulate sales tax				
Know money values				
Make change for customers				

	O b j e c t i v e	F r u s t r a t e g i c	I n s t r u c t i o n a l	I n d e p e n d e n t
Calculate cost per serving				
Knowledge of menu pricing				
Item cost purchasing				
Calculate food amount for serving				
Determine can size per serving				
Determine gratuity from customer's check				

Calculate federal withholding tax				
Calculate federal income tax				
Calculate state income tax				
Calculate social security				

Convert gallons, quarts, pints				
Convert ounces, pounds				
Measure teaspoons, tablespoons				
Estimate weights of dipper sizes				
Determine weights of can sizes				
Know symbols for 1/4, 1/2, 2/3 & 3/4				
Know ladle size				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Food Service**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Food Service Vocabulary Skills	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t u s e
Aging				
A La Carte				
A La Mode				
Al Dente				
Ambrosia				
Antipasto				
Aspic				
Au or Aux				
Au Gratin				
Au Jus				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Baked Alaska				
Baste				
Bechamel				
Breading				
Buffet				
Canape				
Carte Du Jour				
Caviar				
Chef				
Chives				
Chop				
Coat				
Cobbler				
Consomme				
Crepe				
Cube				
Cuisine				
Cut In				
Deglaze				
Demiglace				
Heifer				
Jus				
Knead				
Leek				
Legumes				
Lyonnaise				
Mayonnaise				
Menu				
Meringue				
Mignon				
Minced				
Mirepoix				
O'Brien				
Poach				
Puree				
Reduce				
Roe				
Roux				
Saffron				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t o f w o r d s
Saute				
Scald				
Score				
Sear				
Sift				
Simmer				
Sole				
Stock				
Truffle				
Veloute				
Vichyssoise				
White Wash				
Whip				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Plumbing**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Plumbing**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Plumbing Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Shop safety rules & regulations					
Handling & recognition of plumbing hand tools					
Reading the rule					
Marking with a pencil, soapstone, chalk, scribe					
Marking metal & pipe with a center punch					
Marking with scribe or pencil along a straight edge					
Making a straight cut on sheet metal with aviation snips or tin shears					
Tighten and loosen nuts with a box end wrench					
Using a socket wrench with a ratchet					
Tighten and loosen nuts with an open end wrench					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Tighten and loosen fittings with a pipe wrench					
Using an open end pipe wrench					
Using a smooth jaw wrench					
Tightening & loosening screws with a screwdriver (flat & Phillips)					
Tightening & loosening fasteners with allen hex wrenches					
Holding & tightening with a channel rib lock pliers					
Driving nails with a hammer					
Pulling nails with a hammer					
Using a level for leveling					
Drilling holes in wood with an electric drill					
Drilling holes in piping with an electric drill					
Cutting to a line with a cross cut saw					
Using a basin wrench					
Chiseling across a grain					
Chiseling with a cold chisel					
Using and aligning with a drift pin					
Cutting with a hacksaw					
Adjusting & using an adjustable wrench					
Using a soldering iron & cleaning same with sal ammoniac block					
Using a tri-stand pipe vise					
Lighting a torch					
Shaping smooth surfaces with a file					

Recognition of various types of steel pipe					
Recognition of various types of copper tubing					
Sizing of piping (I.D. measurements)					
Recognition of steel C.I. and malleable fittings					
Recognition of copper fittings					
Recognition of plastic piping & fittings					
Measuring pipe in plumbing trade (C-C E-C E-E etc.)					
Cutting steel piping by hand					
Cutting copper tubing by hand					
Reaming steel piping by hand					
Threading steel piping by hand					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Join steel pipe to plastic pipe					
Join copper tubing pipe to copper tubing pipe					
Join copper tubing to plastic pipe					
Join copper tubing to steel pipe					
Join copper tubing with flared connections					
Swage copper tubing pipe					
Join plastic pipe to plastic pipe					
Secure piping with hangers to wood surfaces					

Disassemble & assemble gate valves					
Disassemble & assemble globe valves					
Disassemble & assemble stop & waste valves					
Disassemble & assemble a compression faucet					
Disassemble & assemble a single lever faucet					

Connect lavatory water supplies					
Connect lavatory trap (Ess-P-J bends)					
Install closet supply					
Install kitchen sink faucet					
Install sink basket strainers					
Connect water supplies to sink faucet					
Install sink trap (Kitchen-Ess-P-J bends)					
Install continuous waste drain (center or end outlet)					

Replace washers in valves & faucets					
Replace a trap on a sink (kitchen & lavatory)					
Replace sink strainers on a sink (all types)					

Stripping romex wiring					
Place a connector on romex wire					
Cutting electrical wire with cutters					
Taping romex wire with friction tape					
Connecting romex wire with wire nuts					
Connect romex wire to junction box					

Replace oil cartridge in oil filter					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Plumbing**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Plumbing Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wear shop clothing appropriate to activity being performed					
Wear safety glasses at all times					
Wear goggles, shields, helmets as needed for specific job tasks					
Remove or roll up sleeves past elbow on long sleeve shirts before operating power threading machines					
Remove rings, neck jewelry when working in shop					
Avoid wrestling, throwing objects and other forms of horseplay					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Keep your arms and body as nearly straight as possible when lifting heavier objects					
Good, sturdy leather work shoes would be worn to protect feet from falling objects & from dampness					
Breathing filter should be used when working job tasks involving excessive dust					
Ear plugs or protectors should be worn when working in extremely noisy areas					
Use soap & water regularly as a method of protecting skin on hands and face					

Keep all hand tools sharp, clean and in safe working condition					
Report any defective tools, machines or equipment to instructor					
Operate a hazardous machine only after receiving proper safety instruction					
Report all accidents regardless of nature or severity to instructor					
Do not remove any safety guards or devices from machinery before operating					
Disconnect power to machines before performing maintenance on same					
Know locations of "Panic Button" shut-off switches for entire shop in case of emergency					
Know location in shop of all fire extinguishers					
Know location in shop of emergency first aid kit					
Use solvent only after determining its properties and how to apply it					
Make sure all power machines have stopped turning before leaving them					
Use correct, properly fitting wrenches for pipes, nuts, bolts and objects to be turned or held					
Always keep hands open on handles when using pipe wrenches without the use of a vise					
Keep shop floor clear of objects, litter, etc.					
Clean up any spilled liquids immediately					
Oily rags should be stored in metal containers					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean steel chips from threading dies with a brush and not with a rag or bare fingers					
Always wear protective gloves when working with hot objects					
Make sure all overhead bins and shelves are not overfilled to prevent objects from falling out and causing a head injury					
Know rules & exits in case of fire emergency					

All traffic free aisles and exits clear of materials, equipment or debris					
All power machines and equipment arranged to permit safe work practices					
Stack materials and supplies safely and store in proper place					
Store all tools and accessories safely in cabinets, shelves, racks, etc.					
Clear working areas, overhead areas and work benches of debris and other hazards					
Dispose of combustible materials properly					
Clean oily or slippery floors immediately					
Sweep all debris from floors, tables, dressing area at the end of each class period					
Know your specific area assigned to be cleaned each day					
Keep sufficient brooms, brushes, and other housekeeping equipment readily available					
Report any burned-out overhead lighting bulbs to proper authorities for replacement					
Make sure no sharp edges from piping on racks are sticking out which may cause an injury					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Plumbing**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e d e	F r u s t e r i v e n t	I n s t r u c t i o n a l	I n d e p e n d e n t
Plumbing Mathematics Skills				
Solve math problems involving addition				
Solve math problems involving subtraction				
Solve math problems involving division				
Solve math problems involving multiplication				
Identify numerator and denominator in a fraction				
Reduce fractions to lowest terms				
Change fractions to decimals				
Change decimals to fractions				
Write percents as fractions and decimals				
Square roots of numbers 1.00 through 9.99				

	O b j e c t i v e E v e n t	F r u s t r a t e g i c O e n t	I n s t r u c t i o n v a l u e s	I n d e p e n d e n t
Constants for 45° fittings				
Constants for 60° fittings				
Constants for 22½° fittings				
Constants for 11¼° fittings				

Identify basic measuring tools				
Read the rule to the nearest one-sixteenth of an inch				
Read a tape measure				
Measure objects				
Measure lines to the nearest quarter, eighth and sixteenth of an inch				
Draw objects to specified dimensions				
Calculate basic math problems dealing with volume				
Calculate allowance for fittings				
Calculate end-to-end measurement				
Calculate end-to-center measurement				
Calculate center-to-center measurement				
Calculate face-to-face measurement				
Calculate "overall" measurement				
Calculate pipe length by layout				
Calculate grade, drop & run				
Calculate offset, diagonal & rise				
Calculate diameters of piping				
Calculate standard weight pipe - diameters, capacities				
Estimate size of piping				
Water measure				
Measure rectangular solids				
Measure cylinders				
Measure spheres				
Word use in leveling				
Math aids in leveling				
Knowledge of basic standard symbols for plumbing, piping & valves				

	R e c o g n i t i o r d n	S p e l l o i r n d g	U n d e r s t a n d i n g	C o n t e n t o f U s e
Ball Valves				
Basket Strainer				
Bathtub				
Bell Trap				
Branch				
Branch Vent				
Building Drain				
Building Sewer				
Building Sanitary Sewer				
Building Storm Sewer				
Building Supply Pipe				
Butterfly Valve				
Check Valve				
Cleanout				
Closet				
Common Seal Trap				
Compression Faucet				
Continuous Waste				
Core Cock				
Corporation Cock				
Curb Stop				
Crown of Trap				
Dip of Trap				
Dishwasher				
Downspout				
Drain				
Drinking Fountain				
Drum Trap				
DWV				
Female Thread				
Finishing				
Fitting				
Fixture Drain				
Floor Drain				
Flow Pressure				
Flush				
Flush Valve				
Full-Bath				
Garbage Disposal				

	R e c o g n i t o r d n	S p e l l o r n d g	U n d e r s t a n d i n g	C o n t e n t o f W o r k e d
Gate Valve				
Globe Valve				
Grade				
Half-Bath				
Hangers				
Horizontal				
Hub				
Indirect Waste				
Journeyman				
Kitchen Sink				
Laundry Tray				
Lavatory				
Length				
Main				
Male Thread				
Master Plumber				
Meter				
Offset				
Overflow				
Pipe				
Pitch				
Potable				
P-Trap				
Riser				
Roof Jacket				
Rough-In				
Run				
Seal				
Sewage				
Sewer				
Shower				
Sill Cock				
Soil Pipe				
Stack				
Stop				
Strainer				
S-Trap				
Support				
Syphonage				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Trap				
Trim				
Tube				
Vent				
Washer				
Water				
Waste				
Vertical				
Vanity				
Valve				
Vacuum				
Urinal				

Romex				
Wire				
Stripping				
Cutting				
Taping				
Wire Nuts				
Connectors - Angle				
Connectors - Straight				
Junction Box				
Switch				
Conduit				
Short				
Fuse				
Circuit Breaker				
Panel Board				
Control				
Staple				
Hot				
Ground				

Filter				
Oil				
Gas				
Coal				

	R e c o g n i t i o r d n	S p e l l i n g d g	U n d e r s t a n d i n g	C o n t e n t U o r d e d
Boiler				
Hydronic				
Steam				
Fittings				
Pipe				
Tubing				
Steel				
Cast-Iron				
Base				
Chamber				
Retort.				
Gauge				
Supply				
Return				
Expansion				
Tank				
Flow				
Coil				
BTU				

Standard Slot				
Phillips				
Stubby				
Offset				
Reed and Prince				

Open End				
Box End				
Combination				
Adjustable Open End				
Pipe				
Flare Nut.				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Slip Joint				
Slip Groove				
Long Nose				
Plier Wrench				

Ballpeen				
Soft Face				
Sledge				
Claw				

Pin Punch				
Center Punch				
Cold Chisel				
Pry Bar				
Scratch Awl				
Wood Chisel				
Flooring Chisel				
Bullnose Chisel				

Flat				
Half-Round				
Round				
Triangular				
Handle				

Ratchet Handle				
Socket				
Deep Socket				
Hinge Handle				
Extension				
Speed Handle				
Universal Joint				

	R e c o g n i t i o n o r d n	S p e l l i n g o r d n g	U n d e r s t a n d i n g	C o n t e n t o f U s e
Flaring Tool				
Tubing Reamer				
Flaring Block				
Tubing Cutter				
Swage Punch				
Bending Spring				
Lever Type Bender				

Pipe Vise				
Dies & Die Head				
Die Stock				
Reamer				
Pipe Cutter				

Drop Light				
Hacksaw				
Nut Drivers				
Level				
Hex Key Wrenches				
Basin Wrench				
Cutting Oil				
Jab Saw				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Masonry**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Masonry**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Masonry Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Gage masonry wall with spacing rule					
Gage masonry wall with modular rule					
Gage masonry wall with story pole					
Determine if surface is plumb, level and square					
Match terms associated with builder's level to the correct definitions					
Label types of levels					
Label parts of a builder's level					
State rules pertaining to care of leveling instruments					
Demonstrate ability to set up and adjust a builder's level					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Demonstrate ability to perform a differential leveling job by setting elevations for conveyor footing					
State basic rules concerning care of the four and two foot levels					
Label methods used to align masonry units					

Cut a bat closure					
Cut a queen closure					
Bond a wall					
Mix mortar by hand					
Mix mortar with power mixer					
Lay a stretcher course					
Lay a header course					
Lay corners					

Tool concave joints					
Tool rake joints					
Tool squeeze joints					
Tool grapevine joints					
Point a wall					

Lay rowlock, sailor, shiner & soldier courses					
Lay common bond pattern					
Lay a flemish bond pattern					
Lay a stack bond					
Lay a diamond pattern					
Lay a herringbone pattern					
Lay a basketweave pattern					

Reinforce brick masonry					
Construct brick veneer wall					
Construct cavity wall					
Form a corbel					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Build square brick columns					
Build rectangular brick columns					
Build round columns					

Build forms for concrete					
Construct piers					
Construct a wall containing pilasters					
Raise a foundation					

Install wall ties					
Place beams					
Pour concrete					
Make reinforced lintels					
Set lintels					
Construct sills (rowlock)					
Set windows					
Use anchors to tie wall together					
Lay a flight of stairs					

Clean brick walls					
Lay glass blocks					
Lay structural clay tile					
Lay masonry floors					
Estimate masonry materials needed					
Lay ceramic tile					
Cut ceramic tile by hand					
Cut ceramic tile with tile saw					
Grout ceramic tile					
Clean ceramic tile wall					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Masonry**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Masonry Safety Skills					
Prevent accidents by a safety conscious attitude at all times					
Be alert to hazards in the shop					
Never take safety for granted; practice it at all times					
Wear clothing appropriate to the instructional activity being performed					
Confine long hair before operating rotating equipment					
Remove earrings, rings & other jewelry when working					
Wear safety glasses at all times					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wear full protective goggles when cutting, chipping & grinding					
Wear full protective goggles & a disposable type dust mask while mixing or screening mortar					
Wear a 6" or 9" high hard-soled work shoe					
Wear gloves when handling sharp objects					
Read directions before using chemicals					
Wear rubber gloves & safety glasses when using chemicals					
Clean dirty goggles					
Use soap & water frequently					

Keep all hand tools sharp, clean and in safe working order					
Report any defective tools, machines or other equipment					
Report all accidents regardless of the nature					
Keep materials and tools out from underfoot					
Store tools in a professional manner					
Do not use compressed air to clean your person or clothing					
Do not overload wheelbarrows or equipment					
Do not take shortcuts unless they are safe & approved by the instructor					
Handle mortar with a concern for safety					
When cutting masonry materials, cut in a direction away from other students					
Always handle tools with an eye on other students working nearby					
Is safety-conscious when using ladders					
If mortar gets in the eyes, never rub it out. Flush with plenty of clean water					
Inspect scaffolding before getting on					
Know all scaffolding rules					
Is very cautious when working near electrical lines or outlets					
Wears a hard hat if there is an overhead danger					
Uses the right tool for the right job					
Do not use the trowel for a hammer					
Do not hammer on the level					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not cut reinforcement with a brick hammer, chisel or trowel					
Devote full attention to the task being performed					

Studies object beforehand to determine best method to pick it up					
Lift with the legs, not with the back					
Keeps back straight					
Does not lift heavy objects without help					
When lifting with another person, lift together at the same time to avoid a strain					
Always make sure he/she can see either around or over the object to avoid stumbling or falling					
When setting the load down, make sure fingers are out from under object					
Sets it down carefully; never drops it					

Do not stack masonry materials so high that they are in danger of falling					
Stack material on a pile in a safe manner by interlocking & bonding the units together to prevent them from falling					
Allow enough working room when stacking materials					
Keep the material spaced back a minimum of two feet from the wall line					
Store tools, levels & accessories safely in cabinets, on racks or in other suitable devices					
Clean tools & equipment daily					
Use a metal scraper to clean & free floor of debris					
Dry mop or squeegee down floor daily to eliminate dusty conditions					
Know proper procedures to follow in keeping work area clean & orderly					
Keep aisles, traffic areas & exits free of materials, scraps & litter					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Arrange machinery & equipment to permit safe, efficient work practices & ease in cleaning					
Dispose of scrap waste material properly in an approved trash container					
Keep sufficient brooms, brushes & other housekeeping equipment readily available					
Wipe up any spills of water or oil immediately					
Store all linseed oil cloths in an airtight can					
Safety glasses & goggles will be stored in a dustproof, sterile cabinet					

All safety rules & operating instructions for a machine or piece of equipment should be studied before attempting to operate it					
Operate power equipment only after receiving instructions on how to operate safely					
Retain all guards or protective devices from equipment					
Never force a tool when it does not cut or push power equipment when it does not operate freely					
Use grounded receptacles & extension cords when operating power equipment					
Pays attention to what he/she is doing when operating power equipment					
Never put hands inside any moving equipment					
Never make any adjustments to a machine when it is operating					
Be sure adequate ventilation is present when operating equipment that creates dust or fumes					
Only one student at any time will be inside the safety zone of the power equipment					
When you feel ill or not in command of all your senses, do not operate power equipment					
Use full face shields when cutting materials that may bounce back & strike the face					
Use equipment only for purpose intended					
Do not operate electrical tools while standing on a wet surface					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Place a piece of wood or rubber on the wet floor before attempting to operate any power equipment					
Operator turns off power & makes certain machine has stopped running before leaving safety zone					
Disconnect power from machine tools before performing maintenance task of oiling & cleaning					

Wear goggles, gloves & respirator or dust mask when dry cutting					
Wear goggles, rubber gloves & rubber apron when wet cutting					
Keep hands away from blade					
Keep work area clean					
Inspect blade for damage before installing					
Clean & inspect blade-shaft collars & arbors before installing blade					
Tighten nut on blade shaft just enough to hold blade securely; do not overtighten					
Operate blade within specified maximum operating speed					
Stand to the outside of blade path when starting saw					
Hold materials securely when making cuts					

Always wear eye safety protection & disposable dust mask when operating mixer					
Check all operating parts of mixer before starting to make sure everything is secure & nothing is loose					
Set mixer on a firm, solid base before starting					
Lubricate mixer before starting					
Follow proper sequence for mixing mortar					
Caution other students standing nearby not to look into the mixing drum when operating unless they also have on safety eye protection					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not overload mixer. Only put in amount of mix recommended by manufacturer for specific size mixer being used					
Do not put the shovel or other objects inside mouth or drum of mixer when it is running					
Never place hands or fingers inside mixer when it is running					
Do not scrape excess mortar from mixer at completion of the mix by reaching inside unless mixer is out of gear and shut off					
When dumping mortar from mixer, be extremely careful not to place fingers or hands near or on the pinch points of the drum					
Always pay attention. Talking to someone or looking in another direction when operating mixer can result in an accident					
Clean mixer with water immediately after each use to remove all mortar. When used again a dirty mixer may throw out pieces of hard mortar that could fly into the eyes					
It is a good practice to always fill gasoline engine mixer's tanks with gasoline at the beginning of the day					
Use a funnel to pour gas into the mixer gas tank					
Gasoline is poisonous. Always wash your hands if you get gasoline on them					
Get help to move mixer to another location					
Never operate electric mixer on voltage other than that which it is designed for					
Be sure switch is off before plugging mixer into the power source. A quick start can catch the operator by surprise and cause an injury					
Never lay or rest on the mixer when it is operating					
If the mixer makes a noise that is not natural or looks unusual or different, turn it off immediately. Disconnect it from the power source & call the instructor					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
If there is an electrical problem with a mixer, or it fails to operate when turned on, call the instructor					
Never attempt to stop a mixer with the hands. Let it stop naturally					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Masonry**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Masonry Mathematics Skills	O b j e c t i v e E v e n t	F r u s t e r i v e n t	I n s t r u c t i o n a l	I n d e p e n d e n t
Match terms associated with basic trade arithmetic to the correct definitions				
Calculate basic problems dealing with area				
Calculate basic problems dealing with volume				
Calculate basic problems dealing with triangular relationship				
Explain the 3-4-5 method of squaring corners				
State the difference between ratio & proportion				
Solve basic ratio & proportion problems				
Solve basic addition of whole numbers				
Solve basic subtraction of whole numbers				

	O b j e c t i v e	F r u s t r a t e g i c	I n s t r u c t i o n s	I n d e p e n d e n t
Solve basic multiplication of whole numbers				
Solve basic division of whole numbers				
Solve basic addition, subtraction, multiplication & division of fractions				
Solve basic addition, subtraction, multiplication & division of decimals				
Convert fractions to decimals				
Convert decimals to fractions				
Write percent as a fraction				
Write percent as a decimal				

Estimate materials needed for a specific job				
Write the formula for estimating running feet of block & brick				
Write the formula for estimating concrete				
Estimate mortar yield				
Estimate cu. ft.				
Estimate cu. yds.				
Estimate grout coverage of ceramic tile per pound				
Estimate waste of masonry material				
Estimate area & cost of brick masonry				
Estimate number of block per course in a given measurement				
Estimate number of brick per course in a given measurement				

Match terms associated with measuring to the correct definitions				
Identify basic measuring tools used by bricklayer				
List uses of modular & spacing rules				
Read a standard measuring rule				
Describe procedures for reading modular & spacing rules				

	O b j e c t i v e E v e n t	F r u s t r a l t e r a t i v e E v e n t	I n s t r u c t i o n a l E v e n t	I n d e p e n d e n t E v e n t
Measure objects to nearest one-sixteenth of an inch when given pictures of objects & a measuring instrument				
Draw lines & objects to specified dimensions				
Mark course height on a story pole using a modular rule				
Mark course height on a story pole using a spacing rule				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Masonry**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Masonry Vocabulary Skills	R	S	U	C
	e	p	d	o
	c	e <td>e <td>n </td></td>	e <td>n </td>	n
	o	l <td>r <td>t </td></td>	r <td>t </td>	t
	g	l <td>s <td>e </td></td>	s <td>e </td>	e
	n	o <td>t <td>n </td></td>	t <td>n </td>	n
	i	i <td>a <td>f </td></td>	a <td>f </td>	f
	W	W	W	W
	t	l	d	U
	o	o <td>o <td>o </td></td>	o <td>o </td>	o
	r	r <td>r <td>r </td></td>	r <td>r </td>	r
	d	n <td>n <td>s </td></td>	n <td>s </td>	s
	n	d <td>d <td>e </td></td>	d <td>e </td>	e
		g <td>g <td>d </td></td>	g <td>d </td>	d
Absorption				
Absorption rate				
Admixtures				
Air space				
Anchor				
Arch				
Ashlar Masonry				
Backup				
Bat				
Bed joint				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t O f W o r d s U s e d
Batter boards				
Blocking				
Bond				
Bond course				
Breaking joints				
Brick				
Brick-acid resistant				
Brick-abode				
Brick-angle				
Brick-arch				
Brick-building				
Bearing walls				
Brick veneer				
Brickwork				
Buttered joints				
Buttress				
Cavity wall				
Center				
Chase				
Chimney				
Chimney lining				
Clip course				
Closer				
Closure				
Column				
Common american bond				
Common bond				
Consistency of mortar				
Coping				
Corbel				
Course				
Cross joints				
Dentil				
Diagonal bond				
Draft				
Dutch bond				
Efflorescence				
English bond				
Extrados				

	R e c o g n i t o r o d n	S p e c i f i c o r d n g	U n d e r s t a n d i n g	C o n t e n t o f U s e d
Expansion joints				
Face				
Face brick				
Facing				
Fat mortar				
Filling in				
Fire clay				
Fire stop				
Flemish bond				
Flue				
Flue lining				
Flush				
Footing				
Full-header				
Flashing				
Frog				
Furrow				
Garden wall bond				
Gauge				
Glazed tile				
Gothic arch				
Grout				
Header				
Header bond				
Herringbone bond				
Head joint				
Hollow wall				
Hydrated lime				
Initial set				
Interlocking				
Intrados				
Jack arch				
Jamb				
Jamb block				
Joint				
Jointer				
Jointing				
Jumbo brick				
Key				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t U s e d
Keystone				
Lap				
Laying overhand				
Laying to bond				
Lead				
Lean mortar				
Lime				
Line				
Line pin				
Linear feet				
Load-bearing				
Lintel				
Mason				
Masonry				
Masonry cement				
Masonry unit				
Mortar				
Mortar board				
Mortar box				
Nominal dimension				
Outrigger				
Overhand work				
Overhang				
Parapet				
Parging				
Partition				
Party wall				
Paving brick				
Pier				
Pilaster				
Plumb bob				
Plumb rule				
Pointing				
Pointing trowel				
Portland cement				
Plugging				
Queen closure				
Quoin				
Rake				

	R e c o g n i t o r d n	S p e l l o i r n d g	U n d e r s t a n d i n g	C o n t e n t o f W o r k U s e d
Range line				
Recess				
Reinforced concrete				
Return				
Rowlock				
Sand				
Scaffold height				
SCR brick				
Scutch				
Set				
Sill				
Skewback				
Smoke Chamber				
Slushed joints				
Soap				
Solider				
Solid masonry wall				
Spall				
Span				
Split block				
Stack bond				
Story pole				
Straightedge				
Strecher				
Struct joints				
Temper				
Template				
Tie				
Tile				
Tier				
Tooling				
Toothirg				
Trig				
Trimmer arch				
Trowel				
Tuck-pointing				
Veneer				
Veneered wall				
Vertical joints				

	R e c o g n i t i o n s	S p e c i f i c a t i o n s	U n d e r s t a n d i n g	C o n t e n t s
	W o r d s	W o r d s	W o r d s	W o r d s
Voussoir				
Wall				
Wall plate				
Wall tie				
Wall-bearing				
Washing down				
Water retentivity				
Water table				
Weathering				
Web				
Weep-holes				
Wythe				
Workability				
Working drawings				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Sales**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Sales**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Sales Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Identify product's manufacturer					
Identify product line					
Give brief product history (sales, length of time on market)					
Locate product's sizes on shelf					
Locate product's colors on shelf					
Locate product's styles or models on shelf					
Identify product's features					
Identify product's benefits					
Identify what product is made of from descriptive label					
Explain how to maintain product					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Assist customer in removing product from package					
Demonstrate product features					
Assist customer in demonstrating product features					
Assist customer in finding important information on product's package					
Explain store return policy					
Explain product's warranty from manufacturer					
Show warranty information booklet to customer					
Count correct change for customer					
Gift wrap package					
Bag product with stapled receipt					
Make thank-you statement to customer					

Identify prospect					
Approach prospect					
Use merchandise greeting					
Use service greeting					
Use informal greeting					
Ask questions to determine who product is for					
Explain key features					
Explain key benefits					
Remove product from package					
Demonstrate key features					
Hand product to prospect to demonstrate usage of key features					
Ask questions to determine if prospect likes product					
Handle price objection					
Handle need objection					
Make closing statement					
Write up sales check					
Figure sales tax					
Identify sales tax from sales tax credit					
Calculate total sales					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Sales**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Sales Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Keep sales counters clean at all times					
Remove all cartons from floors					
Keep floors clean of any product spills					
Keep cartons away from walk areas					
Use safety razors to open cartons					
Do not stack cartons too high					
Do not leave razors on counter where children may pick them up					
Keep all tools behind counters					
Use proper lifting techniques for heavy cartons					
Keep cleaners or solvents out of reach of customers					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Remove all broken items, especially glass, from selling areas					
Report any accidents to your manager immediately					
Know the location of fire extinguishers					
Know where fire exits are located					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Sales**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Sales Mathematics Skills	O b j e c t i v e E v d e	F r u s t e r i v e n l	I n s t r u c t o r i n v o l v e d	I n d e p e n d e n t l e v e l
Solve math problems involving addition (several items of merchandise and/or sales tax)				
Solve math problems involving subtraction (on merchandise returns)				
Solve math problems involving multiplication (to figure sales tax)				
Solve math problems involving multiplication (when there is a % off)				
Solve math problems of multiplication involving multiple purchase of same items				

	O b j e c t i v e n e s	F r u s t r a t e g i c a l i n v e n e s	I n s t r u c t i o n a l i n v e n e s	I n d e p e n d e n t i a l i n v e n e s
Solve math problems involving division (figure unit price when price per dozen is known)				
Calculating amount of change for customers				

Tabulate sales checks by putting figures in columns connecting				
Understand symbols - 1/2 off, 1/4 off				
Understand symbols - 10% off, 25% off, 30% off, 40% off and 50% off				
Convert decimals to %				
Convert % to decimals				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Sales**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Sales Vocabulary Skills	R	S	U	C
	e	P	d	o
	c	e <td>e <td>n </td></td>	e <td>n </td>	n
	o	l <td>r <td>t </td></td>	r <td>t </td>	t
	g	l <td>s <td>e </td></td>	s <td>e </td>	e
	n	l <td>t <td>n </td></td>	t <td>n </td>	n
	i	l <td>a <td>f </td></td>	a <td>f </td>	f
	W	W	W	W
	t	l	d	U
	o	o	o	s
	r	r	r	r
	o	n	n	e
	r	d	d	d
	d	g	g	e
	n	g	g	d
Salesmanship				
Retail selling				
Industrial selling				
Promotion				
Distribution				
Market				
Marketing				
Advertising				
Personal selling				
Needs				

	R e c o g n i t i o n d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f U n d e r s t a n d i n g
Wants				
Goods				
Services				
Customer				
Prospect				
Product knowledge				
Product features				
Product benefits				
Brand name				
Trademark				
Packaging				
Model				
Price				
Product line				
Credit				
Delivery				
Product uses				
Manufacturer				
Product composition				
Informative label				
Descriptive label				
Grade label				
Warranty				
Guarantee				
Discount				
List Price				
Quantity discount				
Sales presentation				
Preapproach				
Approach				
Merchandise greeting				
Service greeting				
Informal greeting				
Opening barrage of key features				
Features				
Demonstration				
Objection				
Forestalling objections				
The close				

	R e c o g n i t i o r d n	S p e l l i n g d g	U n d e r s t a n t i o r n d g	C o n t e n t i o r n d g
Assumption close				
Special concession close				
Customer relations				
Customer complaint				
Sales manager				

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VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor Yes No

Agreement of Special Education Instructor Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Cosmetology**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Cosmetology**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Cosmetology Skills (Shampooing & Rinsing)	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Diluting detergent					
Dissolving granules					
Determining amount of each to use					
Determining which shampoo to use					

Use of neck strip, cape, towel					
Prepare hair for shampoo					
Remove net & pins; brush hair					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Seat patron properly					
Adjust head to sink; apply wax paper					

Determine type & amount of shampoo					
Wet hair; apply shampoo					
Cover all areas of scalp					
Rinse the hair					
Regulate the temperature of the water					
Proper position of hands during shampoo					
Proper position of cosmetologist					
Test for cleanliness					
Remove moisture from the hair					
Wrap head in a towel & return to work station					

How to prepare sterilizing solution					
How to prepare & sterilize combs & brushes					

Hair structure					
Hair texture					
Hair porosity					
Hair elasticity					
Hair color					
Abnormal hair conditions					

Permanent waving (cold)					
Permanent waving (heat)					
Sun					
Hair bleaches					
Hair colorings					
Soap shampoos					
Soapless shampoos					
Other products					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Peroxide rinse					
Acid rinse					
Henna rinse					
Color rinse					
Cream rinse					
Medicated rinse					

Cosmetology Skills
(Basic Operations)

Arrange sterilized supplies & implements					
Beautician washes her hands					
Examine condition of patron's neck and scalp					
Apply neck strip & cape					
Shampoo hair					

Select suitable hair rinse					
Prepare rinse mixture					
Apply rinse mixture as per instructions					
Check results of rinse on patron					
Apply final water rinse					
Style hair					

Discard used supplies					
Place supplies in their proper place					
Clean booth					
Sanitize implements & store in cabinet sterilizer					
Beautician washes her hands					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Cosmetology**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

- ✓ indicates that student has achieved this goal
- X indicates that student is working on this objective

Cosmetology Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean shampoo bowl & remove hair from basket					
Dampen a piece of cotton with 70% alcohol & sanitize neck of the bowl					
Do not permit shampoo to get in the patron's eyes					
Protect patron's ears with small pieces of cotton if she is sensitive to water					
Test water temperature on your inner wrist before applying it on patron's head to make sure it is not too hot or cold					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not permit fingernails to scratch the scalp. Use only the cushions of the fingers for scalp manipulations					
Always towel blot excess moisture from patron's hair before she leaves the shampoo bowl					
Do not turn the dryer to hot if the patron is subject to high blood pressure					
Do not permit any water to remain on the floor around the shampoo bowl if any water should accidentally get on the floor					
When draping a patron, do not allow the shampoo cape to come in contact with the patron's skin					
Use only sanitized combs, brushes, towels & all implements for each patron					
Keep all shampoos & materials labeled					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Cosmetology**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Cosmetology Mathematics Skills	O b j e c t i v e d e	F r u s t r a t i v e n e s	I n s t r u c t i v e n e s	I n d e p e n d e n t l e v e l
Measures cups				
Measures pints				
Measures quarts				
Measures gallons				
Computes minutes				
Computes seconds				
Multiplies a 2-3 digit number by a 1 digit number				
Multiplies a 2-3 digit number by a 2 digit number				
Divides a 3-4 digit number by a 1 digit number				

	O b j e c t i v e d e	F r u s t r a l t e i v o e n l	I n s t r u c t i o n s a l l	I n d e p e n d e n t l
Divides a 3-4 digit number by a 2 digit number				
Subtracts a 3-4 digit number from a 3-4 digit number				
Adds a 3-4 digit number and a 3-4 digit number				
Adds fractions with like denominators				
Adds fractions with unlike denominators				
Writes a fraction to represent a given part of a whole unit				
Subtracts fractions with like denominators				
Subtracts fractions with unlike denominators				
Writes decimals to ten-thousandths				
Rounds decimals to nearest tenth, hundredth				
Adds decimals - ten				
Subtracts decimals				
Multiplies decimals by a whole number				
Divides decimal by a decimal				
Computes comparable value of pennies, nickels, dimes, quarters, half dollars				
Computes change for \$1.00				
Computes change for bills of \$10.00 or less				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Cosmetology**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Cosmetology Vocabulary Skills	R	S	U	C
	ecogni	pell	nderst	ontent
	Wt	Wl	Wd	W
	oi	oi	oi	Uo
	ro	rn	rn	sr
	dn	dg	dg	ed
Alkaline				
Coconut oil				
Cream shampoo				
Crown				
Hair line				
Sanitize				
Dry shampoo				
Hydraulic chair				
Lather				
Manipulation				

	R o g n i t o r d n	S p e l l o i r n d g	U n d e r s t a n d i n g	C o n t e n t o f U s e
Nape				
Neck strip				
Egg shampoo				
Dilute				
Soaping				
Soapless oil				
Tepid				
Water softener				
Concentrate				
Sheen				
Body				
Softens				
Solid				
Dissolve				
Brush applicator				
Bottle applicator				
Cotton applicator				
Henna rinse				
Camomile rinse				
Color rinse				
Sterilize				
Sanitize				
Sanitation				
Sterilizer				
Receptacle				
Vinegar rinse				
Bluing rinse				
Cream rinse				
Peroxide rinse				
Acetic acid				
Silver rinse				
Platinum rinse				
Medicated rinse				
Yellow cast				



VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
 Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
 Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Electrical**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Electrical**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Electrical Skills	O b j e c t i v e	E x p o s u r e	T r a i n g	P r o d u c t i o n	E m p l o y a b l e
Screwdrivers					
Diagonal pliers					
Lineman pliers					
Needlenose pliers					
Slip joint pliers					
Vice grip pliers					
Electrician's knife					
Awl					
Wire strippers					
Hacksaw					
Woodsaw (rip & crosscut)					
Micrometer					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
AWG					
Adjustable wrench (crescent)					
Pipe wrench (stillsen)					
Combination wrench					
Allen wrench					
Files					
Brace and bit					
Conduit cutter					
Conduit threader					
Conduit reamer					
Carpenter's square					
Level					
Cold chisel					
Wood chisel					
Machinist hammer					
Mallet					
Tape measure					
Spring joint rule					
T square					
Plumb bob					
File card					
Nut drivers					
Socket wrench					
Center punch					
Prick punch					
Pin punch					
Screw gauge					
Feller gauge					
Depth gauge					
Taps and dies					
Adjustable reamers					
Chassis punches					
Fuse puller					
Tin snips					
Hydrometer					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Plastic					
Rubber					
Cotton					
Friction					
Varnished cambric					
Fiberglass					
Insulation putty					

Pig tail					
Tap					
Western Union wire					
Western Union cable					
Fixture					

Soldering gun					
Soldering iron					
Induction gun					
Soldering copper					
Propane torch					

Ammeter					
Voltmeter					
Wattmeters (1 & 3 phase)					
Ohmmeter					
Multimeter					
Varmeter					
Power factor meter					
Frequency					
Pyrometer					
Whetstone bridge					
Phase rotation					
Synchroscope					
Stroboscope					
Tachometer					
Capacitor tester					
High voltage tester					
Megger					
Clamp-on ammeter-voltmeter					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Pistol drill					
Portable saw					
Disc grinder					
Drill press					
Conduit cutter & threader					
Pedestal & table grinder					
Power hacksaw					
Mica undercutter					

Read residential wiring diagrams					
Interpret the National Electrical Code					
Determine calculated load					
Determine service entrance conductor size					
Determine general lighting load					
Determine appliance circuit load					
Determine number of branch circuits					
Determine number of small appliance branch circuits					
Apply the demand factor					
Install a service mast					
Install service head					
Install meter base					
Install load center					
Install ground electrode					
Bond service ground to water main					
Install load service breakers					
Install load center fuses					

Plan cable layout					
Determine wire size to be used for each circuit					
Determine correct box sizes (maximum conductors per box)					
Determine conductor ampacity vs. ambient temperature					
Mount switch boxes					
Gang switch boxes					
Mount receptacle boxes					
Mount light outlet boxes					
Mount offset bar hanger					
Mount junction boxes					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Drill cable holes in studs & joists					
Notch studs & install steel plates					
Pull romex cable					
Install box connectors					
Use cable clamps in boxes					
Staple romex cable					
Clamp romex cable					
Remove box knockouts					
Connect convenience receptacles					
Use grounding clips					
Connect single-pole switches					
Connect three-way switches					
Connect four-way switches					
Connect incandescent lights					
Connect incandescent dimmers					
Connect fluorescent lights					
Connect fluorescent dimmers					
Connect interchangeable units					
Connect electric heating					
Connect electric heating thermostats					
Connect electric water heaters					
Connect electric range					
Connect electric clothes dryer					
Connect electric dish washer					
Connect electric garbage disposal					
Connect water pump					
Connect overhead garage door opener					
Complete electrical inspection form					
Use wire nuts					
Use wire bugs					

Cut EMT					
Ream EMT					
Clamp EMT					
Bend EMT					
Use EMT couplings					
Use EMT connectors					
Use insulated bushings					
Pull wire					
Use a fish tape					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Cut rigid conduit					
Ream rigid conduit					
Thread rigid conduit					
Clamp rigid conduit					
Bend rigid conduit					
Make conduit nipples					
Install connectors					
Install couplings					
Install lock rings					
Install insulating bushings					
Drill holes in masonry using star drills					
Drill holes in masonry using masonry drills					
Install fasteners in masonry					

Cut flexible conduit					
Clamp flexible conduit					
Install connectors					
Install couplings					
Install insuliners					

Install low voltage transformers					
Install bells, buzzers & chimes					
Run low voltage wire					
Install low voltage push buttons					
Install door lock					
Install annunciator					
Install burglar alarm					
Install fire alarm					

Mix electrolyte					
Add electro!yte to a battery					
Add water to a battery					
Clean battery terminals					
Clean battery surface					
Test battery with a hydrometer					
Test battery with a voltmeter and ammeter					
Conduct a normal charge					
Conduct a fast charge					
Connect batteries for different voltages					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Understand d-c motor theory					
Understand d-c generator theory					
Connect a d-c shunt motor					
Connect a d-c series motor					
Connect a d-c cumulative compound motor					
Connect a d-c differential compound motor					
Test d-c motor field windings for opens					
Test d-c motor field windings for shorts					
Test d-c motor field windings for grounds					
Test d-c armature with a growler					
Test d-c armature with a bar-to-bar test					
Properly disassemble and reassemble a d-c motor					
Rewind d-c motor shunt field coils					
Rewind d-c motor series field coils					
Rewind d-c armature					
Undercut mica					
Replace d-c motor brushes					
Reseat d-c motor brushes					
Use a commutator stone					
Use a commutator burnisher					
Check brush pressure with a spring gauge					
Remove and replace ball bearings					
Remove and replace sleeve bearings					
Properly lubricate bearings					
Connect d-c motors to starters					
Connect d-c motors to controllers					
Connect pressure switches					
Connect vacuum switches					
Connect limit switches					
Connect start-stop buttons					
Read schematic diagrams					
Read controller wiring diagrams					
Determine correct branch circuit wire size					
Determine correct overcurrent protection					
Connect d-c shunt generator					
Connect d-c series generator					
Connect d-c cumulative compound generator					
Connect d-c differential compound generator					
Connect interpoles					
Connect compensating windings					
Connect generators to control panel					
Parallel d-c generators					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Connect equalizer connection between generators					
Connect d-c generator voltage regulators					
Shift electrical load between d-c generators					
Shift brushes to the neutral plane					

Use Ohm's Law					
Analyze simple d-c circuits					
Analyze series d-c circuits					
Analyze parallel d-c circuits					
Analyze series-parallel circuits					
Understand principles of d-c motor action					
Understand principles of d-c generator action					
Understand purpose of interpoles					
Understand purpose of compensating windings					
Apply Fleming's Right-hand Rule					
Understand torque and its variables ($T = KZI\theta$)					
Understand armature reaction					
Understand counter electromotive force					
Understand hystereses and their effects					
Understand eddy currents and their effects					
Understand magnetic saturation					
Understand voltage regulation					
Understand speed regulation					
Understand factors that affect voltage regulation					
Apply Fleming's Left-hand Rule					
Understand the purpose and use of the diverter					
Understand mutual inductance					
Understand self-inductance					
Able to determine efficiency					
Recognize drum and gramme-ring armatures					
Understand lap connected armatures					
Understand wave connected armatures					
Understand commutator pitch					
Understand the need for equalizer connections in a lap connected armature					
Understand coil pitch					
Understand the frogs leg winding					
Understand critical field resistance					
Understand reasons why a generator fails to build-up					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Understand dynamic braking					
Understand the operation of magnetic blowouts					
Understand the operation of eutectic overload relay					
Use the prony brake					
Understand methods of d-c motor acceleration					

Understand the principle of operation of the a-c induction motor					
Understand how the a-c induction motor produces a rotating magnetic field					
Able to reverse rotation of a three-phase induction motor					
Able to reverse rotation of a single-phase induction motor					
Able to reverse rotation of a repulsion-start induction-run motor					
Test a capacitor for proper operation					
Make a three-phase wye connection					
Make a three-phase delta connection					
Recognize a squirrel-cage, wound-rotor and a synchronous motor					
Determine the number of poles in an a-c motor					
Determine the number of pole phase groups in a three-phase motor					
Rewind a single-phase motor					
Rewind a three-phase motor					
Replace the centrifugal switch in a single-phase motor					
Connect a-c motors to their controllers					
Connect a-c alternators to their switchboard					
Parallel a-c alternators using synchroscope					
Shift electrical load between alternators					
Shift reactive load between alternators					
Connect voltage regulators in a-c alternators					
Operate synchronous motor					
Operate a synchronous motor to correct power factor					
Test a-c machine windings for opens, shorts and grounds					
Connect dual voltage stators in series-star					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Connect dual voltage stators in parallel-star					
Connect dual voltage stators in series-delta					
Connect dual voltage stators in parallel-delta					
Connect wound-rotor motor as a frequency changer					
Analyze a-c circuits containing R					
Analyze a-c circuits containing L					
Analyze a-c circuits containing C					
Analyze a-c circuits containing R-L-C in series					
Analyze a-c circuits containing R-L-C in parallel					
Analyze a-c circuits containing R-L-C in series-parallel					
Analyze a-c circuits for series resonance					
Analyze a-c circuits for anti-resonance					
Analyze a-c circuits for impedance					
Analyze a-c circuits for apparent power					
Analyze a-c circuits for reactive power					
Analyze a-c circuits for true power					
Analyze a-c circuits by the use of vectors					

Determine polarity of transformer terminals using d-c voltmeter & battery method					
Determine polarity of transformer terminals using a-c voltmeter method					
Determine polarity of transformer terminals using visual method					
Identify primary & secondary terminals if manufacturer's markings are missing					
Identify additive & subtractive wound transformers					
Connect primaries & secondaries of two single-phase transformers in series					
Connect primaries & secondaries of two single-phase transformers in parallel					
Connect both primaries & secondaries of two single-phase transformers in series					
Connect both primaries & secondaries of two single-phase transformers in parallel					
Connect autotransformer to increase voltage					
Connect autotransformer to decrease voltage					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Connect three single-phase transformers star-star					
Connect three single-phase transformers delta-delta					
Connect three single-phase transformers star-delta					
Connect three single-phase transformers delta-star					
Connect two single-phase transformers in "open delta"					
Determine core losses of a transformer by using "open circuit test"					
Determine copper losses of a transformer by using "short circuit test" or "impedance test"					
Determine efficiency of a transformer at full load					
Determine line & phase voltage & current for a star-star connected transformer					
Determine line & phase voltage & current for a delta-delta connected transformer					
Determine line & phase voltage & current for a star-delta connected transformer					
Determine line & phase voltage & current for a delta-star connected transformer					
Observe all safety precautions when working with potential & current transformers					
Determine percent of voltage regulation of transformer					
Troubleshoot a faulty transformer					

Understand sine wave generation					
Understand inductance					
Understand capacitance					
Understand phase displacement					
Understand inductive time constant					
Understand capacitive time constant					
Know types of a-c generators					
Understand frequency					
Understand voltage regulation					
Understand power measurements in a-c circuits					
Understand power factor					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Understand reactance & its effects					
Understand impedance & its effects					
Understand resonance & anti-resonance					
Understand polyphase systems					
Understand a-c meter principles					
Understand how to use & care for a-c meters					
Understand how to shift true power & reactive power between alternators operating in parallel					
Know how to control alternator frequency					
Understand principle of operation of a-c induction motor					
Understand operation of a single-phase a-c induction motor					
Understand operation of the universal motor					
Understand operation of the repulsion-induction motor					
Understand how to connect dual voltage motors					
Solve for synchronous speed of a-c induction motors					
Understand slip					
Determine rotor frequency					
Determine rotor power factor					
Understand principle of operation of squirrel-cage rotor					
Understand principle of operation of double squirrel-cage rotor					
Understand torque characteristics of induction motors					
Understand characteristics of amortisseur winding in the synchronous motor					
Principle of power factor correction with the synchronous condenser					
Understand effects of excitation of a synchronous condenser					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Electrical**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Electrical Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Appropriate footwear					
Clothing shall not constitute a hazard					
Appropriate dress for the job task					
Hair shall be contained					

Clean machines & immediate areas daily					
Dispose of oily rags & scraps of metal debris in oily rag disposal container					
Any lubricants or cutting oils shall be stored in areas provided for those substances					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Help in shop clean up					
Any grease or oil shall be wiped up immediately with cloths					

Power operated equipment shall be energized only by personnel familiar with their operation					
Instructor's permission shall be secured before using any machinery or power device					
Eye protection shall be worn by anyone operating rotation power machinery as well as anyone in adjacent areas of the equipment					
Full face shields shall be worn when operating power grinders, wire brushes and drill presses					
Anyone entering the lab shall wear eye protection upon entrance if lab machinery is being used (Note: Instructor shall be notified of anyone entering lab during instruction)					
Personnel shall not talk to nor otherwise distract anyone using power machinery					

Extreme care should be exercised when working on any equipment connected to the volt bus duct					
NEVER work on an energized circuit except for periods of troubleshooting					
NEVER work on shop equipment or circuits unless an instructor is present					
Discharge all capacitors prior to working on a circuit containing capacitors					
Defective test equipment should not be used. Inform the instructor					

Proper use of safety glasses					
Proper use of goggles					
Proper use of face shield					
Proper use of rubber gloves					
Proper use of rubber apron					
Proper use of rubber mats					
Proper use of caution tags (DO NOT ENERGIZE)					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Safety eye protection shall be worn when using shop air to blow debris or clean objects					
Air spinning bearing assemblies is prohibited					
Never direct air stream toward personnel					

All persons in the lab shall maintain activities that are responsible & safe at all times					
Persons using lab facilities shall be alert at all times & aware of activities around them					
Unauthorized persons shall not use lab or equipment					

All injuries shall be reported to instructor immediately					
In the case of emergencies caused by power operated equipment " <u>Panic Buttons</u> " are provided on each wall of the lab. Depressing the red buttons will shut off power to all outlets & devices. Notify the instructor immediately to this action					

Always inform instructor if feeling ill					
Do not attempt to operate power machinery if under doctor's prescribed drugs					
Inform instructor of any personal situation that may require his knowledge to deal with in an emergency situation (i.e. you were sick recently, gave blood, etc.)					

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SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Electrical**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Electrical Mathematics Skills	O b j e c t i v e d e	F r u s t r a t e i v e n l	I n s t r u c t i o n v e n t l	I n d e p e n d e n t l
Solve math problems involving addition				
Solve math problems involving subtraction				
Solve math problems involving division				
Solve math problems involving multiplication				
Identify numerator and denominator in a given fraction				
Convert mixed numbers to improper fractions				
Reduce fractions to lowest terms				
Write numbers in scientific notation				
Write the place value of each digit in a numeral with three decimal places				
Write fractions in decimal notation				

	O b j e c t i v e E v a l u e	F r u s t r u c t i v e I n s t r u c t i o n s	I n s t r u c t i o n s	I n d e p e n d e n t I n d e v e n t
Solve problems involving addition, subtraction, multiplication and division of decimals				
Change decimals or fractions to percentages				
Write percentages as fractions & decimals				
Plot values & angles using vector notation				
Transpose a basic formula to derive other values				

Read a tape measure to the nearest sixteenth of an inch				
Measure objects & spaces to the nearest sixteenth of an inch				
Convert a small unit of measurement to larger unit (ex. milliamps to amps)				
Convert a large unit of measurement to smaller unit (ex. volts to millivolts)				
Interpret values associated with nonlinear scales				
Interpret values associated with linear scales				
Measure angles with a protractor to the nearest degree				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Electrical**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Electrical Vocabulary Skills	R e c o g n i t i o n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t u s e
	W o r d r e c o g n i t i o n	W o r d s p e l l i n g	W o r d u n d e r s t a n d i n g	W o r d u s e
AC - Alternating Current				
AC generator				
Ampere				
Ampere hour				
Apparent power				
Armature				
Armature reaction				
Atom				
Automatic starter				
Auxiliary contact				

	R e c o g n i t i o n d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f W o r d s u s e d
Average value				
AWG - American Wire Gauge				
Axial center				
Bar magnet				
Battery				
Binding post				
Brush				
Brush holder				
Capacitance				
Capacitor				
Capacitor start motor				
Capacity				
CW, CCW				
Circuit				
Circuit breaker				
Circular mil				
Coil				
Collector rings				
Commutator				
Compound wound motor				
Condenser				
Conductor				
Contact				
Contacto				
Copper losses				
Counter EMF				
Current				
Cycle				
D'arsonval meter				
DC - Direct Current				
Depolarizer				
Dielectric				
Duty - Continuous				
- Short time				
- Intermittent				
- Periodic				
- Varying				
Dynamometer				
Dynamotor				

	R e c o g n i t i o n a l W o r d s	S p e l l i n g W o r d s	U n d e r s t a n d i n g W o r d s	C o n t e n t W o r d s
Eddy current loss				
Efficiency				
Effective value				
Electric motor				
Electrically reversible motor				
Electrolyte				
Electromagnet				
Electromotive force				
Electron				
Enclosure				
Energy				
Eutectic Alloy				
Field coil				
Flexible coupling				
Frame				
Frame size				
Frequency				
Fuse				
Galvanometer				
Generator				
Horsepower				
Hydrometer				
Hysteresis				
Induced EMF				
Induction				
Induction motor				
Insulation resistance				
Insulator				
IR drop				
Iron vane meter				
Jogging (Inch)				
Kilowatt				
Laminations				
Lamp				
Lamp cord				
Lenz's Law				
Load				
Lodestone				
Magnet				

	R e c o g n i t i o n d n	S p e e l W l o i r n d g	U n d e r s t a n d i n g	C o n t e n t U o r d e r
Magnetic contactor				
Magnetic controller				
Magnetic field				
Matter				
Micro				
Mill				
Milli				
Molecule				
Motor				
Motor - generator set				
Multi-speed motor				
Multimeter				
Multiplier				
Negative				
Nema				
Neutron				
No load voltage				
Nucleus				
Ohm				
Ohmmeter				
Ohm's Law				
Ohms per volt				
Open circuit				
Open core				
Overload relay				
Parallel circuit				
Peak				
Permanent magnet				
Phase - single				
- three				
Pilot device - float-switch				
- foot-switch				
- limit-switch				
- pressure-switch				
- temperature-switch				
Plugging				
Polarity				
Pole				
Pole piece				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Polyphase				
Positive				
Power				
Power factor				
Primary cell				
Primary winding				
Proton				
Pushbutton				
Rating				
Reactance				
Rectifier				
Relay				
Reluctance				
Repulsion-start motor				
Resistance				
Resistor				
Rheostat				
RMS value				
Rotor				
Safety switch				
Schematic diagram				
Secondary				
Secondary cell				
Selector switch				
Sensing device				
Series circuit				
Series wound motor				
Service factor				
Shaded pole motor				
Short circuit				
Shunt wound motor				
Silicones				
Single-phase				
Slip rings				
Solenoid				
Specific gravity				
Split-phase motor				
Square mil				
Squirrel-cage winding				

	R e c o g n i t i o n d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f W o r d s u e
Starter				
Starting switch, centrifugal				
Starting torque				
Static electricity				
Stator				
Step-down transformer				
Submersible motor				
Switch				
Synchronous motor				
Terminal				
Thermistor				
Thermocouple				
Thrust bearing				
Timer				
Torque				
Transformer				
Turns ratio				
U/L				
Universal motor				
Varistor				
Volt				
Voltage				
Voltage rating				
Voltaic cell				
Volt-ampere				
Watt				
Watt-hour				
Wire				
Work				
Wound rotor induction motor				
Yoke				
Zero adjuster				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor
 Yes No

Agreement of Special Education Instructor
 Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

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Vocational/Special Education

I.T. Planner

Vocational Area: **Welding**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Welding**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

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✓ indicates that student has achieved this goal

X indicates that student is working on this objective †

Welding Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Learn oxy-acetylene safety rules					
Learn oxy-acetylene terms					
Correctly set up oxy-fuel equipment					
Cut a 90° straight cut on mild steel plate					
Cut a 45° bevel cut on mild steel plate					
Cut different size circles on mild steel plate					
Correctly set up the automatic track torch					
Cut straight lines using the track torch					
Weld a bead on 12ga. sheet					
Weld a corner fusion joint on 12ga. sheet					
Weld a butt joint on 12 and 14ga. sheet					
Weld a Tee joint on 12 and 14ga. sheet					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Braze weld a bead on 14ga. sheet					
Braze weld a butt joint on 14ga. and 18ga. sheet					
Braze weld a lap joint on 14ga. sheet					

Learn safety rules of S.M.A.W.					
Learn terms of S.M.A.W.					
Weld beads with tie ins with E6013, E7014, E6010, E7018, E8018C3					
Weld flat pads using E6013, E7018, E8018C3					
Weld butt joints using E6013, E6010, E7018					
Weld 3 pass fillet welds on T joints using E6013, E7014, E7018, E8018C3					
Weld single pass lap joints using E6013, E7014, E7018					
Tack weld in all positions					
Complete 3-7 in all positions (horizontal, vertical and overhead)					

Learn terms associated with M.I.G. welding					
Set up M.I.G. welding equipment					
Choose correct filler metal & size for the job					
Choose correct gas for the job					
Change wire spools & re-thread a M.I.G.					
Make tack welds with a M.I.G.					
Run beads on 1/8 and 3/16 plate					
Weld a Tee joint					
Weld a full penetration butt joint					
Practice build up on heavy plate					
Move on to out of position welding					

Identify & set up parts of a T.I.G. welding system					
Select proper tungsten for type of welding being done					
Prepare tungsten for welding					
Make tack welds on mild steel, stainless steel & aluminum					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Weld beads on mild steel, stainless steel & aluminum					
Make full penetration butt joints on mild steel, stainless steel & aluminum					
Weld single pass Tee joints on mild steel, stainless steel & aluminum					
Weld a lap joint using mild steel, stainless steel & aluminum					
Weld a corner fusion weld using mild steel, stainless steel & aluminum					
Make the above welds in all positions					

Learn terms associated with blueprint reading					
Draw a simple three view sketch					
Read blueprints & identify different types of lines					
Identify important dimensions					
Draw a pictorial from a blueprint					
Construct & weld a project from a blueprint					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Welding**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
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✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Welding Safety Skills					
Application of federal safety colors -					
Red					
Yellow					
Orange					
Purple					
Green					
Black & White					
Wear appropriate shop clothing					
Confine long hair					
Wear safety glasses					
Wear correct eye protection when welding or cutting					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Remove all jewelry when working					
Make sure there are no flammable liquids nearby					
Review all arc welding safety rules					
- Handle gas cylinders with care					
- Never weld in a confined area without ventilation					
- Always ground machine properly					
- Wear rubber boots when welding in damp areas					
- Stand on solid items only					
- Keep eye protection in place (curtains)					
- Do not weld or cut directly on concrete					
- Never use more than 15 p.s.i. of acetylene pressure					
- Do not oil or grease regulators					
- Do not weld or cut closed, jacketed tanks or vessels					
- Light torch with friction lighters only					
- Do not use gas cylinders as rollers					
- Use exhaust at the sources when welding					

Keep tools in good condition					
Retain all guards & barriers					
Report all accidents to instructor or foreperson					
Turn off electrical power before cleaning or servicing a machine					
Keep shop floors clean					
Clean up spills quickly					
Stack materials correctly					
Store combustible materials properly					
Learn classes of fires & correct fire extinguishers to combat them					
Learn to properly operate fire extinguishers					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Welding**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e d e	F r u s t r a l t e i v o e n l	I n s t r u c t i o n a l l	I n d e p e n d e n t l
Welding Mathematics Skills				
Solve math skills involving addition				
Solve math skills involving subtraction				
Solve math skills involving multiplication				
Solve math skills involving division				
Reduce common fractions				
Convert decimals to fractions				
Reduce inches to feet & inches				

	O b j e c t i v e	F r u s t r a t e g i c	I n s t r u c t i o n a l	I n d e p e n d e n t
Find the circumference of circles				
Find the volume of a cylinder				
Find the volume of a rectangular or square container				
Read rulers & tape measures to nearest one-sixteenth of an inch				
Estimate job cost				
Find the radius & diameter of circles				
Find the center of rectangles & squares & circles				
Understand flow rates				
- cubic feet per hour				
- pounds per square inch				
Measure objects				
Layout 45° mitered joints				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Welding**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Welding Vocabulary Skills	R e c o g n i t i o n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t U s e
	W o r d s	W o r d s	W o r d s	W o r d s
Acetylene				
Alloy				
Alloy Steel				
Alternating Current (A.C.)				
Amperage				
Arc				
Arc Blow				
Arc Welding				
Argon Gas				
Backfire				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t s
	W o r d s	W o r d s	W o r d s	W o r d s
Backhand Welding				
Bead				
Bevel				
Brazing				
Butt Weld				
Cable				
Carbon				
Carbon Steel				
Carburizing Flame				
Collet				
Collet Body				
Color Coding				
Conductivity				
Cored Wire				
Corner Weld				
Crater				
Critical Temperature				
Cutting Torch				
Cylinder				
Direct Current (D.C.)				
Ductile				
Electrical Conductivity				
Electrode				
Electrode Holder				
Fatigue Strength				
Feeder Roll				
Filler Metal				
Fillet Weld				
Filter Plate				
Flame Cut				
Flowmeter				
Flux				
Forehand Welding				
Fusion				
Gas Cup				
Gauge				
Ground Clamp				
Hardfacing				
Hardness				

	R e c o g n i t i o n r o d n	S p e l l i n g r o d g	U n d e r s t a n d i n g	C o n t e n t o f U s e d
Helmet				
Hose				
High Frequency Current				
Inert Gas				
Infrared Rays				
Ingot				
Injector Torch				
Inner Cone				
Land				
Lap Joint				
Longitudinal Angle				
Low Alloy Steel				
M.I.G.				
Metallurgy				
Mill Scale				
Neutral Flame				
Nozzle				
Orifice				
Oscillate				
Oxidizing Flame				
Oxy-acetylene Welding				
Oxy-acetylene Cutting				
Oxygen				
Parent Metal				
Penetration				
Plate Steel				
Polarity				
Porosity				
Preheat				
Puddle				
Rectifies				
Regulator				
Residual Stress				
Root				
Root Opening				
Safety Cap				
Shielding Gas				
Shielded Metal Arc Welding				
Short Arc M.I.G. Welding				

	R e c o g n i t i o n d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t O f W o r d s U s e d
Slag				
Slag Inclusions				
Soapstone				
Spark Lighter				
Spark Testing				
Spatter				
Spray Arc M.I.G. Welding				
Stickout				
Stress Relieving				
Stringer Bead				
Tack Weld				
Tee Joint				
Tempering				
T.I.G.				
Tensile Strength				
Thermal Conductivity				
Thermal Expansion				
Tip				
Toe of the Weld				
Torch				
Transformer				
Tungstun				
Undercutting				
Ultraviolet Rays				
Voltage				
Weave				
Welding Rod				
Wniskers				
Wire Electrode				
Wire Wheel Welding				
Welding Current				
Welding Voltage				
Yield Strength				
Yield Point				

VOCATIONAL/SPECIAL EDUCATION CURRICULUM PLANNING FORM

Student's Name _____

Recommended Occupational Area _____

Agreement of Shop Instructor Yes No

Agreement of Special Education Instructor Yes No

Immediate Vocational and Safety Tasks to be Accomplished:
Vocational Instructor

Immediate Mathematics and Vocabulary Tasks to be Accomplished:
Special Education Instructor

Needed Materials (Vocational/Special Education Instructors):

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education
I.T. Planner

Vocational Area: **Graphic Arts**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Graphic Arts**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Graphic Arts Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Start & prime electronic typesetter					
Install a font of type					
Insert a width card					
Load photographic material					
Install & remove the cassette					
Choose the correct pulley & belt					
Install pulleys & belts					
Set leading & continuous leading					
Set justification thumb dial					
Select correct justification size					
Read line length display - (subtract)					
Use cancel character, word & line keys					

	C b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Use insert space key					
Use quad left & return keys					
Correct an overset condition					
Center a line of copy					
Quad left & quad right copy					
Use the keyboard layout (all keys)					
Use the discretionary hyphen					
Calculate a line of type					
Double the point size of type					
Use the compuwik					
Clean the compuwik					
Lubricate the compuwik					
Clean film fonts					

Mix glue for layout work					
Use wax coater for layout work					
Cut out galley copy properly					
Correctly make a paste up using headliner and Varsity copy					
Make a neat clean looking layout					
Make small paste-ups using tweezers					
Properly glue-up a layout (a piece of copy-one paste-up)					
Use a T-square in making a layout					
Properly use a T-square & a triangle in making an accurate layout					
Center copy on layout (center on center)					
Correctly paste-up type close to a picture					
Make a halftone window on a layout					
Reduce & enlarge using the diagonal line method					
Correctly figure enlargements & reductions using the wheel					
Mark a layout for ruling					
Design a name card					
Design a letterhead correctly					
Choose a type style for making layout of a name card					
Correctly & accurately proof a layout					
Properly cover a layout for out-proofing					
Correct errors on a layout after proofing					
Layout correctly a ruled & typeset form					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Layout a post card correctly					
Use india ink & whiting on a layout					
Layout an envelope (return address & center address)					

Mix dark room chemicals (developer A&B, Stop & Hypo)					
Set camera for same size, lock in position & view copy on ground glass					
Mix developer for darkroom (both powder & liquid)					
Position copy in copy board of process camera					
Center copy on ground glass of offset camera					
Set copy board & lens board of process camera for reductions & enlargements					
Remove film from box & place on back of process camera					
Set the "F" number for proper exposures					
Position lamps correctly for even light distribution on copy					
Properly use gray scale when exposing & developing film					
Determine emulsion side of film & explain layers of film					
Determine what size film to use and what are the standard sizes of film					
Place film on the camera back of an offset process camera					
Expose a negative on the process camera					
Insert film in developer tray & properly agitate it					
Speed up development in a certain area of negatives while developing the whole negative					
Put negative in stop bath & fixer (hypo) bath & determine processing time					
Inspect finished negative on darkroom glass					
Correctly mix farmers reducer & apply to negatives or positives					
Set automatic timer for exposures on process camera					
Clean developer, stop & fixer trays					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Operate vacuum frame					
Make photo print from negative					
Make reverse negative					
Clear sheet of film & make solid black negative					

Make standard corner for 1250 Multilith					
Rule standard corner on mask & mask a negative to it					
Mask negative for 1250 offset press					
Opaque a negative					
Remove opaque that is covering copy					
Strip two pieces of film together					
Mask a job for the 1850 press					
Attach masked negative to a plate					
Expose a plate in the vacuum frame					
Handle offset plate before & after work-up (developing it)					
Work-up an aluminum negative working offset plate					
Work-up an aluminum negative subtractive aluminum offset plate					
Hone (erase an image) the image from a plate					
Make a brown lined proof					
Mask a job for the KOR press					
Check a negative before burning					
Make a double burn negative setup					
Make a step burn negative setup					
Place a screen tint on the back of a negative					
Dry a photographic negative					
Scratch out filled in letters on a photographic negative					
Score & crack a negative or a positive					
Tape two negatives together (stripped)					
Inspect an offset plate after it is worked up					
Hang up & store a plate					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Set & adjust repelex unit for 1250 Multilith press					
Place ink in fountain & ink 1250 press					
Attach & detach masters for Multilith presses using standards master clamp, pin bar					
Set vacuum feed to properly pick up sheets & place them in the correct position on the register board					
Properly set register board in Multilith press					
Adjust impression cylinder on 1250 and 1850 Multilith presses					
Set delivery end of 1250 press					
Load paper magazine					
How water system, inking system & impression unit combine to make duplication process					
Check quality of copy produced on Multilith machine					
Change vertical position of image on Multilith press					
Make lateral adjustments of master on Multilith 1250					
Put new form ductor covers on repelex unit of Multilith 1250					
Install new blanket on 1250 Multilith press					
Remove ink rollers from 1250 Multilith press					
Check contact pressure of ink form rollers					
Clean ink rollers with multilith cleaner sheet					
Clean ink fountain & fountain rollers					
Install repelex rollers					
Take care of blanket for offset press					
Check and adjust master-to-blanket pressure					
Adjust impression cylinder pressure					
Adjust feed rollers					
Oil & clean vacuum pump					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Graphic Arts**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Graphic Arts Safety Skills					
Eye protection					
- when mixing any darkroom chemicals					
- when mixing chemicals for computer typesetters					
- when cleaning the press with solvents					
- when cleaning out silk screen frames					
- when mixing press chemicals					
- when mixing offset plate chemicals					
Hand protection if allergic to any chemicals or solvents					
No jewelry or loose clothing. Shop coats protect clothing					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Long hair must be safeguarded					
Only one person will operate machinery					
Use properly maintained tools					
Read all labels on chemicals before mixing or handling					
Use goggles when mixing any chemicals					
All chemicals must be returned to the safety cabinet					
No press adjustments should be made when machine is running					
Never remove or lock-out safety guards or covers					
Do not operate equipment unless all guards & shields are in place					
Do not start-up a machine that has stopped for no apparent reason					
Lock-out and tag any equipment that is being maintained or repaired					
Check for persons, tools or pieces of equipment between and around all parts of equipment - before operating or starting					
In high noise areas, wear hearing protection					
Keep fingers & other parts of body clear of nips, slitters & moving parts when operating a press					
Do not reach into machinery to make adjustments or clear paper while press is running					
Do not wipe cylinders, plates, rollers or blankets while equipment is moving					
When using rags to clean a press, fold rag into a pad, with no loose ends					
Do not eat in the graphic arts area					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Graphic Arts**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Graphic Arts Mathematics Skills	O	F	I	I
	b	r	n	n
	j	u	s	d
	e	s	t	e
	c	t	r	p
	t	a	v	e
	i	L	n	n
	v	t	v	d
	e	e	a	e
	n	n	e	n
	d	e	t	t
Change inches to picas				
Change inches to points				
Change picas to points				
Change picas to inches				
Change points to picas				
Change points to inches				
Measurement of an em				
Measurement of an en				

	O b j e c t i v e E v d e	F r u s t r a t e g i c a l I n v e n t i v e	I n s t r u c t i o n a l I n v e n t i v e	I n d e p e n d e n t I n v e n t i v e
Properly read 12-inch ruler to nearest sixteenth				
Properly read 12-inch ruler to nearest half pica				
Properly measure to specified objects in a layout				
Properly read a meter stick				

Properly use a T-square				
Properly use a triangle				
Properly lay out equal spaces using a T-square & triangle				
Properly use an enlarging & reducing wheel				

Solve problems involving addition of whole numbers & fractions				
Solve problems involving subtraction of whole numbers & fractions				
Solve problems involving multiplication of whole numbers & fractions				
Solve problems involving division of whole numbers & fractions				
Properly calculate paper before cutting				
Calculate type sizes				
Calculate borders for a layout				
Calculate margins for a printed job				
Calculate exposure time & temperature				
Calculate pH using test strips				
Properly read a fahrenheit thermometer				

Calculate & measure 1 ounce				
Calculate & measure 1 pint				
Calculate & measure 1 quart				
Calculate & measure 1 gallon				
Properly mix chemicals				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Graphic Arts**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Graphic Arts Vocabulary Skills	R e c o g n i t i o n d n	S p e l l i n g d g	U n d e r s t a n d i n g d g	C o n t e n t u s e d
Anti-halation backing				
Aperture				
Ascender				
Backing up				
Base				
Basis weight				
Blanket				
Bleed				
Blowup				
Body				

	R e c o g n i t i o n o r d n	S p e l l i n g o r d n	U n d e r s t a n d i n g	C o n t e n t o f w o r d s
Body type				
Burn				
Chase				
Color separation				
Composing stick				
Computerized composition				
Condensed type				
Contact print				
Contact screen				
Continuous tone				
Copy				
Crop				
Curl				
Cyan				
Dampeners				
Densitometer				
Density				
Diffusion transfer				
Dummy				
Em				
En				
Felt side				
Flat				
Fog				
Form				
Grippers				
Gumming				
Highlight				
Italic				
Jog				
Layout				
M				
Mask				
Mechanical				
Moire				
Mylar				
Negative				
Offset				
Opaque				

	K e c o g n i t o r d n	S p e l l o r n d g	U n d e r s t a n t o r n d g	C o n t e n t o f w o r d s u s e d
Opaque ink				
Packing				
pH				
Pica				
Point				
Process colors				
Quad				
Register marks				
Relative humidity (RH)				
Saddle wire				
Screen				
Side wire				
Signature				
Slug				
Soft dot				
Stripping				
Tack				
Text				
Tints				
Transparent ink				
Two-sheet detector				
Type gauge				
Vacuum frame				
Vehicle				
Vellum finish				
Walk off				
Wach up				
Wipe-on plate				
Work and tumble				
Work and turn				
Wrinkles				
Yellow				
Graphic Arts				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Machine**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

2:0

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Machine**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

/ indicates that student has achieved this goal

X indicates that student is working on this objective

Machine Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Sign a safety pledge					
Complete general shop safety awareness checklist					
Interpret & read industrial blueprints					
Make a usable shop sketch					
Make a layout using blueprint & hand tools					
Fasten work piece in bench vice					
Hacksaw to layout lines					
Finish by filing to layout lines					
File square hole to fit gage					
Find center of round stock using surface gage					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Find center of round stock using blade & center head (combination square set)					
Select proper tap drill size					
Produce drilled hole					
Counter sink hole					
Tap hole (producing internal thread)					
Produce external thread by using a die					
Convert fraction to decimal					
Complete simulated micrometer reading sheet					
Complete simulated vernier reading sheet					
Demonstrate linear measurement					
Cut off stock in power hacksaw (round & flat)					
Mount round stock in three jaw chuck (lathe)					
Mount round & square stock in four jaw chuck (lathe)					
Make proper gear selection for speed & feed					
Check head & tail stock alignment after light cut by marking both ends (lathe)					
Make tail stock alignment if required (lathe)					
Lathe, turn outside die to $\pm .010$					
Knurl on the lathe					
Lathe, chase threads, external					
Pedestal grinder, dress wheel by hand with disc dresser					
Sharpen tool bit to existing preground form					
Check number of threads with screw pitch gage					
Milling machine, vertical align vice by using a dial indicator					
Select end mill					
Mount end mill to proper holder					
Adapt to machine					
Make proper machine speed selection					
Cut key way vertical					
Cut key way horizontal					
Mount work piece parallel & mill to layout line with side of end mill					
Mount work piece in vice vertical and mill with face (bottom) of end mill					
On surface grinder, mount diamond set dresser, true & sharpen grinding wheel					
Surface grind two surfaces parallel					
Maintain tool crib					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Select proper tool upon demand					
Clean & store tools in tool crib					
Demonstrate good safe working conditions at all times					

Identify machine shop measuring tools					
Read a rule to nearest one sixty-four .015					
Read micrometers to nearest .001					
Read verniers to nearest .001					
Measure objects					
Calculate basic math problems dealing with circumference					
Lay out, measure & set up angles using a protractor					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Machine**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Machine Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Always wear safety glasses					
Wear leather top, non-skid sole shoes					
Wear ear protection in high noise level areas					
Do not wear loose fitting clothing					
Remove rings & jewelry when working in shop areas					
Conduct one's self in a manner conducive to safe shop practices					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not operate any machine tool until you have received safety instructions from the instructor					
Make machine adjustments & measurements when machine is at complete stop					
Keep all guards & safety devices in place					
Report any defective machinery					
Report all accidents to the instructor immediately					
Disconnect power from machine tools before performing any maintenance tasks					
Use the correct & proper tools to do a specific job					

Keep shop floor clear & free from grease & oil					
Materials & supplies must be stored in proper place					
Store oily rags in a self-closing metal container					
Keep sufficient brooms, brushes and other equipment available					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Machine**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Machine Mathematics Skills	O b j e c t i v e d e	F r u s t r a t e n l	I n s t r u c t i o n a l	I n d e p e n d e n t
Match symbols used in math problems to their name				
Solve math problems involving addition				
Solve math problems involving subtraction				
Solve math problems involving division				
Solve math problems involving multiplication				
Identify numerator & denominator in a given fraction				
Distinguish between proper, improper and mixed fractions				
Reduce fraction to lowest terms				

	O b j e c t i v e	F r u s t r a l t e r n e t i v e	I n s t r u c t i o n a l	I n d e p e n d e n t
Solve problems involving addition of decimals, subtraction of decimals, multiplication of decimals & division of decimals				
Write fractions as decimals				
Add, subtract degrees, minutes & seconds				
Advanced student will calculate tapers & angles using & understanding trig tables				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Machine**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

	R e c o g n i t i o n d n	S p e l l i n g r o d g	U n d e r s t a n d i n g d g	C o n t e n t u s e d
Machine Vocabulary Skills				
Section line				
Object line				
Dimension line				
Cut plain line				
Radius				
End view				
Top view				
Side view				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t O f W o r d s
Follower rest				
Steady rest				
Lathe chuck				
Lathe dog				
Drive plate				
Face plate				
Head stock				
Tail stock				
Thread chase dial				
Lead screw				
Saddle				
Compound				
Cross slide				
Bed (lathe)				
Apron				
Half nut				
Cross slide				
Lathe centers				
Tool post				
Tool holder				
Spindle threader				
Cam-lock spindle				
Tapered key drive spindle				
Clearance angles				
Gear box				
Tool bit				
Taper turning				
Facing				
Turning				
Boreing				
Reaming				
Center drill				
Knurling				

	R e c o g n i t i v e w o r d s	S p e l l i n g w o r d s	U n d e r s t a n d i n g w o r d s	C o n t e n t w o r d s
Vertical				
Horizontal				
End mill				
Plain mill cutter				
Cylindrical				
Periphery				
Straddle milling				
Concave				
Convex				
Collets				
Draw bar				
Arbor				
Spacing collars				
Fly cutter				
"T" slot				
Dove tail				
Key way				
Pick up (edge)				

Abrasive				
Truing a wheel (dressing)				
Parallelism				
Coolant				

Peening				
Filing or file				
Draw filing				
Cross filing				
"V" block				
Angle plate				
Hand tap				
Hand die				
Die stock				
"T" handle				
Set up				
Dividers				
Protractor				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Combination set				
Depth gage				
Screw pitch gage				
Calipers				
Micrometer				
Vernier calipers				
Radius gage				
Center gage (fish tail)				
Scriber				
Surface plate				
Surface gage				
Dial indicator				
Feed (rate)				
RPM (speed)				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: Scientific Data Processing

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

		Not Acquired	Acquired Employment Level
1.	_____	_____	_____
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____
7.	_____	_____	_____
8.	_____	_____	_____
9.	_____	_____	_____
10.	_____	_____	_____
11.	_____	_____	_____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Gait</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Eye-Hand</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Finger Dexterity</u>	P	_____	_____	_____
	E	_____	_____	_____

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Solves problems</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Works with people</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Completes job task</u>	P	_____	_____	_____
	E	_____	_____	_____
<u>Verbal communication</u>	P	_____	_____	_____
	E	_____	_____	_____

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Scientific Data Processing**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Scientific Data Processing Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Actual shop skills					
Turn on computer					
Load disk					
List directory					
Key in program developed by others					
Correct errors developed by others					
Run program					
Debug errors					
Save program					
List program					
Print program					
Word processing					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Load software program					
Key in password for program					
Key in material					
Use arrow keys					
Use space bar					
Use return					
Use caps lock					
Use shift key					
Copy text					
Make corrections					
Prepare documents					
Business letters					
Friendly letters					
Memo					
Copy numbers					
Bank Balance					
Stationary					
Proofread Documents					
Make corrections					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Scientific Data Processing**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Scientific Data Processing Safety Skills					
	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Keep your mind on your work. Do not disturb others					
Keep shop clean					
Turn off all equipment before changing or adjusting cable					
Turn off all equipment before replacing ribbon					
Make all adjustments of equipment before turning power on					
Make sure paper is in printer properly					
Be sure switch is off before inserting plug in outlet					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Always shut off computers and printers at the end of class					
Report all accidents to instructor no matter how minor					
Keep equipment in proper working condition. Immediately report any broken equipment to instructor. Do not attempt to make adjustments or repairs about which you are not absolutely sure					
Learn the location of switches, plug-ins, and fuses					
In case of emergency, learn how to turn off main switch					
Hold the plug, not the cord, when disconnecting electric cords					
Clean up any spilled liquids immediately					
Stack materials and supplies safely in their proper place					
Avoid wrestling, throwing objects and other forms of horseplay					
Know location in shop of all fire extinguishers					
Know emergency rules & exits for fire emergency					
Know location in shop of emergency first aid kit					
Know all hazardous material you may come in contact with					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Scientific Data Processing**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

✗ indicates that student is working on this objective

Scientific Data Processing Mathematics Skills	O b j e c t i v e	F r u s t e r i v e n t	I n s t r u c t o r i n v e n t	I n d e p e n d e n t
	d e	n t	l l	t l
Using whole numbers				
Using decimals				
Addition skills				
Adding accurately				
Adding decimals				
Subtracting accurately				
Subtracting decimals				
Making change				
Multiplying accurately				
Multiplying decimals				
Multiplying by 10				
Multiplying by 100				

	O b j e c t i v e E v d e	F r u s t r a t i v e L e v e l n l	I n s t r u c t i o n v e l l	I n d e p e n d e n t L e v e l
Multiplying by 1000				
Dividing accurately				
Dividing decimals				
Dividing by 10				
Dividing by 100				
Dividing by 1000				
Computing averages				
Rounding off numbers				
Finding the percent				
Finding the rate				
Ratios				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Scientific Data Processing**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

	R e c o g n i t i o n i n g	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t u s e
	W o r d r e c o g n i t i o n	W o r d s p e l l i n g	W o r d u n d e r s t a n d i n g	W o r d u s e
Scientific Data Processing Vocabulary Skills				
Applications program				
Accumulator				
Arithmetic operator/symbol				
Arrow				
Artificial intelligence				
Auto				
Backspace				
Basic				
Blank				
Boot				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t U s e
Branch				
Break				
Bug				
Calculator				
Caps				
Cassette				
Cathode-Ray Tube (CRT)				
Character				
Clear				
Command				
Compatible				
Computer				
Computer code				
Computer literacy				
Computer output				
Computer program				
Computer word				
Console				
Control key				
Cursor				
Data				
Data processing				
Debugging				
Decision				
Delete				
Dim statement				
Disk				
Disk drive				
Diskette				
Disk operating system				
DOS				
Enter				
Error				
Floppy disk				
Games				
Graphics				
Increment				
Initialize				
Input/output				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t W o r d s
Insert				
Instruction				
Keyboard				
List				
Memory				
Menu				
Microcomputer				
Modem				
New				
Output				
Pac-man				
Peripherals				
Personal computer				
Print				
Printer				
Program				
Programmer				
Rem				
Return				
Robot				
Run				
Save				
Shift				
Software				
Space bar				
Statement				
Statement number				
Stop				
Storage				
Syntax				
Telecommunications				
Terminal				
Upper and lower case				
Word processing				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Automotive Mechanic**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Automotive Mechanic**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Automotive Mechanic Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Remove hub cap & wheel nuts					
Remove tire from vehicle					
Jack up vehicle with hydraulic jack & safety stands					
Repair tube type tire					
Repair tubeless tire with plug					
Replace tire on wheel					
Replace wheel on vehicle using a torque wrench					
Rotate radial tires					
Rotate bias ply tires					
Recognize tire wear patterns					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Remove front wheel bearings					
Clean & repack wheel bearings					
Install & adjust wheel bearings					
Use a parts cleaner					
Use an air gun					
Install grease retainer					
Remove brake drums					
Measure brake lining					
Measure brake drum					
Machine a brake drum					
Machine a brake rotor					
Measure a disc brake pad					
Replace brake shoes					
Replace disc brake pads					
Identify proper brake tools					
Rebuild wheel cylinders					
Bleed brakes					
Adjust brakes					
Rebuild disc brake caliper					
Identify types of power brake units					
Lubricate ball joints					
Lubricate tie rods					
Lubricate universal joints					
Lubricate rubber bushings					
Test & inspect shock absorbers					
Inspect tie rods					
Inspect ball joints					
Inspect universal joints					
Inspect McPhearson strut suspension					
Replace tie rods					
Replace ball joints					
Replace universal joints					
Replace shock absorbers					
Use a tie rod separator					
Use a coil spring compressor					
Replace a coil spring					
Replace a leaf spring					
Replace a torsion bar					
Adjust torsion bar suspension					
Perform a pre-alignment check					
Balance wheels					
Perform wheel alignment					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Inspect a pitman arm					
Remove & replace pitman arm					
Check power steering fluid					
Replace power steering pump					
Identify & use safely the following tools:					
- sockets					
- ratchets					
- extensions					
- power bars					
- hydraulic jacks					
- safety stands					
- hydraulic lifts					
- shock absorber wrenches					
- static & dynamic wheel balancers					
- ball peen hammer					
- chisels					
- punches					
- snap ring pliers					
- lubrication equipment					
- tie rod fork					
- screwdrivers					
- torx drivers					
- impact wrench					
- acetylene torches					
- brake spoons					
- brake spring pliers					
- Aamco disc & drum machine					
- drill press					
- hand drill					
- brake hold down spring tool					
- torque wrench					
- cutting pliers					
- slip joint pliers					
- channel lock pliers					
- needle nose pliers					
- cylinder hones					
- brake drum & rotor gauges					
- air operated tire changer					
- tire plug gun					
- 4-way lug wrench					
- open & combination wrenches					
- tire pressure gauge					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Check differential fluid level					
Check manual transmission fluid level					
Check automatic transmission fluid level					
Change automatic transmission fluid & filter					
Change manual transmission fluid					
Adjust transmission shifting linkage					
Adjust throttle pressure linkage					
Identify types of transmission fluid					
Remove & replace drive shaft					
Replace universal joints					
Replace pinion seal					
Remove & replace axles					
Remove & replace axle seals					
Remove & replace axle bearings					
Remove & replace throw out bearing					
Adjust clutch linkage					
Remove & replace automatic transmission					
Remove & replace standard transmission					
Remove & replace clutch & pressure plate assembly					
Service speedometer cable assembly					
Adjust transmission bands					
Check transmission pressures					
Check ring & pinion clearance with dial indicator					
Identify & use safely the following special tools:					
- dial indicator					
- feeler gauges					
- transmission pressure gauges					
- clutch aligning tool					
- snap ring pliers					
- transmission jacks					
- micrometer					

Change engine oil					
Change oil filter					
Change air filter					
Service PCV system & filter					
Change fuel filters					
Check oil level					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Replace oil pump					
Replace oil pressure sending unit					
Determine proper engine oil types & viscosity					
Remove & replace oil pan					

Check coolant level					
Check coolant freeze temperature					
Check radiator hoses					
Check heater hoses					
Check engine belts					
Remove & replace belts					
Remove & replace radiator hoses					
Remove & replace heater hoses					
Bleed heater lines					
Flush cooling system					
Replace pressure cap					
Test pressure cap					
Pressure test cooling system					
Test thermostat					
Remove & replace thermostat					
Drain & replace coolant					
Remove & replace water pump					
Recognize types of coolant					
Repair radiator leaks					
Remove & replace radiator					

Replace fuel filter					
Remove & replace fuel tank					
Test fuel gauge circuit					
Replace fuel gauge sending unit					
Check fuel lines					
Remove & replace fuel pump					
Remove & replace carburetor					
Adjust idle speed with tachometer					
Adjust fuel mixture with emission tester					
Test fuel injection pump					
Test fuel injectors					
Check fuel pump pressure					
Test fuel solenoid					
Test fuel system electrical circuits					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Test EGR valve					
Remove & replace EGR valve					
Identify emission system components					

Test battery					
Charge battery					
Clean & replace battery terminals					
Observe all safety precautions concerning batteries & electrical					
Remove & replace ignition switch					
Test ignition switch					
Read wiring diagrams					
Remove & replace starter solenoid					
Remove & replace starting motor					
Replace ignition wires					
Remove & replace spark plugs					
Remove & replace alternator					
Identify all components of the ignition circuit					
Troubleshoot an open circuit					
Troubleshoot a grounded circuit					
Measure amperage (ammeter)					
Measure voltage (voltmeter)					
Solder connections					
Adjust headlights					
Test horn circuit					
Read electrical wiring diagrams					
Remove & replace heater core					
Remove & replace speedometer					
Tape electrical connections					
Identify types & capacities of fuses					
Identify & replace defective fuses					
Adjust alternator belt					
Follow all safety rules					
Identify types of lightbulbs					
Test bulbs with ohmmeter					
Remove & replace headlamps					
Remove & replace bulbs					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Automotive Mechanic**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Automotive Mechanic Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wear proper clothing & safety glasses					
Wear hard soled safety shoes					
Remove all rings & jewelry					
No horseplay					
Do not sit in vehicles					
Do not start a vehicle without instructor's permission					
Start all vehicles in park					
Use exhaust hoses on all vehicles					
Tighten all wheel lugs with a torque wrench					
Do not use any power equipment unless you have the instructor's permission					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Store rags in the proper containers					
Keep your work area clean					
Wipe up all grease & oil from the floor immediately					
Stand up all creepers					
Do not start or drive a vehicle without a driver's license and the instructor's permission					
Do not use a broken tool; report it to the instructor					
Always pull on a wrench					
Safety stands must be used whenever a vehicle is jacked up					
When using power equipment observe all safety rules of that equipment					
Do not lift heavy objects					
Lift with your legs, not your back					
Know the location of all fire extinguishers					
In case of any accident or injury, notify the instructor immediately					
Do not pry with a screwdriver					
Do not hammer on wrenches					
Do not get battery acid on your clothes					
Do not use an open flame near a battery					
Do not spark the battery cables					
Wear safety glasses when servicing a battery					
Wash your hands immediately after coming in contact with battery acid					
Remember safety first					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Automotive Mechanic**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e d e	F r u s t r a t i v e n e s s l e v e l	I n s t r u c t i o n a l l e v e l	I n d e p e n d e n t l e v e l
Automotive Mechanic Mathematics Skills				
Add & subtract whole numbers				
Multiply whole numbers				
Add & subtract fractions				
Multiply fractions				
Add & subtract decimals				
Multiply decimals				
Determine area of a cylinder				
Square whole numbers				
Square fractions				
Square decimals				

	O b j e c t i v e	F r u s t r a t e g i c	I n s t r u c t i o n a l	I n d e p e n d e n t
Read a rule in 1/32				
Read a micrometer to the nearest .001				
Determine percentages				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Automotive Mechanic**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

	R e c o g n i t i o n d n	S p e l l i n g d g	U n d e r s t a n d i n g	C o n t e n t u s e
Automotive Mechanic Vocabulary Skills				
Accelerator				
Accelerator pump				
Air cleaner				
Air-cooled engine				
Air filter				
Air-injection system				
Alternator				
Antidieseling solenoid				
Antifreeze				
Antilock system				

	R e c o g n i t i o n d n	S p e l l i n g d g	U n d e r s t a n d i n g	C o n t e n t W o r d s
Automatic transmission				
Backfiring				
Ball joint				
Battery				
BDC				
Bearing				
Bearing caps				
Belt				
Belted-bias tire				
Belted-radial tire				
Bias-ply tire				
Blow-by				
Brake				
Brake drum				
Brake fluid				
Brake shoes				
Brake system				
Cam				
Camber				
Camshaft				
Carbon				
Carbon dioxide				
Carbon monoxide				
Carburetion				
Carburetor				
Caster				
Catalytic converter				
Centrifugal advance				
Charcoal canister				
Choke				
Clutch				
Coil				
Coil spring				
Combustion chamber				
Compression				
Compression ignition				
Compression ratio				
Compression stroke				
Condenser				

	R e c o g n i t i o n d n	S p e l l i n g d g	U n d e r s t a n d i n g	C o n t e n t O f W o r d s e d
Connecting rod				
Contact points				
Coolant				
Cooling system				
Crankcase				
Crankcase emissions				
Crankcase ventilation				
Crankshaft				
Cylinder block				
Cylinder head				
Cylinder hone				
Cylinder sleeve				
Detonation				
Diesel cycle				
Diesel engine				
Dieseling				
Differential				
Dipstick				
Direct current				
Disk brake				
Distributor				
DOHC				
Drive line				
Drive shaft				
Drum brake				
Dual-brake system				
Dwell meter				
Dynamic balance				
Dynamometer				
ECU				
EGR system				
Electric current				
Electric system				
Electrolyte				
Electroni. control unit				
Electroni. fuel-injection system				
Electronic ignition system				
Electronics				
Emission control				

	R e c o g n i t i o n d n	S p e l l i n g d g	U n d e r s t a n d i n g	C o n t e n t U s e d
Engine tuneup				
Evaporative emission-control system				
Evaporation control system				
Exhaust emissions				
Exhaust-gas analyzer				
Exhaust-gas recirculation system				
Exhaust manifold				
Exhaust stroke				
Exhaust valve				
Fan				
Fast-idle cam				
Filter				
Firing line				
Firing order				
Fixed-caliper disk brake				
Floating-caliper disk brake				
Float level				
Flooded				
Flywheel				
Flywheel ring gear				
Four-barrel carburetor				
Four-stroke cycle				
Front geometry				
Fuel				
Fuel filter				
Fuel-injection system				
Fuel pump				
Fuel system				
Fuel tank				
Fuse				
Fusible link				
Gasket				
Gasket cement				
Gasoline				
Gear ratio				
Gears				
Gearshift				
Glaze breaker				
HC				

	R e c o g n i t i o n r o d n	S p e l l i n g r n d g	U n d e r s t a n d i n g	C o n t e n t U o r d e r
Headlights				
Heat-control valve				
Heated-air system				
High-energy ignition				
High-speed system				
High-voltage cables				
Horn				
Horn relay				
Horsepower				
Hydraulic brakes				
Hydraulic clutch				
Hydraulic valve lifter				
Hydrocarbon				
Hydrogen				
Hydrometer				
IC				
Idle limiter				
Idle mixture				
Idle-mixture screw				
Idle-stop solenoid				
Idle system				
Ignition				
Ignition advance				
Ignition coil				
Ignition distributor				
Ignition switch				
Ignition system				
Ignition timing				
I-head engine				
Inner tube				
Intake manifold				
Intake stroke				
Internal-combustion engine				
Kingpin				
Kingpin inclination				
Knock				
Leaded gasoline				
Leaf spring				
Lean mixture				

	R e c o g n i t i o n d	S p e l l i n g d	U n d e r s t a n d i n g	C o n t e n t O f W o r d s U s e d
Limited-slip differential				
Linkage-type power steering				
Lubricating system				
Magnetic switch				
Main bearings				
Manifold				
Manifold vacuum				
Master cylinder				
MISAR				
Misfire				
Monolithic timing				
Mph				
Muffler				
Multiple-viscosity oil				
Neutral-start switch				
NOx control system				
Octane rating				
Oil				
Oil cooler				
Oil dilution				
Oil filter				
Oil-level indicator				
Oil pan				
Oil-pressure indicator				
Oil pump				
Oil pumping				
Oil ring				
Oil seal				
Oscilloscope				
Overhead-camshaft engine				
Overhead-valve engine				
Parade pattern				
PCV				
PCV valve				
Ping				
Piston				
Piston rings				
Pollution				
Positive crankcase ventilation				

	R e c o g n i t i o n d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f U s e d
Power steering				
Power stroke				
Power train				
Precombustion chamber				
Preignition				
Pressure-relief valve				
Pump				
Pushrod				
Quick charger				
Rack-and-pinion steering gear				
Radial-ply tire				
Radiator				
Rectifier				
Refrigerant				
Relay				
Reluctor				
Rich mixture				
Ring gear				
Ring ridge				
Rocker arm				
Rod bearing				
Rotor				
Rpm				
Run-on				
SAE				
Schrader valve				
Scuffing				
Secondary circuit				
Self-adjuster				
Servo				
Shim				
Shimmy				
Shock absorber				
Single-overhead-camshaft engine				
Slip joint				
Sludge				
Smog				
Smoke				
SOHC				

	R e c o g n i t i o n o r d n	S p e l l o i r n d g	U n d e r s t a n t o i r n d g	C o n t e n t o f W o r s e
Solenoid				
Solenoid relay				
Solenoid switch				
Spark knock				
Spark plug				
Spark-plug heat range				
Specific gravity				
Speedometer				
Stabilizer bar				
Starting motor				
Starting-motor drive				
Steering gear				
Steering system				
Stoplights				
Storage battery				
Supercharger				
Synchronizer				
Tachometer				
Taillights				
Tetraethyl lead				
Thermostat				
Thermostatically controlled air cleaner				
Throttle				
Timing				
Timing light				
Tire				
Torque converter				
Torsion-bar spring				
Transistor				
Transmission				
Transmission-oil cooler				
Tread				
Turbocharger				
Universal joint				
Unleaded gasoline				
Upper beam				
Vacuum advance				
Vacuum switch				
Valve				

	R e c o g n i t i o n o r d n d	S p e l l i n g o r d n d	U n d e r s t a n d i n g	C o n t e n t o f U s e
Valve guide				
Valve lifter				
Valve seat				
Valve-seat inserts				
Valve-stem seal				
Valve timing				
Valve train				
Vapor lock				
Vapor-recovery system				
Variable-venturi carburetor				
Vibration damper				
Viscosity rating				
Voltage regulator				
Voltmeter				
VV carburetor				
Wankel engine				
Water jackets				
Water pump				
Wheel tramp				
Wiring harness				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Residential Construction**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓ both)

P = level of present performance

E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Residential Construction**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Residential Construction Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Lay out stock to length					
Lay out stock to width					
Cut to length with hand saw					
Cut to width with hand saw					
Plane edge grain of stock					
Plane end of wood stock					
Sand wood by hand					
Drill holes with hand drill					
Drill holes with brace & bit					
Drill holes with push drill					
Drill holes with electric drill					
Assemble wood members with screws					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Assemble wood members with screws and spiral drill					
Clamping stock with C clamps					
Clamping stock with bar clamps					
Assemble wood using glue					
Make mitre box					
Cut curves with compass saw					
Cut curves with coping saw					
Cut with saber saw					
Shape surfaces with rasp or file					
Rip stock on table saw					
Joint edge of stock					
Cut to length with radial arm saw					
Assemble butt joints with nails					
Make tool box					
Sharpen plane iron or wood chisel					
Build saw horse					
Shape edge with router					
Make nail tray					

Prepare layout stakes					
Drive layout stakes					
Drive batter board stakes					
Apply batter boards					

Set footer forms					
Place & tie reinforcement steel					
Set reinforcement steel in wall forms					
Install anchor bolts in concrete					
Set form for concrete sidewalk					
Strip, clean & store concrete form materials					
Rub concrete after form removal					

Lay out for anchor bolts					
Assemble built up wood girder					
Set and secure girder					
Frame and install sill plate					
Set floor joist or regular spacing					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Straighten and tie joist					
Install cross bridging					
Cut & install solid bridging					
Apply diagonal subfloor					
Apply plywood subfloor					
Install safety railing					

Construct outside corner post					
Assemble exterior wall section					
Erect exterior wall section					
Install nailers and backing at intersections					
Install double top plate					
Install lat in corner brace					
Apply plywood wall sheathing					
Erect metal scaffold					

Install rafters for shed roof					
Install rafters for gable roof					
Install rafters for hip roof					
Install collar beams					
Install plywood roof sheathing					
Install solid board roof sheathing					
Apply temporary roofing					

Install blocking between rafters					
Install soffit					
Install fascia					
Install nailers for exterior trim					
Install drip-edge					
Apply asphalt strip shingles					
Apply cap shingles					
Apply roll roofing					
Apply wood roofing					
Apply building paper to sidewalls					
Install drip caps on windows and doors					
Apply horizontal siding					
Apply vertical siding					
Apply panel siding					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Install batt insulation					
Apply gypsum lath					
Apply gypsum sheetrock					
Tape and finish sheetrock					
Apply plywood or composition paneling					
Install underlayment					
Install furring strip for ceiling tile					
Install ceiling tile					
Install main runners for suspended ceiling					
Install cross T's					
Install ceiling tiles					
Lay hardwood flooring					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Residential Construction**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Residential Construction Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
No running, wrestling or horseplay permitted					
No throwing of objects					

Always roll up sleeves					
Always tuck in tie or other loose clothing					
Always remove jewelry					
Always wear safety goggles and apron					
No sandals or sneakers allowed					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Keep the floors clean					
Keep aisles and doorways clear					
Remove all hazards around machines					
Pile all materials neatly					

Keep all hand tools sharp					
Do not carry sharp tools in pockets					
Use right tools for right job					
Do not place tools on machine beds					

Check for bad plug, broken switch or poor insulation on the cord					
Make sure hand and feet are dry when using electric hand tools					
Be sure electric hand tools are grounded					

Do not use machines without permission					
Always use the guards					
Do not talk to anyone while operating machines					
When making adjustments, turn off machines					
Before starting machines, check for loose rods					
Keep out of restricted areas when not operating machines					
When it is necessary to leave a machine, turn it off					

Lift with your legs, not your back					
Always ask for help when needed					

Report all accidents to instructor, no matter how slight it may be					
The instructor or school nurse will administer first aid					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Become familiar with shop fire extinguishers and their locations					
Keep oily rags in metal containers					
In case of fires or fire drill,					
- turn off all machines and lights					
- close all windows					
- file outside in an orderly manner					

Check ladders for broken rungs and uprights					
Place ladders at proper angle					
Be sure that the ladder is secure at the top and bottom					
When climbing, use both hands and face the ladder					
Never overreach; move the ladder					
Be sure the scaffolds are secure before use					
When working on ladders or scaffolding always consider your fellow workers below					

Adjust guards to 1/8" clearance					
Stand to left or right of blade while using					
Cylindrical stock cut in jig for support					
Turn off machine to back out stock					
Clicking is a sign of a cracked blade					
Use brake to stop blade after power is off					

Tighten adjustment before starting saw					
Return saw before moving board away					
Keep work area clean					
Rip with radial arm saw only with instructor					
Keep guards in place					
Move saw slowly with strong grip					
Blade should extend 1/8" through stock					
Keep hand 6" away from blade					
Never cut small stock					
Stock should be free of knots, nails and foreign material					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Turn off machine to make adjustments					
Wear goggles or safety glasses					
Never leave saw while blade is moving					

Unplug tool before inserting bits					
Bits should be 3/4" into chuck					
Fasten work securely before drilling					
Do not put tool down while bit is turning					
Use only sharp bits					
Light pressure on drill while operating					

Joint wood 8" long or longer					
Use push block on short pieces					
Make cut 1/8" or less					
Adjust only when machine is off					
Joint with grain of wood, not cross grain					
Stand to the side of jointer while in use					
Joint wood that is free of foreign material					
Never allow hands to pass over cutter					
Keep cutter blade sharp					
Wear goggles or safety glasses					

Use the fence & pressure bar whenever possible					
Keep hands out of danger zone					
Run materials with the grain of stock					
Work should be held with fingertips					
Feed material slowly					
Use only clear, smooth, flat materials					
Check precision of cutting blades					
Wear goggles or safety glasses					

Minimum length of stock 18"					
Allow machine to warm up					
Feed material in machine slowly					
Surface only with the grain of the wood					
Light cuts on harder wood					
Turn off machine if wood sticks					
Wear goggles or safety glasses					



	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Operate at appropriate speed					
Use clear stock					
Turn off machine to make adjustments					
Inspect glued stock to insure strength					
Cutting tools must have a handle					
Wear goggles or safety glasses					

Blade should project no more than 1/8"					
Push sticks should be used					
Never freehand cut on table saw					
Assistance for "tailing off" materials					
Guards always in place					
When crosscutting, be sure crosscut guide and fence are in place					
Stand to left of saw while cutting					
Waste should be to the left of blade					
Turn off machine to make adjustments					
Wear goggles or safety glasses					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Residential Construction**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Residential Construction Mathematics Skills	O b j e c t i v e d e	F r u s t r a t e v o e n l	I n s t r u c t i o n v e n t l	I n d e p e n d e n t l
Match symbols used in math problems to their names				
Addition of whole numbers				
Subtraction of whole numbers				
Multiplication of whole numbers				
Division of whole numbers				

Addition of common fractions				
Subtraction of common fractions				
Multiplication of common fractions				
Division of common fractions				
Practice with common fractions				

	O b j e c t i v e d e	F r u s t r a t e g i c a l i n v e n t u r e	I n s t r u c t i o n a l	I n d e p e n d e n t
Addition of decimal fractions				
Subtraction of decimal fractions				
Multiplication of decimal fractions				
Division of decimal fractions				
Expressing common fractions & mixed numbers as decimals				

Simple percent and percentage				
Interest				
Discount				

Linear measure				
Square measure				
Surface measurements				
The framing square				
Board measure				
Weight measure				

Girders				
Sills				
Floor joist				
Bridging				
Rough flooring				
Wall plates				
Studding				
Rafters				
Sheathing				
Trim				
Roofing				
Doors & windows				
Siding				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: Residential Construction

Subject Area: Vocabulary

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

Residential Construction Vocabulary Skills	R e c o g n i t i o n		S p e l l i n g		U n d e r s t a n d i n g		C o n t e n t u s e	
	W o r d r e c o g n i t i o n	W o r d s p e l l i n g	W o r d r e c o g n i t i o n	W o r d s p e l l i n g	W o r d r e c o g n i t i o n	W o r d s p e l l i n g	W o r d r e c o g n i t i o n	W o r d s p e l l i n g
Acoustical materials								
Adhesive								
Air dried								
Anchor bolts								
Annual rings								
Apron								
Asphalt								
Backfill								
Basement								
Batter board								



	R e c o g n i t i o n o r d n	S p e l l i n g o r d n g	U n d e r s t a n d i n g	C o n t e n t o f U s e
Beam				
Bearing partition				
Bearing wall				
Bench mark				
Bevel				
Board				
Board foot				
Bracket				
Brick construction				
Bridging				
Butt				
Cabinet				
Cased opening				
Casement				
Casing				
Chaulk				
Cleat				
Closet pole				
Collar beam				
Column				
Corner brace				
Cornice				
Dimension lumber				
Door frame				
Door stop				
Dry wall				
Facade				
Face nail				
Fascia				
Fire stop				
Flashing				
Footing				
Foundation				
Framing				
Furring				
Gable				
Girder				
Glazing				
Gutter				

	R e c o g n i t i o n d n	S p e l l i n g d g	U n d e r s t a n d i n g	C o n t e n t U o r d e d
Header				
Headroom				
Hip roof				
I beam				
Interior trim				
Insulation				
Jamb				
Joist				
Kiln dried				
Knot				
Lath				
Leader				
Lineal foot				
Lumber				
Masonry				
Molding				
Nonbearing partition				
Particle board				
Partition				
Penny				
Pier				
Pitch				
Plan				
Plate				
Plumb				
Plumbing				
Rafter				
Rail				
Rake				
Ribbon				
Riser				
Roofing				
Roof ridge				
Roughing-in				
Rough lumber				
Rough opening				
Sash				
Scaffold				
Septic tank				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Sheathing				
Sheathing paper				
Shim				
Sill				
Soffit				
Span				
Specification				
Spline				
Stairway, stair, or stairs				
Stairwell				
Stile				
Stool				
Stoop				
Story				
Straight edge				
Stud				
Subfloor				
Threshold				
Timbers				
Toenailing				
Tread				
Trim				
Trimmer				
Truss				
Valley				
Vapor barrier				
Vent				
Ventilation				
Wallboard				
Wall tie				
Warp				
Weatherstrip				
Window unit				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: **Wood - Refinishing & Upholstering**

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: Wood - Refinishing & Upholstering

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wood - Refinishing & Upholstering Skills					
Pick-up and deliver furniture					
Strip furniture frame					
Strip finish					
Check for loose joints					
Clamping					
Sanding					
Steel wooling					
Filling dents					
Removing scratches					
Frame repairing					
Bleaching					
Raising dents					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Sharpen shears					
Edge ripping tools					
Re-align staple pullers					
Oil sewing machines					
Oil shears					
Change sewing machine needles					
Dress hand-sewing curved needles					
Grease cushion machine					
Grease drill press					
Change handles on tack hammers					
Clean band saw					
Clean sewing machines					

Operate sewing machine					
Operate foam rubber cutter					
Operate button machine					
Use snap dies					
Operate cushion machine					
Operate band saw					
Operate drill press					

Proper use of staple puller					
Proper use of 10" shears					
Correct use of ripping tool					
Correct use of cushion equalizer					
Proper use of magnetic tack hammer					
Correct use of curved needles					
Correct use of straight needle					
Proper use of webbing					

Knows characteristics of a good leader					
Knows origin and history of VICA					
Knows purposes of VICA organization					
Knows meaning of VICA colors and parts of emblem					
Knows VICA motto and pledge					
Reads VICA publications					
Knows VICA offices and their duties					
Knows how to use parliamentary procedure					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Wood - Refinishing & Upholstering**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
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✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Wood - Refinishing & Upholstering Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wear appropriate shop clothing; loose sleeves, aprons, neckties and dangling clothing are dangerous					
Do not disturb others while they are operating power equipment					
Keep mind on work					
Keep and use guards on all equipment					
Keep shop clean and free of rubbish and surplus tools					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Stop all power machines before making adjustments					
Wear hard soled shoes at all times					
Always wear safety glasses in shop area					

Always wear protective goggles when grinding					
Tool rest is adjusted and kept 1/16" to 1/8" from wheel					
Do not hold with pliers any round or spherical objects					
Keep wheel properly trued by frequent dressing					
Use the face of the wheel, not the side when taking heavy cuts					
Do not grind on wheel while it is coasting to a stop					
Check stone for cracks or flaws					
Make all adjustments with power off					
Do not leave the machine until the wheel is completely stopped					

Secure all work with clamp or other device before drilling					
Check to make sure the chuck grips the bit tightly					
Be sure chuck key is removed before starting drill					
Use a center punch large enough to receive the point of the drill					
Use proper lubricant when drilling metal					
Make all adjustments or "set-ups" with the power off					
Avoid forcing the drill bit					
Keep the long end of the stock to your left when possible					
Support the ends of long stock with a stand					
Adjust the drill press to the proper speed for the material being drilled					
Do not attempt to stop a revolving piece of wood or metal in which the bit is caught (turn machine off)					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean chips off work and table with a brush to avoid slivers in hands					
Withdraw bit frequently if it goes deeper than flutes so flutes can be cleaned					
Reduce pressure when bit begins to break through bottom of work					

Make sure blade is properly chucked and is clear before turning on					
Set blade to cut on down stroke					
Set upper blade guide just above material being cut					
Use speed and blade type corresponding to material being sawed					
Feed material into blade slowly; be especially careful when sawing small circles					
Plan cuts to avoid "backouts" whenever possible					
Never use a cracked or kinked saw blade					
Test blade for tension before starting saw					

Use only blades that are sharp and in good condition					
Be sure the blade guides are adjusted to almost touch the blade at the back edge and at the sides when it is running free and not cutting					
Stand slightly to one side of the line of sawing, and feed the work only as fast as the saw will take it					
Always keep hands away from blade while machine is in operation					
Plan work, if possible, so that it will not be necessary to back the saw out of the cut					
Keep upper guide set down close to the work, particularly when sawing thick material					
In sawing irregular work, saw as near the line as possible the first time through; if necessary, make a second cut to finish certain parts					
Tilt table to cut bevels					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
In cutting several pieces to the same length, the ripping fence may be used as a gauge					
If blade tends to lead off to one side, it may be dull or unevenly set, or the guides may be improperly set					

Be careful to keep fingers away from sanding surface					
Do not apply too much pressure to object you are sanding					
Do not keep object you are sanding at the same position on the belted disc for too long a time					

Because of danger of shock, portable tools should always be grounded while in use					
Always remove plug from outlet before changing blades, belts, etc., or before lubricating or inspecting					
Never carry or drag tools around by the cord					
Keep cord free from grease and oil					
Small pieces of wood or metal which are to be worked on should be placed in a vise or fastened to the bench					
Be sure switch is off before inserting plug in outlet					
Make sure all nails or other pieces of metal are removed before starting to work on wood with portable tools					
Make sure electric cord is out of the way before starting tool					

Keep paints tightly covered when not in use					
Keep brushes clean and store them properly					
Protect nearby objects and persons when painting					
Make sure all cans of turpentine, gasoline, kerosene, etc. are covered (capped) when not being used					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not use a dull tool; sharpen it					
Use proper tool for the job, especially hand tools					
Always shut off power tools before leaving them					
Do not use mushroomed tools or tools with loose handles (heads may fly off or slip off)					
Do not use tools that are not properly fitted					
Always wear hard soled shoes when working around a shop area (tacks, staples will perforate soles of sneakers)					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Wood - Refinishing & Upholstering**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

- ✓ indicates that student has achieved this goal
 X indicates that student is working on this objective

Wood - Refinishing & Upholstering Mathematics Skills	O b j e c t i v e	F r u s t r a t i v e	I n s t r u c t i v e	I n d e p e n d e n t
	E v d e	o e n l	a e l l	e n e t l
Read yard stick and tape rule to 1/8" tolerance				
Familiarize with 72" x 54" rule				
Read carpenter's square				
Learn to read "T" square				
Familiarize with 54" x 36" rule				
Determine different widths of fabric				
Be able to calculate linear yards				

	O b j e c t i v e E v i d e n c e	F r u s t r u c t i v e O e n l	I n s t r u c t i o n v e n t a l	I n d e p e n d e n t e v e n t
Ability to measure pints, quarts, gallons				
Ability to calculate square inches, square feet, square yards				
Determine the amount of ounces per quart, quarts per gallon				
Determine square yards				

Determine nail sizes by penny weight				
Determine wood screw sizes by gauge				
Determine the equivalent of one and one-half yards				

Be able to add, subtract, multiply and divide				
Be able to estimate yardage for projects in precise amounts				
Be able to convert inches to yards				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Wood - Refinishing & Upholstering**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

	R e c o g n i t i o n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t u s e
Wood - Refinishing & Upholstering Vocabulary Skills				
Springer				
Outsider				
Frame maker				
Sewer				
Cutter				
Cushion maker				
Upholsterer (insider)				
3, 4, 6, 12 oz. tacks				
Panel tacks (1 1/2 oz. tacks)				
Air tacker (staple gun)				

	R e c o g n i t i o n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t o f w o r d s
Frame gun (heavy duty staple gun)				
1/2" allowance (sewing)				
Spray booth (refinishing)				
Paint gun (refinishing)				
Ripping tool & wooden mallet				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: Computer Maintenance & Repair

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level
 Test/Date _____
 Reading _____ grade level
 Test/Date _____

Physical Assessment (✓ both)

P = level of present performance
 E = level needed for employment

		<u>Low</u>	<u>Average</u>	<u>High</u>
<u>Hand Movement</u>	P			
	E			
<u>Gait</u>	P			
	E			
<u>Eye-Hand</u>	P			
	E			
<u>Finger Dexterity</u>	P			
	E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

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Job Selection _____

Entrance Mathematics level needed _____ grade level
 Entrance Reading level needed _____ grade level
 Entrance Vocational Skills needed for job
 (list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development
 E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

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VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Computer Maintenance & Repair**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

Employable: The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Computer Maintenance & Repair Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Screwdriver					
Hammer					
Slip joint pliers					
Wire strippers					
Automatic wire strippers					
Mini drill					
Tapered reamer					
Precision knife set					
Utility knife					
Long nose pliers					
Diagonal pliers					
Mini "C" type clamps					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Vacuum base mini vise					
Helping hands; ball joints and alligator clamps					
Nut drivers					
Nibbling tool					
Electric engraving pencil					
Hex key set					
Mini screwdriver set					
Crimping tool set					
Vice grip pliers					
Hacksaw					
Adjustable wrenches					
Files					
Rulers					
Socket wrenches					
Center punch					
Prick punch					
Pin punch					
Precision oiler					
Flashlight					
Magnifier lens					
I.C. inserter tool					
I.C. extractor tool					
Static draining wrist straps					
Wire wrapping tool					
Symbols stencil					
Magnifier lamp					

TV tuner cleaner					
Dust remover spray					
Rosin flux remover					
Cleaner/degreaser					
Color TV tuner cleaner					
Component cooler					
Disk drive head cleaning solution					
Anti static spray					
5.25" drive head cleaning disk					
Video display cleaner					
Case and cabinet cleaner					
Lint free cleaning wipes					
Cassette head cleaner					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Packaging tapes					
Electrical tapes					
Heat shrink tapes					
Copper foil shielding tape					
2 sided foam tape roll					
2 sided foam tape strips					

Solder type D-sub subminiature connectors					
Ribbon type connectors					
Peripheral connectors					
- printer connectors					
- header connectors					
- din plug connectors					
Various plug and jack connectors					
Various test clips					
Banana plugs					
Binding posts					
Insulated clips					
Non-insulated clips					

2 conductor speaker wire					
Shielded cable					
Solid hook-up wire					
Stranded hook-up wire					
Telephone cable					
Rainbow cable					
Intercom cable					
Replacement cord for AC operated equipment					
Coax, RF, TV connectors and adapters					
Jumper cables					

Fast actings					
Slow blow					
Fuse holders					
AC circuit breakers					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean computer cover and keyboard					
Clean disk housing					
Clean monitor case and tube face					
Clean printer case and platen					
Destaticise computer working area					
Oil printer mechanism, where applicable					
Change ribbon on printer					
Clean printer "head"					

Soldering gun					
Soldering iron					
Maintain soldering iron & gun tips					
Learn desoldering techniques					
Desoldering iron					
Desoldering bulb					
Soldering iron holder and cleaner					
Soldering "aid" kit					
Vacuum desoldering tool					
Soldering tweezers					
Desoldering braid					
Steel wool					
Rosin core solder					
Acid core solder					
Heat sink					

Layout circuit					
Copper P.C. boards					
Printed circuit layout strips & circles					
Direct etching dry transfers					
Etching solutions					
Drilling of P.C. boards					

Inserting I.C.'s					
Extracting I.C.'s					
Breadboarding					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Safety barrier strips					
"European" barrier strips					
2 screwdriver terminals with RCA type phono jack					
2 screwdriver terminals					
Lug tie points					

Logic probe					
Ohm meter					
Volt meter					
Multimeter					
Signal generator					
Oscilloscope					
Signal analyzer					
Capacitor tester					
Clamp-on ammeter-voltmeter					
Multiplexer					

Multipurpose adapters					
Power supplies					
Battery output measurement with voltmeter					

Using a word processor					
Managing a data base					
Using a spreadsheet					

Identify and label component symbols used in electronic schematic diagrams					
- potentiometer					
- zener diode					
- connections					
- light emitting diode					
- capacitor					
- AC source					
- DC source					
- resistor					
- transformer					
- switch SPST					
- capacitor, polarized					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
- field effect transistor					
- many, many more					
Express and interpret electrical terms in abbreviated form					
- HZ =					
- CW =					
- CCW =					
- P =					
- V =					
- AC =					
- DC =					
- many, many more					

From sun (solar cells)					
From heat (thermocouples)					
From chemicals (dry cells)					
From water (power plants)					
From nuclear (power plants)					

Use single pole single throw (SPST) switches to control various combinations of lamp circuits					
Use SPDT switches					
Use DPDT switches					

Determine Ohmic value of tolerances of resistors, using the color code					
Measure the value of resistors, using an ohmmeter					
Work up the 3 basic formulas that can be derived from Ohm's Law					
Apply Ohm's Law to a few basic circuit examples					

AND					
OR					
NAND					
NOR					
XOR					
XNOR					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
NOT					
Show how they are set up on the basic I.C. chip					
Go over "truth tables"					
Make various tests on the basic I.C. chips using the "truth table"					

Understand the basic "idea" of a microprocessor circuit (deals with "addresses" and "data" primarily)					
Understand what the basic microprocessor I.C. looks like and where it might be located					

Understand what is meant by the basic idea of a "clock" in a microcomputer system (Why is it necessary?)					
Understand what the basic clock or clocks look like and where it might be located					

Understand the basic idea of memory circuits (Deals with the storing of information primarily.)					
Understand the basic I.C.'s involved in these circuits and where they might be located					

Understand the basic idea of "interface" circuits					
Understand what a basic interface board looks like and where it might be located					

Understand the basic idea of what a power supply is used for in a computer					
Understand what a power supply looks like and where you might look to measure its output					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Computer Maintenance & Repair**

Student Name: _____

Objective: Specific knowledge to be learned in order to perform occupational skills.

Exposure: Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.

Training: Performs entire task with direct assistance. Prompting is needed.

Production: The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.

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✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Computer Maintenance & Repair Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean work benches daily					
Dispose of oily rags in proper containers					
All lubricants and flammable materials stored in proper location					
Place any electrical component parts in proper bins					
Clean up floor area					
Keep all lighting in excellent shape. Change bulbs if necessary					
All test equipment and test leads put back in proper order					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Eyeglasses					
Eye goggles					
Full face shields					
Eye cleaning fountains					
Eye cleaning chemical solutions					
Safety glasses and cleaning an area with an air hose					
When grinding use proper glasses					

Never work on live circuits unless instructor is present					
Discharge all capacitors before working on circuits					
Don't clown around or engage in horseplay					
Get your instructor's approval before starting your work					
Report all injuries at once, no matter how small					
Wear safety glasses in areas of flying debris, grinding, etc.					
Use tools correctly					
Do not use a tool if it is not in good working condition					
Use the proper methods when handling or lifting objects. Lift with legs, not the back					
When lifting heavy objects, be sure to wear hard steel toed shoes					
Do not talk or distract a fellow student when he is working					
Never leave a machine while it is running or running down					
Think - plan ahead					
Try to keep one hand in your pocket or behind you when making voltage and current measurements					
Before applying power to a circuit, have your instructor check it out first					
Make it a point to know the location of fire extinguisher and how to use it					
Certain components, such as resistors and vacuum tubes, get quite hot. Give them time to cool off before removing them					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Do not work on electronic equipment while standing on a damp floor or when leaning on any metal object					
Do not work on an electric circuit when power is on except when "absolutely" necessary					
Ask for instruction before using any item of test equipment for the first time, even if you think you know how to use it					

Measure the electrical resistance of your body using the ohmmeter					
State the proper operating procedure when using a power supply					
State the proper operating procedure when using a computer with its peripherals					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Computer Maintenance & Repair**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Computer Maintenance & Repair Mathematics Skills	O b j e c t i v e d e	F r u s t e r i v e n t	I n s t r u c t i o n a l	I n d e p e n d e n t
Be able to solve math problems involving addition				
Subtraction				
Multiplication				
Division				
Fractions				
Percentages				
Raising to powers				
Basic binary addition & subtraction				
Basic hexadecimal addition & subtraction				
Be able to convert from decimal to hexadecimal to binary, and vice versa				

	O b j e c t i v e d e	F r u s t r a t e g i c a l i n v e n t i o n	I n s t r u c t i o n a l e n v i r o n m e n t	I n d e p e n d e n t d e v e l o p m e n t
Understand difference between milli, micro, nano, pico				
Understand difference between killa and mega				
Convert milli, micro, etc. amperes to amperes and vice versa				
Convert milli, micro, etc. volts to volts and vice versa				

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Computer Maintenance & Repair**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

	R e c o g n i t i o n d n	S p e l l i n g o r d r n d g	U n d e r s t a n d i n g o r d r n d g	C o n t e n t u s e o f w o r d s
Computer Maintenance & Repair Vocabulary Skills				
AC				
Adapter				
Addition				
Addresses				
Address bus				
Address modes				
Ampere				
AND gate				
Application				
Arithmetic logic unit				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Armature				
Banana jack				
Battery				
Binary				
Binding post				
Bit				
Branch				
Brush				
Byte				
Capacitor				
Central processing unit				
Chip select				
Circuit				
Circuit breaker				
Cleaning solution				
Close circuit				
Coil				
Compare				
Component				
Computer				
Computer word				
Concept				
Conductor				
Contact				
Control				
Conversions				
CPU				
Current				
CW				
CCW				
Cycle				
Data				
Data bus				
DC				
Decoding				
Decimal				
Delay				
Diagnostic				
Digital				

	R e c o g n i t i o n d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t O f W o r d s
Digital logic				
Disk				
Electric motor				
Electronics				
Electrolyte				
Electromagnet				
Enclosure				
Energy				
Extractor				
Familiarization				
Frame				
Frequency				
Fuse				
Gates				
Handshake				
Hardware				
Hexidecimal				
Initialize				
Input				
I/O				
Insert				
Instruction				
Insulation				
Insulator				
Integrated circuit				
Interrupt				
Key				
Lamp				
Lamp cord				
Language				
Load				
Logic				
Logical				
Loop				
Magnet				
Magnetic field				
Memory				
Memory addressing				
Meter				

	R e c o g n i t i o r d n	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t U s e d
Micro				
Microprocessor				
Milli				
Modem				
Monitor				
Mode				
Motor				
Multimeter				
Multiplier				
Multi-speed motor				
Multiplexer				
Negative				
Nesting				
Nibble				
NOR gate				
NOT gate				
Observing				
Ohm				
Ohmmeter				
Ohm's Law				
Open circuit				
OP code				
OR gate				
Oscilloscope				
Output				
Parallel				
Peak				
Peripheral interface adapter				
Permanent magnet				
Plug				
Polling				
Positive				
Power				
Primary winding				
Printer				
Probe				
Program				
Pushbutton				
Ram				

	R e c o g n i t i o n s	S p e l l i n g	U n d e r s t a n d i n g	C o n t e n t s
Read/write				
Rectifier				
Registers				
Relay				
Resistance				
Resistor				
Rheostat				
RMS value				
ROM				
Rotate				
Routine				
Safety				
Safety switch				
Schematic diagram				
Secondary				
Selector switch				
Semiconductor				
Sensing device				
Series circuit				
Series switch				
Short circuit				
Shift				
Shunt				
Signal analyzer				
Signals				
Socket				
Software				
Solenoid				
Stack				
Step down transformer				
Step up transformer				
Subtraction				
Subroutine				
Switch				
Technology				
Terminal				
Timer				
Timing				
Torque				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Transformer				
Troubleshooting				
U/L				
User ROM				
Volt				
Voltage				
Voltage rating				
Wire				
Work				
XNOR gate				
XOR gate				
Yoke				
Zero				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)

Vocational/Special Education

I.T. Planner

Vocational Area: Diesel & Heavy Equipment Maintenance

Individual Transitional Preparation Form

Name of Student _____

Career Goal _____

Date _____

Present Aptitude Levels

Mathematics _____ grade level

Test/Date _____

Reading _____ grade level

Test/Date _____

Physical Assessment (✓both)

P = level of present performance

E = level needed for employment

Hand Movement

	<u>Low</u>	<u>Average</u>	<u>High</u>
P			
E			

Gait

P			
E			

Eye-Hand

P			
E			

Finger Dexterity

P			
E			

Statement of physical condition (Tests/Dates) _____

Needed agency assistance _____

Job Selection _____

Entrance Mathematics level needed _____ grade level

Entrance Reading level needed _____ grade level

Entrance Vocational Skills needed for job

(list skill and ✓ appropriate column)

	<u>Not Acquired</u>	<u>Acquired Employment Level</u>
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		
11.		

Attitude Assessment (✓ one)

P = present level of development

E = level needed for employment

		<u>Low</u>	<u>Medium</u>	<u>High</u>
<u>Follows directions</u>	P			
	E			
<u>Solves problems</u>	P			
	E			
<u>Works with people</u>	P			
	E			
<u>Completes job task</u>	P			
	E			
<u>Verbal communication</u>	P			
	E			

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Diesel & Heavy Equipment
Maintenance**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
- Training:** Performs entire task with direct assistance. Prompting is needed.
- Production:** The learner has been able to complete this task independently; however, he still lacks the speed and level of accuracy to be considered employable.
- Employable:** The learner is able to complete the task at a "normal rate" without error and independently for at least five consecutive trials.

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Diesel & Heavy Equipment Maintenance	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Clean engine components					
Remove and install cyl. head					
Remove and install oil pan					
Remove and install pistons & connecting rod					
Remove and install crankshaft					
Remove and install flywheel					
Remove and install bell housing					
Remove and install damper pulley					
Remove and install rocker arms					
Remove and install valves					
Remove and install wet and dry sleeves					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Grind valves and seats					
Remove and install radiators					
Remove and install engine oil cooler					
Inspect incoming machines					
Remove and install injectors					
Change engine oil and filters					
Remove and install gaskets					
Remove and install fuel filters					
Lubricate all items shown on lube charts					
Winterize equipment					

Remove and install a single disc clutch					
Remove and install a double disc clutch					
Adjust a clutch					

Remove and install throwout bearings					
Remove and install hydraulic oils					
Change hydraulic filters					
Change broken hoses					
Change blown "O" rings					
Clean hydraulic tank					
Remove and install a hydraulic pump					
Remove and install a hydraulic cyl.					
Remove and install a control valve					
Remove and install a pressure relief valve					

Remove and install a mechanical transmission					
Remove and install an automatic transmission					
Remove and install a torque converter					
Remove and install a rear end					
Remove and install a drive shaft					
Remove and install universal joints					
Remove and install air brake chamber					
Remove and install a wheel cylinder					

Remove and install an alternator					
Remove and install a generator					
Change gauges					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Change lightbulbs					
Change fuses					
Change circuit breakers					
Change light sockets					
Change batteries					

Check engine oil					
Check transmission oil					
Check cooling system					
Grease fifth wheel					
Change tires					
Check hydraulic oil level					
Check fuel level					
Grease equipment					
Check lights					
Check brake					
Service air cleaner					
Check drive train					
Check suspension					

Clean track equipment					
Check for worn parts on bucket, blades, tracks, etc.					
Check engine transmission, hydraulic, fuel for leaks					
Grease all off highway equipment					
Report safety hazards to foreman					
Check all safety equipment for violations					
Assist mechanic in making repairs					

VOCATIONAL CURRICULUM ASSESSMENT INVENTORY

Shop: **Diesel & Heavy Equipment
Maintenance**

Student Name: _____

- Objective:** Specific knowledge to be learned in order to perform occupational skills.
- Exposure:** Step by step demonstration has been presented by teacher or tutor through a sequential and developmental process.
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✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Diesel & Heavy Equipment Maintenance Safety Skills	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Wear shop clothing appropriate to the activity being performed					
Confine long hair before operating rotating equipment					
Always wear eye protection when using grinding wheels, rotating brushes, and as required					
Remove rings and other jewelry when working in the shop					
Ask for help if you need it					

	O b j e c t i v e	E x p o s u r e	T r a i n i n g	P r o d u c t i o n	E m p l o y a b l e
Conduct yourself in a manner conducive to safe shop practices					
Follow class rules established by instructor					
Keep mentally alert to shop hazards					

Keep all tools clean and in safe working order					
Report any defective tools, machines, or other equipment to the instructor					
Retain all guards and safety devices					
Operate powered equipment only after receiving instruction on how to operate the machine safely					
Report all accidents to the instructor regardless of nature or severity					
Turn off the power before leaving a machine tool					
Make sure all guards and barriers are in place and adjusted properly before starting a machine tool					
Disconnect the power from machine tools before you leave it or perform any maintenance task					
Use a solvent only					
Use correct and proper size wrenches for nuts, bolts, and objects to be turned or held					
Keep the shop or laboratory floor clear of tools, scraps and litter					
Clean up any spilled liquids immediately					
Store oily rags or oily waste in metal containers					
Clean the chips from a machine with a brush; do not use a rag or bare hands					
Use proper support for all heavy objects					
Drill out broken studs					
Sharpen drill bits					
Sharpen screw					
Steam clean equipment					

SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Diesel & Heavy Equipment Maintenance**

Subject Area: **Mathematics**

Student Name: _____

Ed Objective: Specific knowledge to be learned in order to perform occupational skills.

Frustration Level: Inability to acquire specific knowledge pertinent to occupation area introduced.

Instructional Level: Ability to perform objective under the guidance of the instructor (training level).

Independent Level: Can transfer knowledge to related situations with independence and proficiency (production level).

✓ indicates that student has achieved this goal

X indicates that student is working on this objective

Diesel & Heavy Equipment Maintenance Mathematics Skills	O b j e c t i v e d e	F r u s t e r i v e n t	I n s t r u c t o r i n v e n t	I n d e p e n d e n t
Cubic in.				
Kilometer/Mile				
Hectometer/yards				
Decameter/feet				
Meter/inches				
Decimeter/1 inch				
Centimeter/0.39 in.				
Millimeter/0.04 in.				

	O b j e c t i v e E v i d e n c e	F r u s t r a l t e r i v e n c e	I n s t r u c t i o n s a l l	I n d e p e n d e n t L e v e l s
Sq. kilometer/sq. miles				
Hectare/acres				
Acre/sq. yards				
Centare/sq. feet				
Sq. centimeter/sq. inch				

Stere/cu. yds.				
Decistere/cu. feet				
Cubic centimeter/cu. in.				

Kilowatt/horsepower (power)				
Watt/B.T.U. (heat)				
Kilopascal/P.S.I. (pressure or vacuum)				
Newton-meter/ounce, in. ft. (torque)				
Degree celsius/fahrenheit (temperature)				
Litre/gallon (capacity)				
Metric ton/short ton				
Metric ton/long ton				

Addition				
Subtraction				
Division				
Multiplication				
Fractions				
Gear-ratios				
Percentages				
Capacities				
Compression ratio				
Cu. in. displacement				
Sleeve diameter				
Connecting rod pinsize				
Piston size				
Crankshaft size				
Fly wheel diameter				
Cooling capacity				
Octane				

	O b j e c t i v e E v i d e n c e	F r u s t r a l t e r a t i v e e v i d e n c e	I n s t r u c t i o n a l e v i d e n c e	I n d e p e n d e n t e v i d e n c e
B.T.U.				
F.H.P.				
I.H.P.				
Valve size				
Cetane				
Oil pan capacity				
Drawbar horsepower				



SPECIAL EDUCATION CURRICULUM ASSESSMENT INVENTORY

Shop: **Diesel & Heavy Equipment
Maintenance**

Subject Area: **Vocabulary**

Student Name: _____

Word Recognition: Ability to correctly recognize words from contextual, pictorial, structural or phonic clues.

Word Spelling: Ability to correctly spell a word.

Word Understanding: Ability to comprehend the meaning of a word.

Content Use of Word: Ability to use a word correctly in both verbal and written communication associated with a job task.

F indicates an inability to learn the skill

S indicates that the student can perform the skill under supervision

I indicates that the student can perform the skill independently at an employment level

	R e c o g n i t i o n r o d n	S p e l l i n g r n d g	U n d e r s t a n d i n g	C o n t e n t u s e
Diesel & Heavy Equipment Maintenance Vocabulary Skills				
Abrasion				
Additive				
Air cleaner				
Antifreeze				
Antifriction bearing				
A.S.M.E. (American Society of Mechanical Engineers)				
Atmospheric pressure				
Backlash				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Back pressure				
Ball bearing				
Bearing				
Brake horsepower				
Blow-by				
Bore				
Break-in				
Bushing				
By-pass				
Calibrate				
Cam-ground piston				
Camshaft				
Carbon monoxide				
Carburetor				
Cetane				
Chamfer				
Chase				
Choke				
Combustion				
Combustion chamber				
Compression				
Cylinder block				
Cylinder head				
Cylinder liner				
Dead center				
Diesel engine				
Dynamometer				
Energy				
Engine				
Exhaust manifold				
Floating piston pin				
Fixed piston pin				
Semifloating pin				
Flywheel				
Four stroke cycle engine				
Gear ratio				
Governor				
Injection pump (diesel)				
Injector (diesel)				

	R e c o g n i t i o n s	S p e l l i n g s	U n d e r s t a n d i n g	C o n t e n t s
Input shaft				
Intake manifold				
Internal combustion engine				
Journal				
Motor				
Piston				

Alternator				
Alternating current (A.C.)				
Ammeter				
Ampere				
Ampere hour				
Armature				
Bendix drive				
Battery				
Capacitor				
Generator				
Ohm				
Volt				
Voltage regulator				

Accumulator				
Actuator				
Bleed				
Cavitation				
Cooler				
Cylinder				
Displacement				
Energy				
Filter				
Force				
Friction				
Pump				
Pressure relief				
Reservoir				

Special Facilities (Vocational/Special Education Instructors):

Needed Aids (Vocational/Special Education Instructors):

Time Needed to Complete Tasks (Vocational/Special Education Instructors):

Vocational Instructor _____
(Signature)

Special Education Instructor _____
(Signature)