Stanislaus County Occupational Olympics and Career Exposition

November 13, 2018

TO: **CTE Instructors, Counselors**

FROM: Cindy Young, Director II – Career Technical Education

RE: Student Registration - 2019 OOCE
Registration forms are due on Friday, February 1, 2019

The 34th Annual Stanislaus County Occupational Olympics and Career Exposition will take place at the Stanislaus County Fairgrounds on Thursday, March 21, 2019.

The OOCE Student Registration form is now available as a fillable pdf at the following link; https://drupalstage.stancoe.org/sites/default/files/educational-options/rop/OOCE%20Student%20Registration%20Form2019.pdf

The purpose of the Stanislaus County Occupational Olympics and Career Exposition is to promote academic and occupational understanding in various career areas and recognize students who excel in the mastery of skills and knowledge necessary for success within a given career.

The day's events will include: 1) CTE Common Core Anchor Standards based competition leading to individual awards, and 2) a career exposition where various agencies, industries, and individuals representing a multitude of occupations will be available to discuss careers with your students on a one-to-one basis. The career exposition will be clustered in the following areas: Agriculture, Business, Home Economics, Industrial focus on their chosen career(s).

This year's competitive events are:

- Ag Engineering/Construction Trades
- Agricultural Equipment Technology
- Automotive Technology
- Criminal Justice (limited to 40)
- Fashion Design (revised, limited to 35)
- Firefighter Candidate Training (limited to 50)
- Floriculture (limited to 100)
- General Marketing (limited to 50)
- Hairstyling
- *Intro to Business Applications (limited to 60)
- Job Seeking Skills (limited to 85)
- Marketing Mathematics
- Medical Occupations
- Pitsco Competitive Drag Racing (limited to 85)
- Portfolio Review
- Robotics
- Salad Prep & Display
- Small Engine Technology (limited to 20)
- *Welding (limited to 40)

* Students registered for these events will be bused off-site from the fairgrounds for competition. Students will not be able to participate in a second event.

IMPORTANT INFORMATION ON PAGE 2

Sponsors

Stanislaus County High School Districts

Modesto Junior College

Stanislaus County Fair

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Cindy Young
Melody Pickford
Jim Etchepare

Scott Kuykendall
Assistant Superintendent

Tom Changnon
Superintendent

Modesto City Schools CTE

Tasha Hutton
Career Exposition Chair

Brad Lash
Pathway Exhibits Chair

Note: Registration for events with limited space will be accepted on a first-come-first-serve basis. Please note that some events also have a per school limit.

Enclosed are information sheets for each competitive event. *Please read this information carefully. Some events require students to bring their own equipment and have limited registration.* Competitive events with less than ten students registered will be canceled.

The top eight students will be recognized in each event; top three will receive plaques. One small and one large school will be awarded a Sweepstakes Award. Help make this showcase event successful by encouraging participation of your students.

The following events are held offsite from the fairgrounds: **(Student's registered for these** events will only be able to compete in one event.)

Welding will be held at Modesto Junior College - West Campus.
Introduction to Business Applications will be held at Turlock High School.

This packet includes registration materials.

Completed registration forms must be returned to Cindy Young, Stanislaus County Office of Education by Friday, February 1, 2019.

Registration forms may be sent via route mail, faxed (238-4203) or emailed to mpickford@stancoe.org. If you fax or email registration forms, please keep the originals on file at your school site.

Agricultural Engineering/Construction Trades

Event Overview: This event is designed to assist students in developing and refining their mechanical skills and knowledge. As a participant you will interpret design schematics to construct, assemble or configure the required projects. You will also complete a tool and parts identification test comprised of basic tools and parts used in the specific trades represented each year. All students will complete the written test, tool identification and two trade area projects in the areas of Electrical Wiring Skills and Woodworking/Carpentry. Instructors must fill out the safety affidavit (see back of registration form) for students to participate in the hands on areas. All projects will be built and remain at the contest site.

The contest will address the following areas:

- **Tool Identification/Estimating**
  - The tools and materials identification event shall consist of the identification of common tools and materials used in agricultural engineering / construction and limited to those items listed on the California Agricultural Education Website – http://ag.csuchico.edu/agMech/
  - Multiple-choice type questions requiring identification or selection of proper tools or materials or bill of materials may be included.
  - Estimation of material problems will be included in this section.
- **General Information Test**
  - General knowledge multiple choice test based on:
    - Students will answer questions pertaining to safety in the work area, and project specific areas as part of the general information test.
    - Electrical Wiring- Codes, equations etc…
    - Woodworking- Figuring a bill of materials, Board Footage, woodworking terms etc…
    - Plumbing- Calculating costs, terms etc…
    - Cold Metal Work- Pricing steel, etc…
- **Trade Specific Categories:**
  - Electrical Wiring
    - Students will demonstrate through hands on installation correct wiring of simple 120 & 240 volt circuits.
    - Students should follow the National Electric Code
    - Safe working practices will account for 15% of total score.
    - Wiring 120 and 240 volt circuits including switches, lights, breaker panel, and outlets according to the instructions given
    - Identification of safety issues within a system
    - Safe working practices will account for 15% of total score.
    - NOTE: Only hand tools may be used in this area; no power drivers or screwdrivers.
  - Carpentry/Woodworking
    - Demonstrate fundamental skills in the use of common woodworking tools by making a simple project or solving a woodworking/carpentry problem.
    - The scoring in this area will emphasize the contestant's ability to layout and cut component parts rather than on completion alone.
    - Safe working practices will account for 15% of total score.

-CONTINUED ON BACK-

Tools will be supplied. Students would be encouraged to bring safety glasses, calculators and clip boards.

Electrical Wiring Skills	**Required safety and other materials**	**Woodworking / Carpentry**
Diagonal Cutters Screwdrivers (Phillips and standard) Linesman Pliers Needle Nose Plier Wire Strippers Cable Rippers Crimping Tool for bonding Grounding Crimp Sleeves 5/16" Nut Driver any other tools you deem necessary	Clipboards Pencils Calculators Safety Glasses that meet ANSI Z87.1 Tape Measure Coveralls Close toed shoes or boots	Curved Claw Hammer Cordless Drill Driver Assorted Saws Chisels Framing Square Combination Square Nail Set Finishing Supplies Planes Hand Clamps any other tools you deem necessary

■ = CTE Anchor Standards addressed in this competition

CTE ANCHOR STANDARDS		
■ **Academics -** Analyze and apply appropriate academic standards required for successful industry sector pathway completion	■ **Problem Solving and Critical Thinking - Writing Standard:** Conduct short as well as more sustained research projects to answer a question or solve a problem.	■ **Leadership and Teamwork - Speaking and Listening Standard:** Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed.
■ **Communications -** Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening.	■ **Health and Safety - Reading Standards for Science and Technical Subjects:** Determine the meaning of symbols, key words, and other domain-specific words and phrases as they are used in a specific scientific or technical con-text	■ **Technical Knowledge and Skills - Writing Standard:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products.
■ **Career Planning and Management - Speaking and Listening Standard:** Integrate multiple sources of information presented in diverse formats and media in order to make informed decisions and solve problems.	■ **Responsibility and Flexibility - Speaking and Listening Standard:** Initiate and participate effectively in a range of collaborative discussions	■ **Demonstration and Application -** Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings.
■ **Technology - Writing Standard:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback.	■ **Ethics and Legal Responsibilities - Speaking and Listening Standard:** Respond thoughtfully to diverse perspectives.	

For specific information regarding this event contact Joe Neally at 209-664-9914

Agricultural Equipment Technology

Event Overview: This contest is for students in the Agricultural Mechanics career area who are preparing for a career in the area of equipment operation, repair and maintenance.

The participant will be evaluated on:

- Tractor and farm machinery parts identification (internal and external).
- A written safety test and general information test.
- Precision driving, backing, and hitching of tractors.
- Diagnosis proper repairs (troubleshooting).

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For specific information regarding this event contact Mike Ellington or Kelly Larson at Hughson High School (883-2427)

Automotive Technology

Event Overview: As a participant you will have five tasks to complete in the area of Automotive Technology.
Note: "Participants must have safety glasses to participate".

- Identify parts of an outside micrometer.
- Use outside micrometer to measure diameter of crankshaft journals.
- Identify tools used in the automotive area.
- Wire an automotive starter and test using a battery/starter tester.
- Disassemble/reassemble an automotive drum brake.

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For specific information regarding this event contact Gerald Wray (575-6358) Modesto Junior College

Criminal Justice

This event is limited to 40 students who will be accepted on a first-come, first-serve basis, with no more than ten students per program.

Event Overview: Participants in this event are to assume the role of a police officer. Dispatched to investigate an incident at a specific location. Participants are to obtain enough information to determine if a crime has been committed, and identify that crime. Participant will then write a police report regarding their investigation. Participants will then discuss their report with the District Attorney and obtain a criminal complaint, if necessary.

Pre-requisite: Participants must be enrolled in or have successfully completed a class in Criminal Justice.

Participants will be evaluated on:

- Techniques of communication
- Ability to withdraw pertinent information
- Note taking ability
- The ability to relate Penal Code sections along with statutory and case law relating to the investigation
- Ability to write a police report
- Ability to interact with District Attorney
- Ability to recognize a potentially life threatening situation and take appropriate action.

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For specific information regarding this event contact Co-Chair: Randy Cerny - Ceres High School (556-1920)

Fashion Design

Theme: **School Uniforms**

These specific sketches: Three (3) original fashion illustrations, depicting apparel inspired by **School Uniforms. *One staff uniform, one female student uniform and one male student uniform*.**

1. Uniforms are for **your school**
2. Colors used are **your school colors**
3. Must meet **dress code standards for school**

See attached pages for more information.

Fashion Design

This event is limited to 35 students who will be accepted on a first-come, first serve basis.

Event Overview: The participant will give a 2-3 minute oral presentation and prepare a display board illustrating three (3) original fashion illustrations for one staff member, one female student and one male student depicting apparel inspired by "School uniforms". The presentation board must not be larger than 24"x 36".

1. The participant will prepare and present to the event chairperson during orientation three copies of a typed information sheet in outline form that includes:

    a. **Category** - size range and/or divisions in apparel
    Price Range – cost to make clothing
    Theme - collection focus
    Colors - options for each style
    Size Range - sizes to be offered
    Season - selling time period

- A list of the following principles and elements of design and an explanation of how each is used in the participant's illustrations:

    b.

Principles	**Elements**
Proportion	Color
Balance	Shape
Emphasis	Line
Rhythm	Texture
Harmony	

    c. Typed cost breakdown should include the following:
    Materials - fabric and lining
    Notions - thread, zippers, pads, snaps, etc.
    Trimmings - lace, buttons, belts, buckles, etc.

    The costs of each design illustrated in the collection should be identified and tabulated separately but can be provided on the same cost breakdown sheet.

2. The participant must prepare original fashion illustrations or sketches depicting "Designer's Choice" (No bathing suits allowed) attire as indicated on the front page of this event overview – (3) original fashion illustrations for a man and a woman and one of their choice.

3. Mat board must include the following:

    a. Title of project
    b. Three (3) original fashion designs
    c. Samples of fabric used
    d. Samples of all buttons and trims used

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4. The participant will prepare and deliver an oral presentation of 2-3 minutes in length. The presentation shall address all the items required on the information sheet including a price estimate of the fashions, textiles and notions specified.

5. The participant will demonstrate creativity in their project selection and presentation.

6. The participant will demonstrate their understanding of the project during a question and answer period following the oral presentation.

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For specific information regarding this event contact Linda Bejaran, Turlock High School (667-2055)

Firefighter Candidate

This event is limited to 50 students who will be accepted on a first come-first serve basis.

Event Overview: Participants for this event will be limited to fifty (50) and will be accepted on a first come-first serve basis. Participants will assume the role of a Firefighter Candidate and will compete in events that will simulate the actual hiring process used by many fire departments.

Participants will be evaluated on:

- Firefighter Candidate Written Test
- Ability to identify firefighting tools and equipment and their use.
- Properly donning firefighter protective clothing within sixty (60) sec.
- Dry Hose drag
- Simulated Ventilation (Hammer Swing)
- Citizen Rescue (Dummy drag)
- Ability to follow proper directions
- Ability to use common sense
- Problem solving

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For specific information regarding this event contact Mark Johansen or Ken White, Davis High School 576-4592

Floriculture

This event is limited to 100 students who will be accepted on a first-come, first-serve basis, with no more than 9 students per school.

Event Overview: This event is designed to evaluate the understanding of the principles and skills of the floriculture industry.

All participants will be allowed 45 minutes for IDENTIFICATION of 75 items:

- Identify tools and materials (25), cut flowers (25), and potted plants (25) used in the floriculture industry.

All participants will JUDGE up to four classes.

- Five minutes will be allowed for each non-reason judging class consisting of a combination of cut flowers, blooming plants, foliage plants, or flower arrangements to demonstrate knowledge of purchase, merchandising, and marketing.

The highest scoring 20 students from IDENTIFICATION and JUDGING will advance to a second round Corsage Construction to determine overall event finalists and 1st, 2nd, and 3rd place winners:

- A 30 minute time limit will be allowed after all contestants have chosen supplies and found work space. Five, not to exceed seven miniature carnations will be provided for each student, and each will be free to choose from an assortment of foliage, filler and necessary materials made available by the contest chairperson. Participants may bring tools only to use, no ribbon, wire, etc. will be allowed.

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For specific information regarding this event contact Katy Cardoza, Modesto High School (492-1706)

General Marketing

This event is limited to 50 students who will be accepted on a first-come, first-serve basis with no more than eight students per school site.

Event Overview: As the participant, you will need to come to the event prepared. **Please be dressed in professional attire to present to a group of judges. You are allowed to use one standard sized poster board. As a participant you will create an idea for any form of "Wearable Technology". You are allowed to use as much creativity as possible on your poster board so be creative and come prepared.**

The Participants will:

- Explain the concept of marketing, what are brands and trademarks?
- Explain the new product, features and why it is different than any other wearable technology? Why would a customer use this instead of any other on the market?
- Pricing – What price will motivate customers to purchase your product?
- Explain who is their target market and why.
- Promotion – What kind of advertising would be most helpful, how will you advertise your product?
- Use proper grammar and vocabulary.
- Have 5 minutes to present to the judges. Five points will be deducted for every minute over the allotted 5 minutes.

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For specific information regarding this event contact James Toste, Pitman High School 656-1592

HAIRSTYLING EVENT MODELS MUST COMPLETE A "STUDENT REGISTRATION FORM"

Please print the name of the stylist they are modeling for where indicated on the registration form.

Hairstyling
"1800's Era"

Event Overview:

- **Participants will bring their own model; hair has been set and dried prior to the event.**
- **Participants must keep their models hair in the set until instructed by the proctor.**
- **Prior to the event models make-up, nails and costume will be done.**
- **Set could include rollers, pin curls, braids or barrel curls still in hair. NO pre-combed sets allowed.**
- **Participant will comb hair out into an "1800's Era. Any type of setting is permissible.**
- **Female models only.**
- **Models can be in "1800's" attire.**
- **Participants must wear professional dress.**
- **Participants must supply their own kits.**
- **Participants and models are to arrive 45 minutes early.**

Participants will be evaluated on:

- Speed, accuracy, and appearance of finished hairstyle
- Set technique, roller and pin curl placement
- Back-combing
- Smooth and controlled hairstyle
- SMA (sanitary maintenance area only!)
- Handling of the implements
- Comfort and patron protection
- Time element
- Ability to follow directions

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For specific information regarding this event contact Michelle Hickman, Adrian's Beauty College (526-2040)

Introduction to Business Applications

This event is limited to 60 students who will be accepted on a first-come, first serve basis.

Event Overview: This event is designed to evaluate beginning level document formatting skills for word processing and spreadsheet application proficiency for job entry and job-sustaining skills. It will include a written evaluation, a word processing document, and spreadsheet production activity. **Participants will use Microsoft Office 2013 to complete the following requirements:**

The Participant will:

- Type a mailable business letter from a rough-draft copy, using a block style letter format.
- Create a simple spreadsheet and insert basic (simple) formulas as necessary.
- Participants will be given a test on the rules of letter formatting and addressing, punctuation, spacing, word processing and spreadsheet functions.
- Participants will be judged on their ability to perform the activities with accuracy.

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For specific information regarding this event contact Event Chair Nancy Backlund, Modesto Junior College (575-6497)

Job Seeking Skills

This event is limited to 85 students who will be accepted on a first-come, first serve basis with no more than 5 per school.

Event Overview: This event is designed to test student's competency in applying for employment. As a participant, you will be assigned the role of job applicant. Students may choose to apply for any position available in their field of expertise. You must develop a resume and letter of application for the job you selected prior to coming to the event site**.** (Bring a copy of the resume and cover letter) During the competition, you must complete a job application **(without the use of any materials)** and be interviewed for that position. **Skills and credentials need to reflect student's current level of achievement in cover letter and resume. (i.e. high school courses currently enrolled in)**

The participant will:

- Address other people in a business-like manner whether they are customers, fellow employees, supervisors, or managers
- Listen to and follow directions
- Communicate effectively (oral and written)
- Talk clearly and pleasantly, conveying spirit and enthusiasm in one's speech
- Realize that first impressions are important to the business and last impressions are longest remembered
- Acknowledge that the ability to communicate skillfully, using good grammar, is essential to a person's business advancement
- Understand that enthusiasm is contagious
- Prepare a résumé and letter of application
- Understand the importance of positive body language
- Complete a job application

■ = CTE Anchor Standards addressed in this competition

CTE ANCHOR STANDARDS		
■ Academics - Analyze and apply appropriate academic standards required for successful industry sector pathway completion	■ Problem Solving and Critical Thinking - Writing Standard: Conduct short as well as more sustained research projects to answer a question or solve a problem.	■ Leadership and Teamwork - Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed.
■ Communications - Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening.	■ Health and Safety - Reading Standards for Science and Technical Subjects: Determine the meaning of symbols, key words, and other domain-specific words and phrases as they are used in a specific scientific or technical con-text	□ Technical Knowledge and Skills - Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products.
■ Career Planning and Management - Speaking and Listening Standard: Integrate multiple sources of information presented in diverse formats and media in order to make informed decisions and solve problems.	■ Responsibility and Flexibility - Speaking and Listening Standard: Initiate and participate effectively in a range of collaborative discussions	■ Demonstration and Application - Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings.
□ Technology - Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback.	■ Ethics and Legal Responsibilities - Speaking and Listening Standard: Respond thoughtfully to diverse perspectives.	

For specific information regarding this event, contact Randee Vitorino 667-2055 x4015, Kathi Dunham-Filson 238-6608, or Kaci Brazil 883-0469

CALIFORNIA ASSOCIATION FFA
Employment Skills (Job Interview) Contest
2018-2019

JOB DESCRIPTIONS & CONTACT PERSONS

NOTE: Prepare a letter of introduction to ONLY ONE of the job interview titles listed below. All information on the application, included in the cover letter, listed on your resume, communicated during the interview, etc. is to be true. Approach the contest as if the openings appeared in your local newspaper. Please do not contact these individuals and/or companies directly, as this is a Leadership Development Event for the California Association FFA.

Agriculture Business Management – Sales Assistant

JSC Agricultural Supply is looking for an energetic individual with great people skills who has an interest in the agriculture sales. This position answers questions regarding product features and options, receives orders from customers (by telephone, fax, in person or email), prepares quotations on items, writes orders, and handles counter walk-in sales and pick-ups. Candidates should be flexible, reliable, and have excellent interpersonal skills. Candidates need to be proficient with the Microsoft Office Suite and possess outstanding verbal/written communication. Send cover letter and resume to: JSC Agricultural Supply, c/o Anthony Ramirez, 3349 Washington Street, Santa Rosa, CA 95403

Agriculture Mechanics – MIG Welder

Seeking a welding position where the company fabricates agricultural equipment? Look no further! Randstad Manufacturing looking for a part-time MIG welder. Candidates must have experience MIG welding, setting up and breaking down welding machines, proper welding technique and be familiar with power tools. Candidates must own steel toed work boots, helmet and gloves. Submit cover letter and resume to: Randstad Manufacturing, c/o Jason Ramos, 256 Jensen Avenue, Fresno, CA 93722

Animal Science – Veterinary Hospital Assistant

Green Acre Veterinary Hospital is looking for an entry-level assistant. Candidates must love animals and should not be afraid to get dirty! Responsibilities may include: intake of animal patients; animal restraint/handling; assist with the collection of basic samples including blood, feces, urine; assist veterinarians by preparing wound, gathering supplies, monitoring during and after procedures; and kennel sanitation. Submit resume and cover letter to: Green Acre Veterinary Hospital, c/o Francine Peterson, 2400 Primrose Road, San Carlos, CA 94070

Floriculture – Floral Shop Assistant

Looking for a motivated person to assist in all aspects of a busy flower shop. Major responsibilities would include helping customers, entering orders on computer, display of products on sales floor, processing flowers from flower market, watering and care of plants, general cleaning and sweeping. Must be able to stand and be on your feet most of the day and be able to lift buckets filled with water. Looking for someone with a great attitude that enjoys customer service. Apply by sending cover letter and resume to: Antioch Florist, c/o Luann Jennings, 1442 Oak Leaf Way, Antioch, CA 94509

Forestry & Natural Resources – Forestry Technician Intern

The US Department of Agriculture is looking for a Forest Technician Intern to assist with research of northern California forests. Candidates should have knowledge and/or experience in collecting data on tree growth and mortality; forest type; tree size and age; natural disturbances; insects and disease; and soil attributes. Send cover letter and resume to: US Department of Agriculture, c/o Human Resources, 908 Redwood Drive, Chico, CA 95928

Ornamental Horticulture – Transplanting Technician

Do you love plants? Do you like working with your hands? Phytelligence is seeking conscientious, detail-oriented individuals to join our team as a transplanting technician. This is an entry-level position at our greenhouse facility in Lancaster, CA. Phytelligence is an agricultural biotech company that is revolutionizing the way food crops are grown. Key responsibilities are transplanting plants from plug stages, preparing trays for planting, maintaining an organized workstation and keeping records. Candidates should send their cover letters and resumes to: Phytelligence, c/o Bob Robertson, 99832 County Road 3, Lancaster, CA 93536

Plant and Soil Science – Commodity Inspection Intern

Safe Food Alliance is looking to hire an intern in their Commodity Inspection Department. Candidates should have knowledge of common nut crops such as walnuts, almonds and pistachios. Responsibilities include drawing samples from production line and inspecting according to quality, grade, color, and size as specified under commodity guidelines. Candidates will also place rejected products and individual grades of products in designated piles, containers, or areas. Candidates should be able to make decisions efficiently, maintain sanitary work conditions and work independently. Send cover letter and resume to: Safe Food Alliance, c/o Margaret Schimper, 1432 Silver Trails Lane, Winters, CA 95694

JOB INTERVIEW CONTEST

Job Titles and Contacts - Business

Accounting Clerk
Smith & Associates is looking for a responsible accounting clerk. Knowledge of A/P, file maintenance, journal entries and general ledger a plus. If interested, please send cover letter and resume to Daniel Hernandez at 763 Covina Ave., Los Angeles, CA 91722.

Sales
Max of New York is in need of an outgoing individual to join their successful sales team. Individual must possess good sales and customer service skills. Strong math and computer skills helpful. If you are interested in working in a professional setting, please apply to Maxwell Klein, 8838 Broadway Blvd., New York, NY 82093.

Administrative Assistant
Doctor's office seeking individual with strong organizational and clerical skills. Responsibilities are working on a computer, filing, and phones. 10-key and spreadsheet a plus. Interested candidates should apply to Robert Wright, MD, 927 Gould Ave., Modesto, CA 95355.

Graphic Artist
Local advertising agency needs individual with experience using various graphic programs. Must be able to create effective logos and advertisements for clients. Individual must be able to target customer needs and be creative. If interested, please send letter of application and resume to Lucas Benson, Benson Advertising, Inc., 999 S. Hollywood Blvd., Hollywood, CA 91730.

General Office Assistant
Insurance office seeking an individual with experience in computer application software such as Microsoft Word, Excel, Outlook, and PowerPoint. Prospective employees must also have skills in filing, answering phones, and good written and spoken language. If interested, send a letter of application and resume to Napa Insurance Agency, 1296 South Main Street, Napa, CA 95446.

Web Page Design and Maintenance
Small local company is looking for an individual to work part-time updating and maintaining company web site. Applicant must have experience with HTML editing, graphics manipulation, web servers, and Macromedia Dreamweaver and Fireworks. Applicant must also have strong written and grammar skills. Interested individuals can apply to Morro Surf Shop, 831 Beach Road, Morro Bay, CA 92491.

JOB DESCRIPTIONS
CULINARY ARTS

Wait Staff
Las Gaviotas
525 South 2nd Street
Patterson, CA 95363
Las Gaviotas is now hiring wait staff. This part-time, entry level position includes a first hand opportunity to learn and be friendly. The ability to follow directions is a must. Cheerful and outgoing personality is needed.

Host/Hostesses
Black Angus
5247 Kearny Villa Road
San Diego, CA 92123
Hosts and Hostesses are needed, must be able to work full-time. Duties are as follows: show customers to their table, take reservations, and operate cash register. Must be outgoing and respectful.

Newspaper Food Writer
Contra Costa Times
2021 Wheelan Way
Walnut Creek, CA 94518
Newspaper food writer needed for Contra Costa Times. Preferred present or former food critic. Must pay for own meals. Proper grammar and writing skills a must.

Food-Canning and Food-Freezing
895 Orange Avenue
New York, New York 96782
Lucy's Supermarket is now hiring for food-canning and food freezing personnel. Great opportunity for students, part-time available. Duties include: workers preparing foods that are sold in cans, jars, and cartons.

Super Market Cashier
Food Max
500 North Sunrise
Roseville, CA 95661
Food Max is hiring supermarket cashiers. These part-time entry level positions offer a firsthand opportunity to learn the supermarket business from the ground up. Duties include: packing groceries at check out counter and bagging and helping customers carry them to the car.

Restaurant Pastry Chef
6601 Florin Road
Sacramento, CA 95828
Looking for someone who can cook amazing pastries. We need someone who is able to come in when needed. Good pay.

Job Descriptions for Occupational Olympics
Teaching Careers

Aide for Family Day Care—Infant through age 5

Sunshine Family Day Care Center is currently seeking help from a qualified individual to assist in with children's activities, nutrition, outdoor play, and know how to care for an infant. Applicants should have some experience with children and a high school diploma. Please send a resume and a letter of introduction to: Melissa Barba, Sunshine Family Day Care, 413 Oakland Avenue, Oakland, CA 94601

Day Care Assistants

Day care seeking assistants to help with supervision, preparing snacks and caring for other basic children's needs. Please send a resume and three letter of recommendation to be reviewed to: 250 3rd Street, Patterson, CA 95363.

Marketing Mathematics

Event Overview: The participant will take a marketing mathematics skills test utilizing a calculator. Emphasis will be on practical math.

■ = CTE Anchor Standards addressed in this competition

CTE ANCHOR STANDARDS		
■ **Academics -** Analyze and apply appropriate academic standards required for successful industry sector pathway completion	■ **Problem Solving and Critical Thinking - Writing Standard:** Conduct short as well as more sustained research projects to answer a question or solve a problem.	■ **Leadership and Teamwork - Speaking and Listening Standard:** Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed.
■ **Communications -** Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening.	■ **Health and Safety - Reading Standards for Science and Technical Subjects:** Determine the meaning of symbols, key words, and other domain-specific words and phrases as they are used in a specific scientific or technical con-text	☐ **Technical Knowledge and Skills - Writing Standard:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products.
■ **Career Planning and Management - Speaking and Listening Standard:** Integrate multiple sources of information presented in diverse formats and media in order to make informed decisions and solve problems.	■ **Responsibility and Flexibility - Speaking and Listening Standard:** Initiate and participate effectively in a range of collaborative discussions	■ **Demonstration and Application -** Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings.
☐ **Technology - Writing Standard:** Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback.	■ **Ethics and Legal Responsibilities - Speaking and Listening Standard:** Respond thoughtfully to diverse perspectives.	

For specific information regarding this event contact Kathy Sheppard, Modesto City Schools (492-4222)

Medical Occupations

Event Overview: The participant will be assigned the role of a medical clinic/hospital employee and will be asked to perform a variety of procedures applicable to that position. The participant will demonstrate preparedness to enter an advanced health careers program at the college level/vocational school level.

The participant will:

- Demonstrate knowledge of medical abbreviation and terminology on a written test.
- Demonstrate knowledge of anatomical positions by identifying their terms and locations.
- Demonstrate knowledge of human body systems by identifying parts of the muscular and skeletal systems.
- Demonstrate knowledge of patient safety and emergency care by identifying and/or, given a variety of situations, demonstrating appropriate usage of the parts of the International Hospital Code System.

■ = CTE Anchor Standards addressed in this competition

CTE ANCHOR STANDARDS		
■ Academics - Analyze and apply appropriate academic standards required for successful industry sector pathway completion	■ Problem Solving and Critical Thinking - Writing Standard: Conduct short as well as more sustained research projects to answer a question or solve a problem.	■ Leadership and Teamwork - Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed.
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☐ Technology - Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback.	■ Ethics and Legal Responsibilities - Speaking and Listening Standard: Respond thoughtfully to diverse perspectives.	

For specific information regarding this event contact Chair: Karen Mihok at 985-7993 or, Co-chair: Letitia Havens, Oakdale High School (847-3007)

Pitsco Competitive Drag Race

This event is limited to 85 students who will be accepted on a first-come, first serve basis.

Event Overview: As a participant you will compete in two separate competitions:

- Drag Race
- Car Design

The participant will:

Complete the following:

- Drag Race
  - Two competitors will race on an automatic start track where each racer will be responsible for their car starting based on a "Christmas Tree" style starting gate. 4/10-5/10 of a second start time.
  - Racers will be subject to a single elimination race, wherein once their car loses it is disqualified from further racing.
  - All cars must pass Pitsco guidelines in order to qualify - A car that does not pass 100% of regulations will not be allowed to race - no exceptions.
- Design Competition
  - All Cars must be constructed out of Bass Wood only. Cars made out of any other material will be disqualified.
  - All design competition cars are subject to all Pitsco race guidelines. If any car is entered in design that does not pass 100% Pitsco Regulations zero points will be awarded.
  - All cars regardless of race standing will be allowed to compete in the design competition.
  - All cars will be based on multiple criteria and awarded a point range of 0 to 5 points from four judges for a total of 20 points maximum.
    - Best overall design competition
    - Paint - color scheme, quality of finish and creativity
    - Design - body style, aesthetics and overall creativity.

NOTE: Please read additional directions on the bottom of page 5 of the Pitsco TSA Metric 500 Rules and Specs.

Participant requirements:

Each participant must provide their own car, complete with axles and wheels. The Participants will be given the necessary Co2 to complete the races.

Participants must remain in the designated areas at all times throughout the duration of the event. If a participant is called upon to race and they are not available they will be disqualified with no opportunity for make-up races allowed. This disqualification will also include the design competition.

-Continued on back-

■ = CTE Anchor Standards addressed in this competition

CTE ANCHOR STANDARDS		
■ Academics - Analyze and apply appropriate academic standards required for successful industry sector pathway completion	■ Problem Solving and Critical Thinking - Writing Standard: Conduct short as well as more sustained research projects to answer a question or solve a problem.	■ Leadership and Teamwork - Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed.
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□ Technology - Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback.	■ Ethics and Legal Responsibilities - Speaking and Listening Standard: Respond thoughtfully to diverse perspectives.	

For specific information regarding this event, contact Dean Massey - Turlock High School (667-2055)

Pitsco TSA Metric 500 Rules & Specs.

I. CONTEST PURPOSE
The Metric 500 Dragster Competition is planned to bring the best entries of each chapter together to compete for national honors.

II. ELIGIBILITY FOR ENTRY
A. Entries are limited to two (2) per chapter.
B. See "General Rules" for additional information.

III. LEVELS OF COMPETITION
Level I and Level II as described in General Rules.

IV. TIME LIMITATIONS
Contestants entry must be available at times specified in the conference program for timed runoffs.

V. SPECIFIC REGULATIONS
A. All entries must be turned in at the time designated. Each contestant will be responsible for obtaining time schedule at registration time.
B. A contestant may enter only one dragster that has been self-designed and constructed during the current AIASA year, and not previously entered in National AIASA Competitions.
C. All entries must be free of needed repair and/or maintenance at time of check-in.
D. CO_2 cartridges will be provided by AIASA.
E. Drawings
Every entry must be submitted with a metric drawing of the completed dragster. A two-view (top and side) drawing with metric dimensions shall be made either full scale on 11" x 17" or 12" x 18" paper or half scale on 8½" x 11" or 9" x 12" paper. A three view (top, side and end) drawing is acceptable, but will not change point allocations. Standard engineering procedures/practices should be followed. Drawings may be made using ink or graphite. Originals, blueprint copies will be accepted. Title block will only include "Entry Number _____," which will be assigned at registration time, and placed on entry prior to turn-in. *(See figure V.E.-1 for example of sheet layout).*

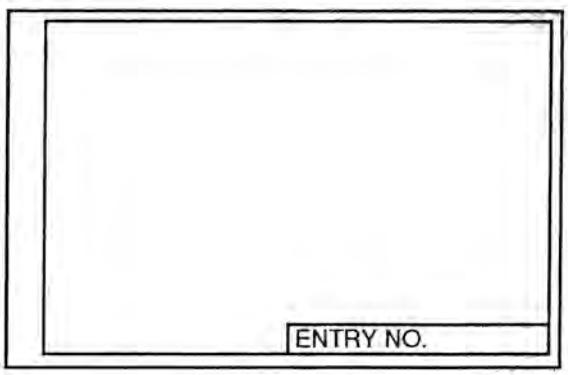


FIGURE V E-1

F. Specifications - Body Blank and Dragster
1. Body Blank
a. Length - 305 mm
b. Front height - 20 mm
c. Rear height - 65 mm
d. Bottom to center line of power plant chamber - 33 mm
e. Body width - 42 mm
f. Power plant chamber - 20 mm diameter, 51 mm depth, and drilled parallel to bottom surface. A minimum of 3 mm thickness around entire power plant housing must be maintained on all dragsters for safety purposes. See Figure V. F1f-1

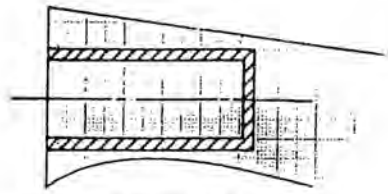


FIGURE V. F1f-1

g. The body of the model shall be one piece all-wood construction and no parts such as body strengtheners, fenders, plastic canopy, exhausts, or air foils may be glued or attached to or enclosed within the dragsters. Air foils, fenders and other appearance or designed and engineered in the original body blank. Bearings and lubricants may be used in construction.

2. Dragster	MIN	MAX
a. Axles (diameter)	3 mm	3 mm
b. Axles (length)	42 mm	70 mm
c. Axles bearing (diameter)	3.5 mm	4.5 mm
d. Axle hole (diameter)	3.5 mm	4.5 mm
e. Axle hole (position above body bottom)	3.5 mm	9 mm
f. Axle hole (position from either end of body)	9 mm	100 mm
g. Brass spacer bearing (diameter)	7 mm	9 mm
h. Dragster body (length)	200 mm	305 mm
i. Dragster body (height at rear **with** wheels)	56 mm	75 mm
j. Dragster body (mass with wheels)*	30 g	170.10 g
k. Dragster body (width at axles - front and back)	35 mm	42 mm
l. Power plant depth of hole	51 mm	51 mm
m. Power plant housing thickness (around entire housing)	3 mm	
n. Power plant housing (diameter)	19 mm	20 mm
o. Power plant C/L (from body bottom)	31 mm	35 mm
p. Screw eye (eyelet inside diameter)	3 mm	5 mm
q. Screw eyes (2) or C/L of bottom, distance apart	155 mm	270 mm
r. Wheels, front (diameter)	32 mm	37 mm
s. Wheels, front (width at greatest diameter)	2 mm	5 mm
t. Wheels, rear (diameter)	30 mm	40 mm
u. Wheels, rear (width at greatest diameter)	15 mm	18 mm
v. Wheelbase	105 mm	270 mm

*Assembled without CO_2 cartridge

G. Dragsters will be disqualified which fail to met the specifications listed in section F.
H. Wheels must be made entirely from plastic.
I. All contest entries will be judged according to the Metric 500 Rating Sheet, which includes criteria for drawing, design, race, speed, etc.
J. No repair or maintenance on entries will be allowed after entries have been registered. Any entry damaged during the race will be judged by the Contest Coordinator to determine whether or not the dragster will be allowed to race again. In the event that the dragster is damaged by conference personnel, the Contest Coordinator will make a ruling as to whether or not the dragster may be repaired by the student entering the dragster. This is the only reason a STUDENT would be allowed to touch his/her dragster after registration. Undamaged wheels which come off during the contest may be replaced as determined by the Contest Coordinator. Damaged wheels may not be replaced.

Rules & Specs. Continued

VI. PROCEDURES

A. Contestants will register with the Contest Coordinator at the time designated by the Competitive Events Coordinator. (See Conference Program.)

B. Instructions and contest timelines provided at registration will be followed. It will be the responsibility of each contestant to obtain these for each conference.

VII. REQUIRED CONTEST PERSONNEL AND EQUIPMENT

A. Contest Coordinator.

B. Judges - three (3) or more per level.

C. Two (2) persons assigned to check in and receive entries.

D. Person assigned for security.

E. Room - must be securable for equipment and entries. Size must accommodate an eighteen (18) meter track and equipment. Two (2) rooms optional - one per level.

F. Tables and chairs for judges.

G. Tables for entries (at least 6 - 2' × 8' tables).

H. The length of the drag strip (track) shall be twenty (20) meters (65' 7½") from start gates to timer.

I. CO_2 cartridges - two (2) per entry, plus spares are needed on site. Provided by AIASA at National Conference.

VIII. CRITERIA FOR JUDGING

A. Contestants shall be ranked in numerical order on the basis of final score to be determined by each judge without consultation with each other. The winner will be that contestant whose total score is the highest. Other placings shall be determined in the same manner. In case of a tie, the judges shall consult each other to ascertain the winner.

B. Ratings shall be based upon the following:

1. Design - 6 points
   a. Appearance - 3 points
   b. Finish - 3 points
2. Drawing - 20 points
   a. Accuracy - 10 points (dragster will be compared to drawings and specifications)
   b. Neatness - 2 points
   c. Dimension - accuracy - 2 points
   d. Point to point contact/dimension lines - 2 points
   e. Line quality - 2 points
   f. Irregular curves - 2 points
3. Construction/craftsmanship - 14 points
4. Race - 60 points

1st Place	60
2nd Place	56
3rd Place	52
4th Place	48
5th & 6th Place	45
7th & 8th Place	40
9 - 12	35
13 - 16	30
17 - 24	25
25 - 32	20
All others Run	10

C. Contest Coordinator will provide a sealed packet to the competitive Events Coordinator containing the results.

D. All judges' ratings and results are to remain confidential.

NOTE. *The top sixteen qualifiers for the double elimination bracket will be determined by the following TSA rules beginning in 1988.*

1. Points will be tallied for each dragster in the categories of design, drawing, and construction.

2. Points will be assigned for each dragster's rank in the qualifying round. See VIII B. 4 for points breakdown.

3. Points accumulated in 1 and 2 above will be added together to determine the sixteen entries with the most points.

4. The dragsters with the most accumulated points will advance to the double elimination bracket.

5. After the double elimination bracket races, final entry standings will be determined by adding together the points accumulated in the categories of design, drawing, construction and final ranking in the double elimination race.

★★NOTES REGARDING V. F2

Item 2a: Axles
Plastic axles such as delrin may be used in competition. However, design elements regarding impact, etc., should be considered when engineering the dragster.

Item 2f: Axle Hole
Axles may not be placed closer than 7 mm to either end.

Item 2h: Dragster Body (length)
Some student designers/engineers feel that shorter dragsters are faster. However, national contest results prove that length of the dragster is not generally the determining factor.

Item 2j: Dragster Body (mass with wheels)
Gross mass does not include the CO_2 cartridge.

Item 2k: Dragster Body (width at axles - front and back)
A dragster could be engineered to include a width of 42mm at the front axle and 35mm at the rear axle or vice versa or any distance between the specifications.

Item 2m: Power Plant Housing Thickness (around entire housing) Figure V. F1f-1

Item 2p: Screw Eyes
Eyelet shall be closed tightly to prevent the line from coming out of the screw eye. On very soft woods the designer/engineer may wish to reinforce the screw eye's hold in the wood with glue.

Items 2t and 2u: Rear Wheels
A dragster must have 4 wheels, two of which comply with item 2t specifications and two of which comply with item 2u specifications. The wheels may be placed in position(s) to create the effect of a 2, 3, or 4 wheel dragster.

Item 2u: Wheels, Rear (width at greatest diameter)
The specifications dictate that the wheel's surface contact is the point of measurement. See Figures VF2u-2.

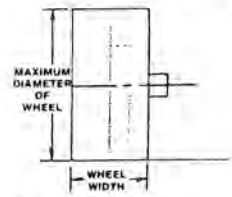


Figure VF2u-2

The wheel designs shown in VF21-3 will not be legal:

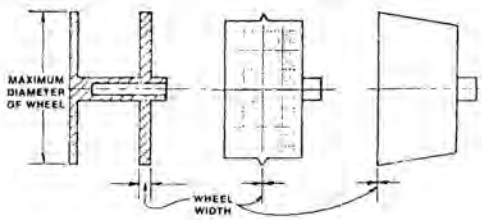
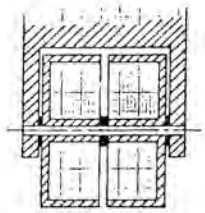


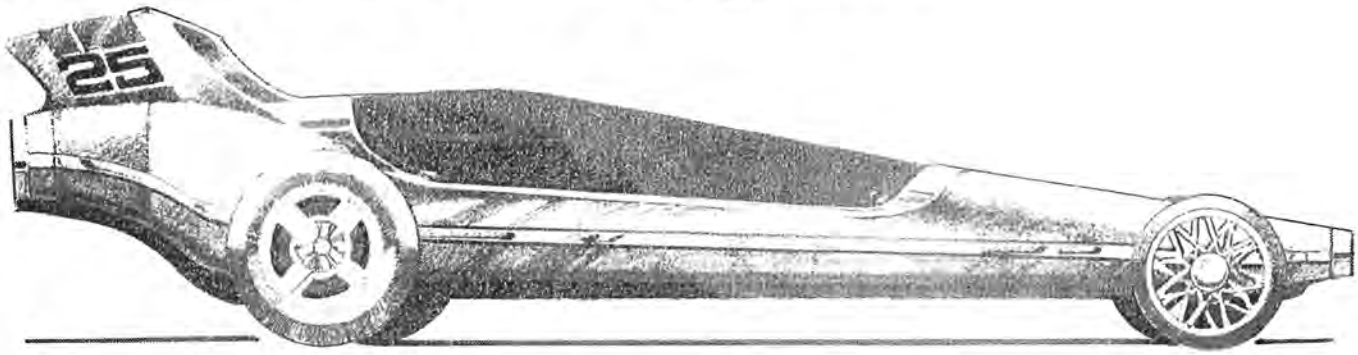
Figure VF21-3

COMMENT ON VF2a-v
Specifications now allow designs in which wheels may be located inside the car body. Example:



Section of Rear Wheels in front of CO_2 cartridge hole (minimum wheel width & diameter)

You're a Car Designer!



Design, Build and Race your own Dragster!

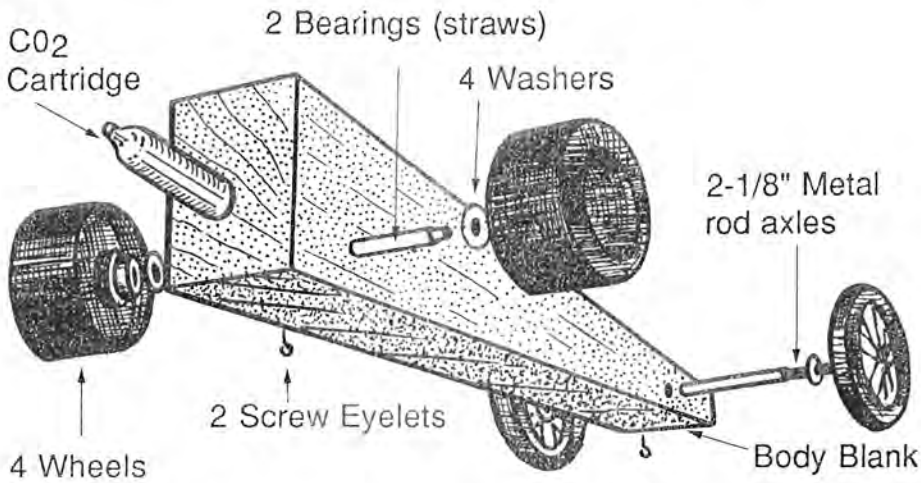
This book is about cars. It shows you how to design, build and race your own dragster. It's not a car you ride in but a real one just the same. The race car drivers at Indianapolis, the mechanics at Daytona, the automobile designers in Detroit, and the automobile engineers in Germany all had to start somewhere. They started small. Then as they learned and progressed they moved on to bigger and better things.

The car that you will build is like a miniature rocket powered dragster. It really goes! Wow, does it ever! As you build your dragster, do not cut corners. It will have a better chance of looking good and going fast if you design and build it step by step as suggested.

Good design helps this dragster win. At such high speeds, good design and careful planning insure that it runs smoothly.

It's Easy!

This is your chance to learn how it's done. You are going to come up with a super, fantastic idea for your dragster. Next, you will refine your idea. When everything is just right, you will make a prototype of how your dragster will look. After you have worked out all of the bugs you are going to build a miniature dragster. The final test will come when you race against others in your class. All cars will be compared for excellence in design, neatest idea, best craftsmanship and fastest racing time.

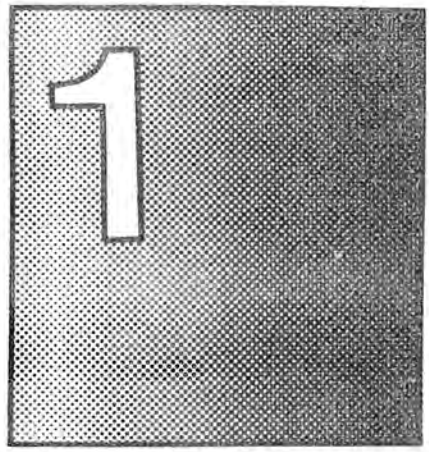


The Design Process

To make it easy and fun you should design and build your dragster in five easy steps. We call this the "Design Process".

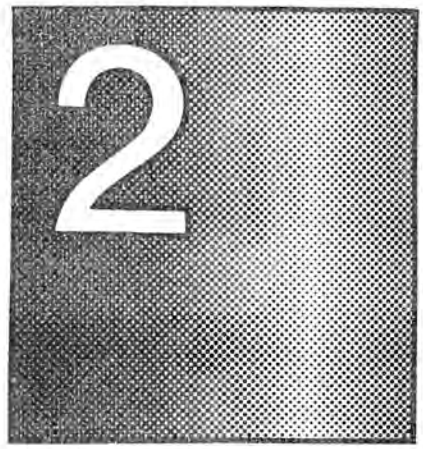
This process can take a few minutes or several hours. It can be easy or somewhat difficult. Quite often this process is not as hard or complex as some people make it.

As you go through each step you will be using the same methods used by the big car manufacturers in Detroit. They start with drawings and ideas on paper. After the ideas have been refined they produce a prototype. Next, they will build a mock-up model that is actual size. The final stage is the production of a test car. And when all is finally perfected the car is mass produced for the consumer market. Many years of planning and testing goes into each year's new model automobiles. Read the five design process steps which follow.



Thumbnails

Thumbnails are very little drawings on paper. They help you see how your dragster is going to look. They can be drawings of the whole car or just part of the car such as the front end. They are called thumbnails because they are small. They are not detailed drawings, just quick sketches to give you ideas.

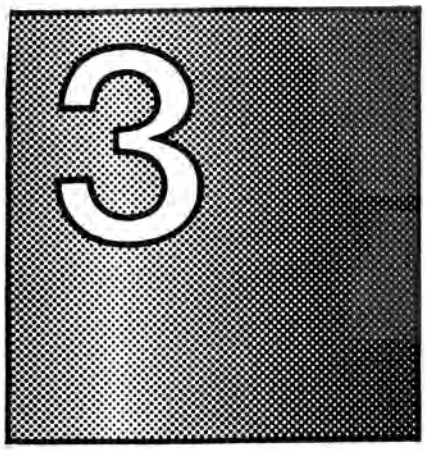


Rough Sketch

Rough Sketches are more detailed drawings of what your dragster will be. They are larger than thumbnail drawings and will show your car from different points of view.

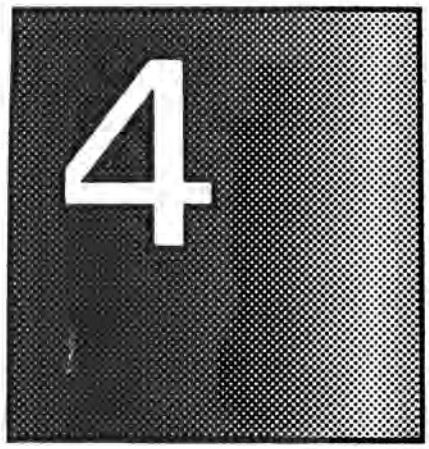
A finished car begins with an idea drawn on a piece of paper.

Students pictured here are showing off their completed dragsters.



Final Drawing

Final drawings show the details of your dragster and they are drawn to exact size. You will draw these on grid paper that will be used as a pattern to produce the final car. These drawings should be very exact and work as a blue print.



Prototype

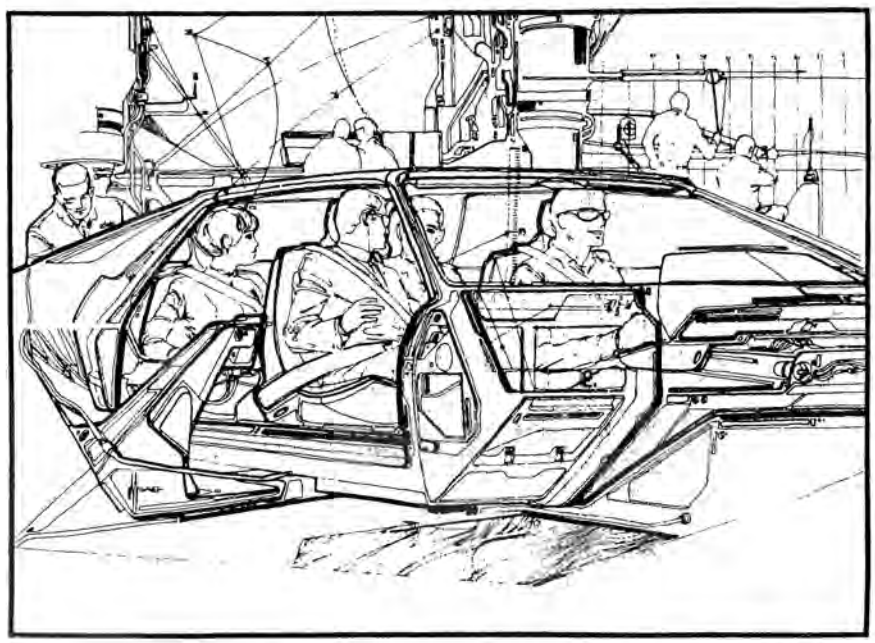
A prototype is a model of the actual dragster. It will be made to be the same size as the finished dragster. It may also be painted. Your prototype will be produced with fragile material that can be destroyed easily but will last long enough to serve as a model to build the real dragster.

Production

When producing the final dragster, good craftsmanship is very important. Your dragster will perform it's best if you build it very carefully.

Cars must be well planned

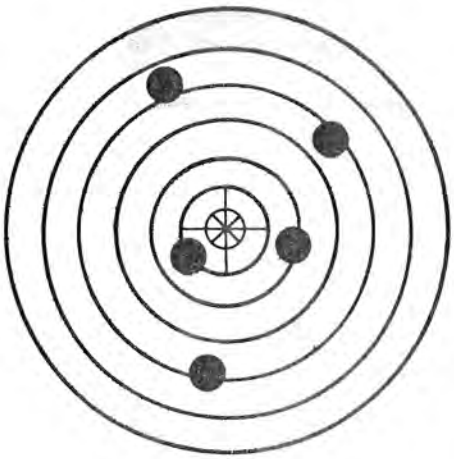
Can you imagine what would happen if cars were not well planned and tested before they were mass produced? We would have ugly, dangerous cars that were too expensive to buy. Even with much planning some "lemons" are still produced. So think about the problems that can occur if there is no planning or if steps in the design process are skipped.



U.S. Steel Corp.

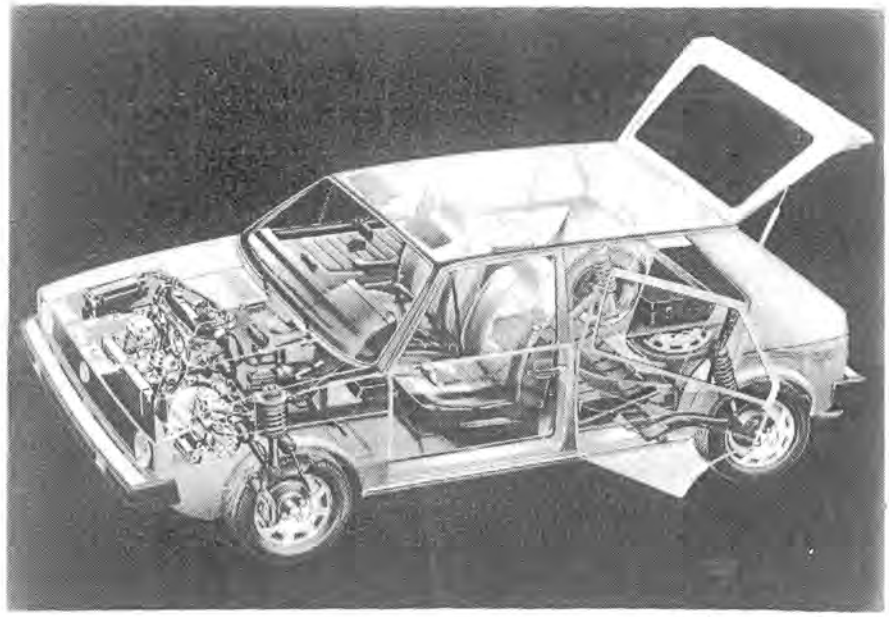
Limitations

Limitations in the design process let you know what you can and can not do. The better you understand your limitations; the better you will be able to make your dragster.



On Target

Think of limitations as a target. On a target the circles get smaller and smaller until you reach the smallest circle of all, the bull's eye. Without these circles it would be almost impossible to shoot and hit the center. They provide limits that tell you whether you are close or far away from the center.



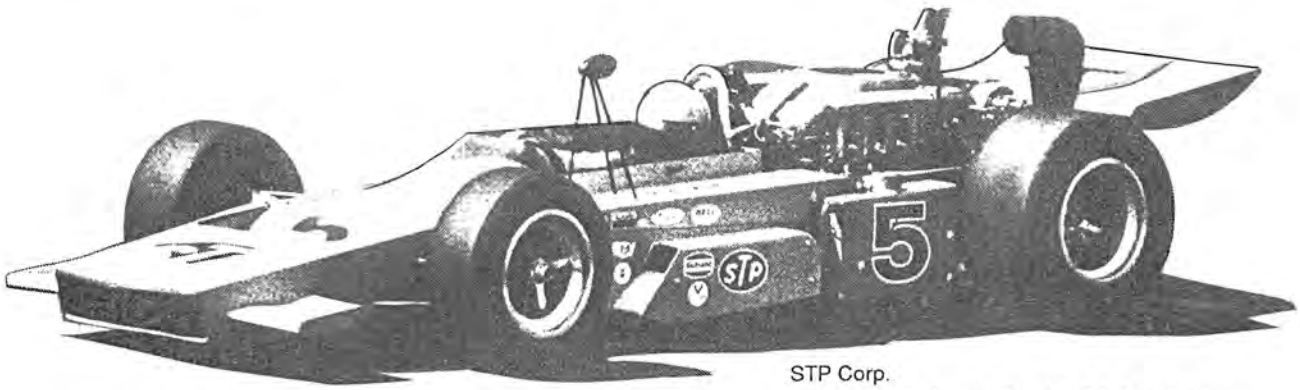
Volkswagen Rabbit

Know the limitations

Your dragster must be made within certain limitations and specifications. To produce it properly you must learn what these requirements are before beginning the design process.

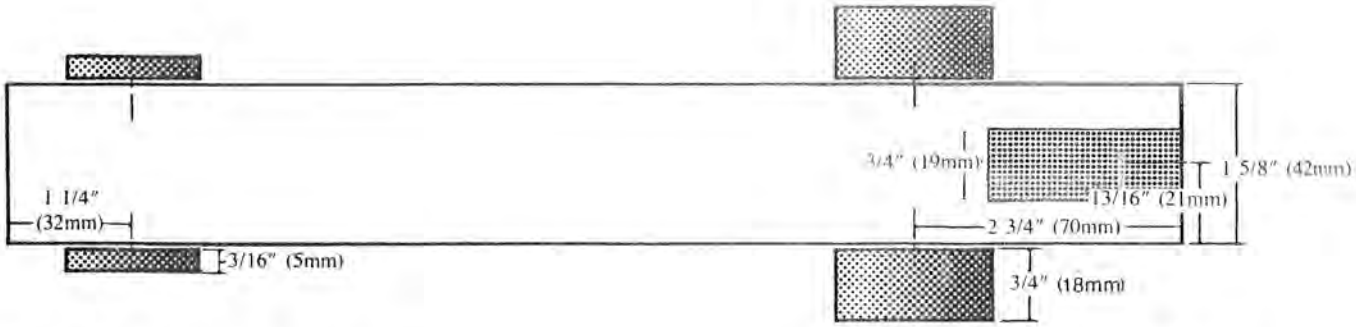
Over 4000 parts

A real car has over 4000 working parts. Each part was designed and built to perform a certain function. If each of those parts did not work within certain standards the car would not function properly. You will not have this many parts to consider. Nevertheless, you must learn the production limits of the parts you do have.

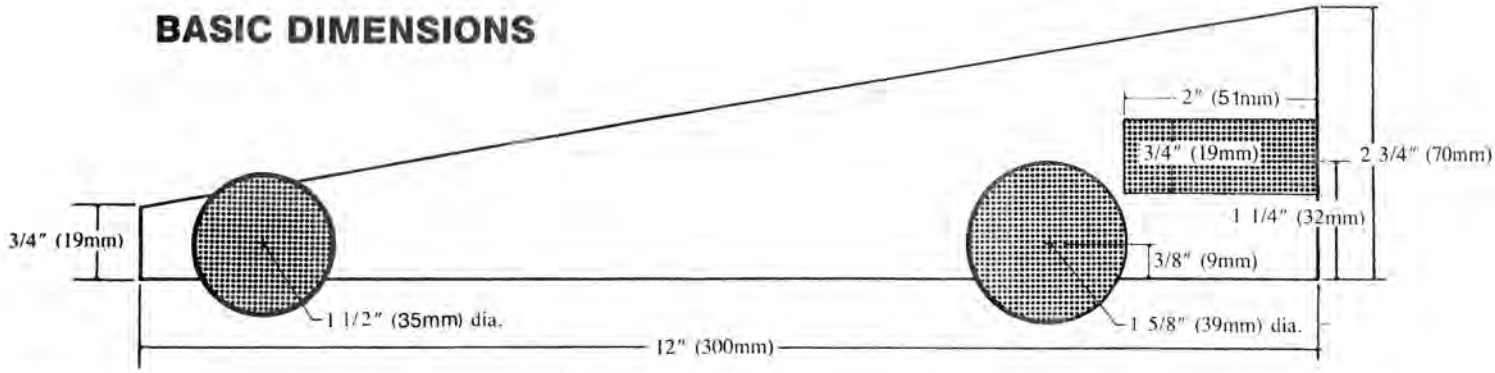


STP Corp.

Mario Andretti-Indy 500 winner



BASIC DIMENSIONS



FACTORS	LIMITATIONS	
	MAXIMUM	MINIMUM
AXLES (diameter)	3mm	3mm
AXLES (length)	70mm	42mm
AXLES BEARING (diameter)	4.5mm	3.5mm
AXLE HOLE (diameter)	4.5mm	3.5mm
AXLE HOLE (position above body bottom)	9mm	3.5mm
AXLE HOLE (position from either end of body)	100mm	9mm
BRASS SPACER BEARING (diameter)	9mm	7mm
DRAGSTER BODY (length)	305mm	200mm
DRAGSTER BODY (height at rear **with** wheels)	75mm	56mm
DRAGSTER BODY (mass with wheels)	170.10g	40g
DRAGSTER BODY (width at axles-front and back)	42mm	35mm
POWER PLANT DEPTH OF HOLE	51mm	51mm
POWER PLANT HOUSING THICKNESS (around entire housing)		3mm
POWER PLANT HOUSING (diameter)	20mm	19mm
POWER PLANT C/L (from body bottom)	35mm	31mm
SCREW EYE (eyelet inside diameter)	5mm	3mm
SCREW EYES (2) on C/L of bottom, distance apart	270mm	155mm
WHEELS, FRONT (diameter)	37mm	32mm
WHEELS, FRONT (width of greatest diameter)	5mm	2mm
WHEELS, REAR (diameter)	40mm	30mm
WHEELS, REAR (width of greatest diameter)	18mm	15mm
WHEELBASE	270mm	105mm

Assembled without CO_2 cartridge REVISED 08/1/86

Design Carefully

This page lists what your production specifications are. You will start with a block of wood cut to the dimensions shown above. It can not be any longer or wider than the measurements shown. The engine for the dragster is a pressure-filled CO_2 cartridge which fits into the back of the dragster. Make sure the cartridge can be fully inserted when the dragster is finished. Follow all given specifications closely.

TECHNOLOGY STUDENTS ASSOCIATION (TSA).
TSA METRIC 500 DRAGSTER SPECIFICATIONS

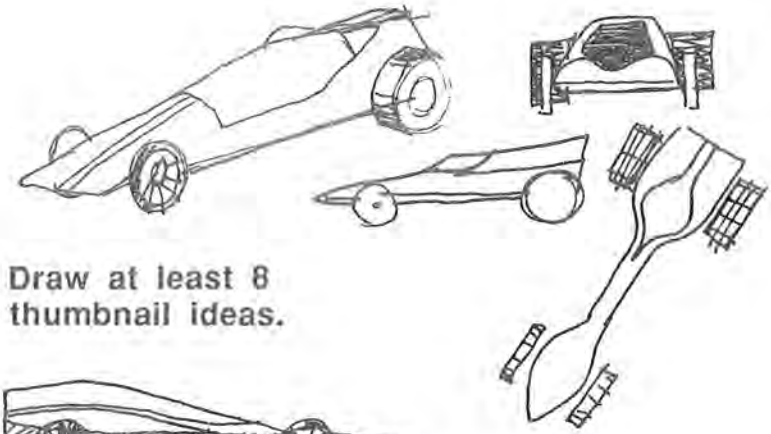
For dates and information on your state or the national Metric 500 contest, contact:

TSA
1908 Association DR.
Reston, VA 22091
703-860-9000

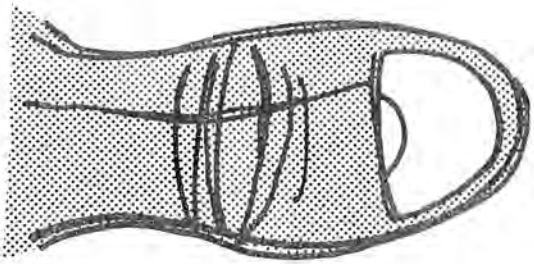
*Heavyweight class 100g and above not to exceed 170.10g. Lightweight class 40-99g, no less than 40g.
Front wheel dimensions can be used if tucked up inside body on rear axle of vehicle.

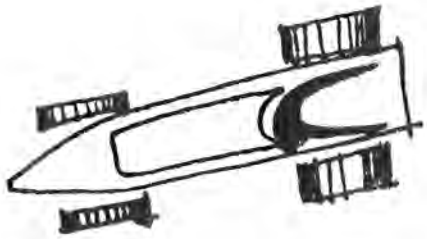
Thumbnails

Your thumbnail drawings do not have to be a masterpiece. They shouldn't be anyway. Keep them simple and small. The small drawings shown are examples. Use the space provided on these pages to draw your ideas. You must draw at least eight different ideas. Do not be afraid to experiment with some far out designs.



Draw at least 8 thumbnail ideas.



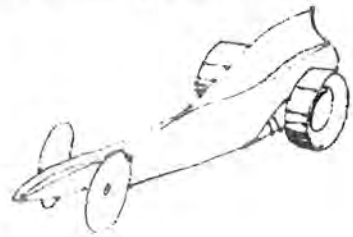


Have you filled these pages with ideas? There must be hundreds of different body styles you could have. Fill the pages with many drawings.

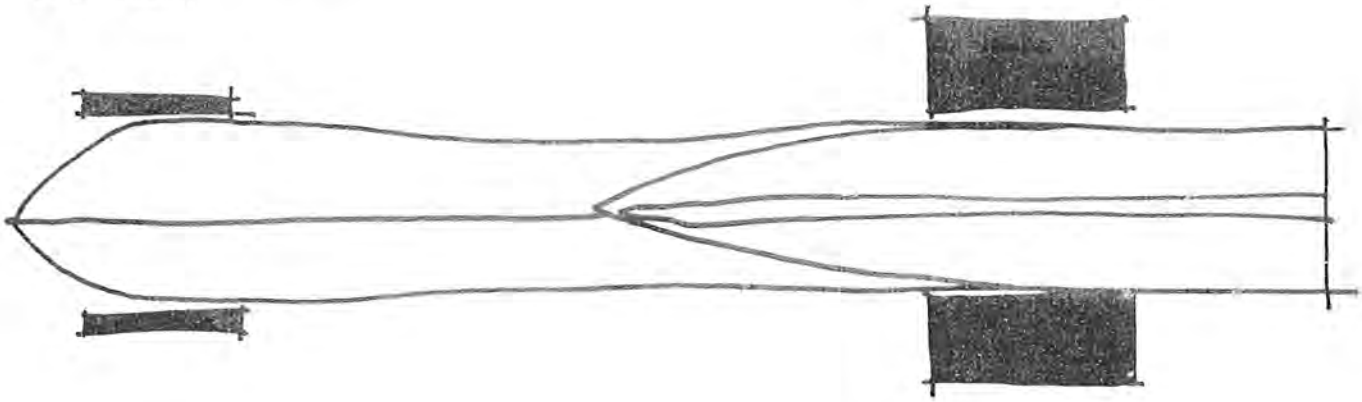
Sketches

Look over your thumbnails and choose the best three ideas. Try to have three totally different designs rather than just one slightly changed. Draw a top and side view of each idea. Your sketches should be similar to the ones shown. Be sure to remember your production limitations. Refer to the drawings and list on pages 5 and 6 if you need to. Use the next three pages for these top and side view drawings of each your three designs.

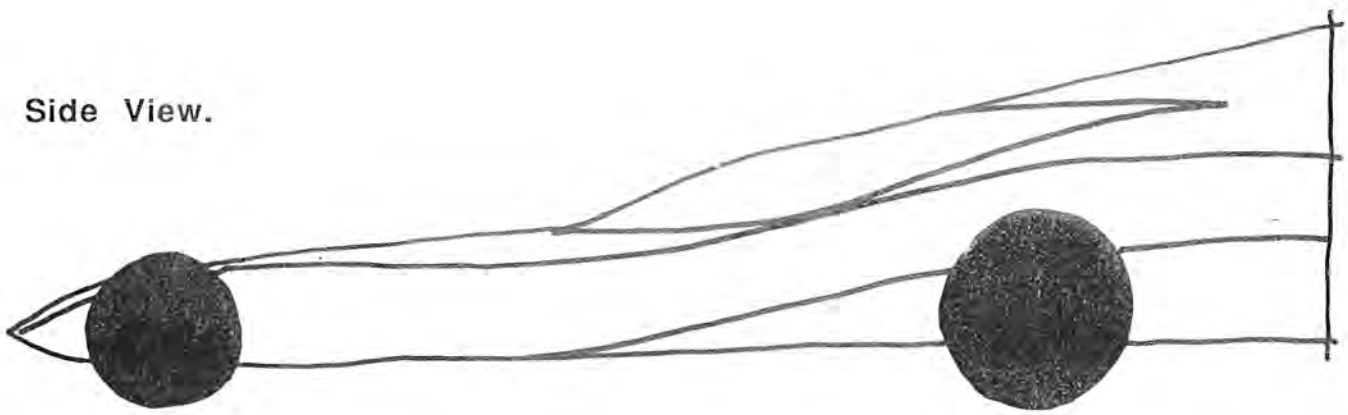
Copy the thumbnail you are working from here.



Example drawing of Top View.



Side View.



Now you do the same on the next three pages as shown here.

Be creative and try something different.

Copy the thumbnail you are working from here.

Top View

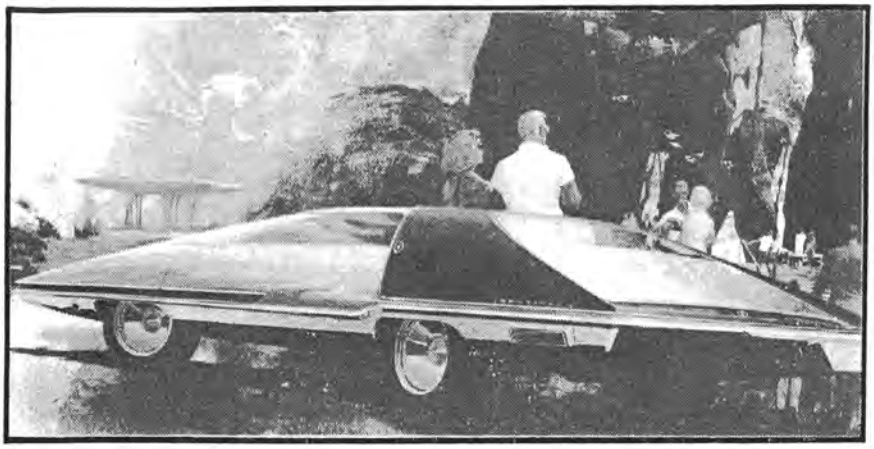
Side View

Sketches

Copy the thumbnail you are working from here.

Top View

Side View



U.S. Steel Corporation

Copy the thumbnail you are working from here.

Top View

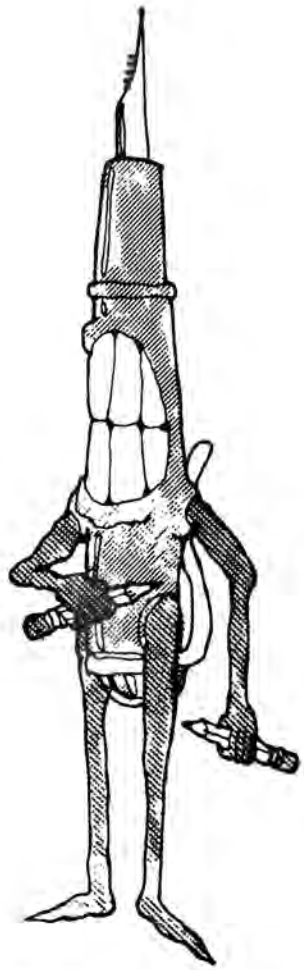
Side View

Finished Drawing

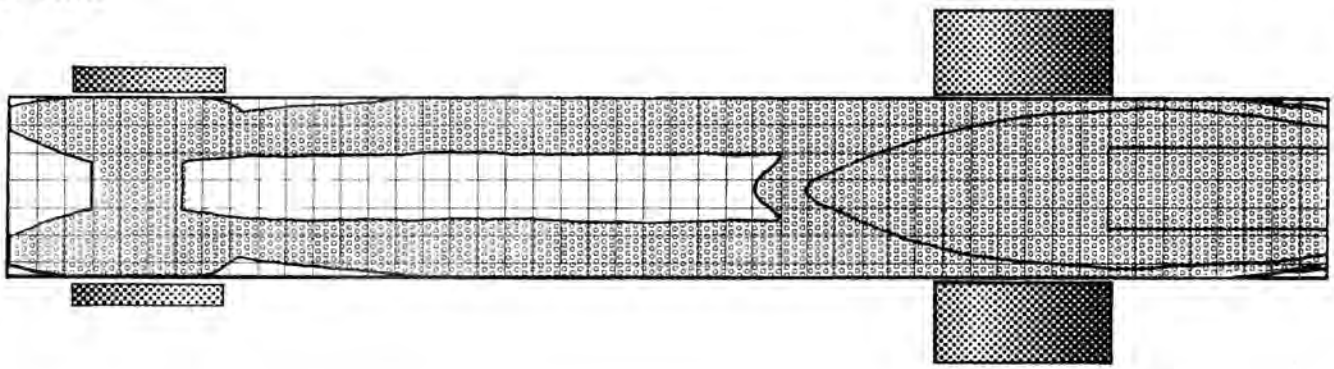
Now you have reached the final drawing stage. This is the last step before making the prototype. Choose the best of your three detailed sketches. Carefully draw your chosen design on the dragster grid patterns provided on the opposite page. The drawings below are examples.

Checklist

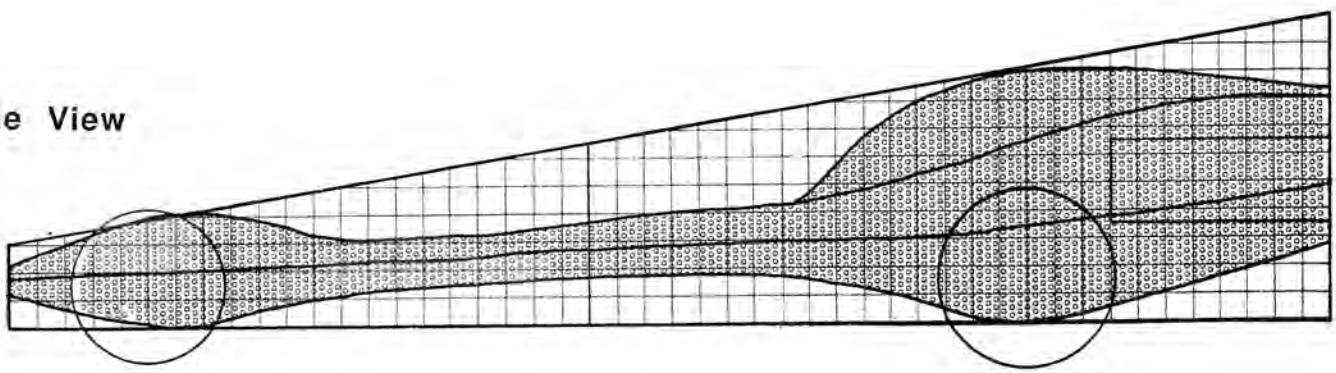
- ☐ 1. Is the front axle in the correct position?
- ☐ 2. Is the rear axle in the correct position?
- ☐ 3. Have you allowed enough room for the CO_2 engine?

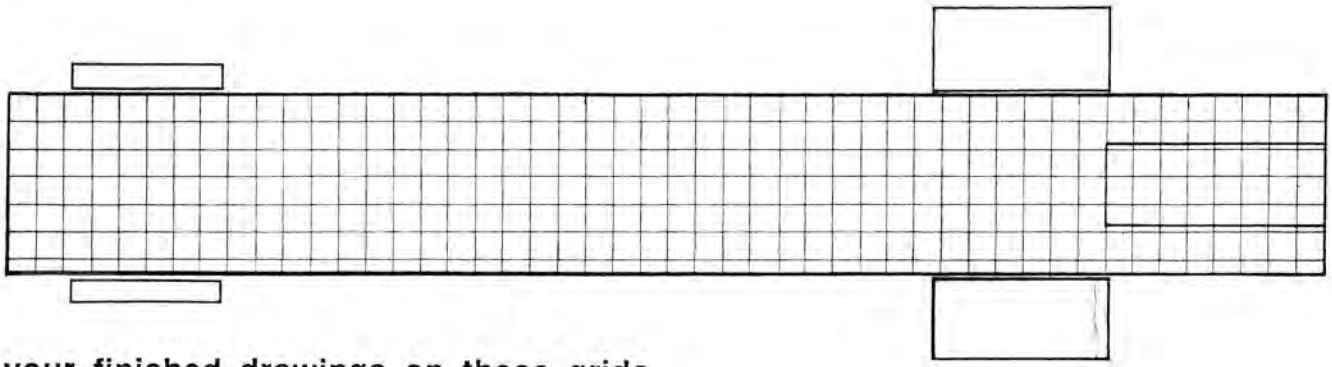


Top View



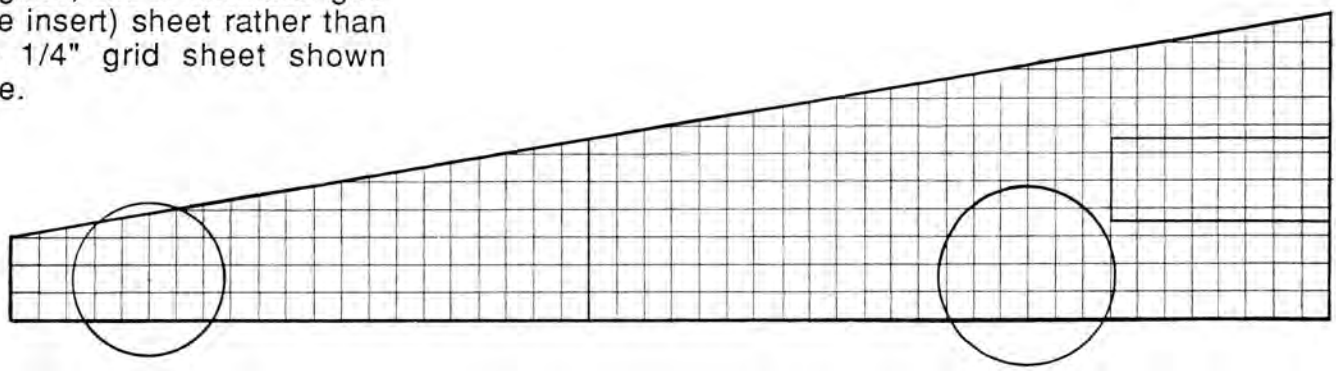
Side View



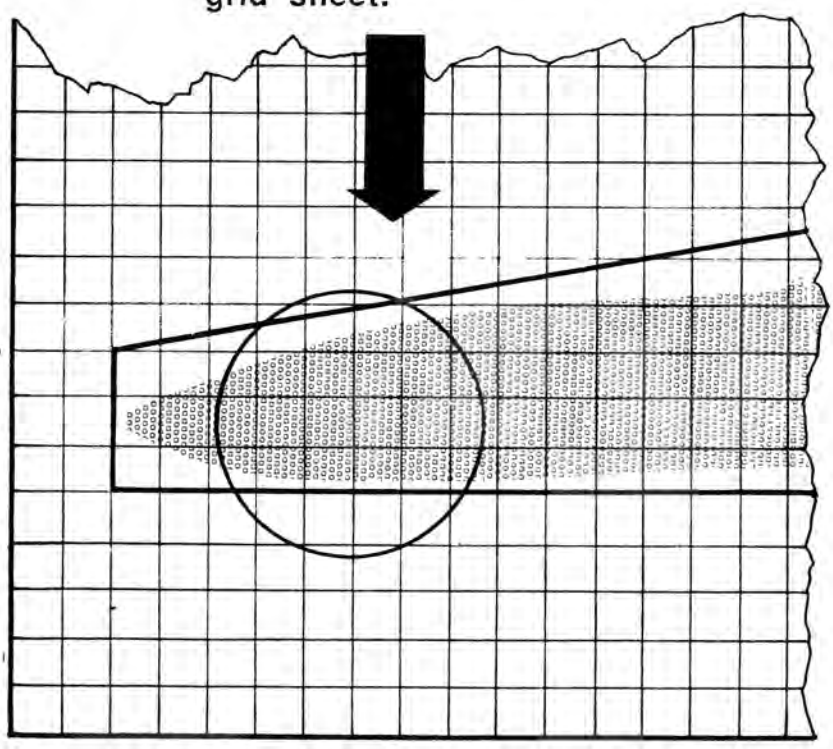


Do your finished drawings on these grids.

If you are using metric measurements to build your dragster, use a millimeter grid (see insert) sheet rather than the 1/4" grid sheet shown here.



Carefully copy your design onto the final grid sheet.



NOTE:

When you have finished drawing your dragster on the patterns above, transfer it to a full size grid sheet (1/4" squares on a 9"x12" sheet). Draw the dragster to actual size within the listed specifications on page 5.

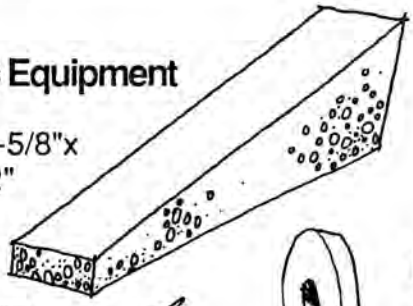
You must do these drawings very accurately because they will be used as patterns for cutting and shaping the dragster body.

Prototypes

Now you have reached the first building stage and are ready to produce a prototype. It is made with soft styrofoam which is easy to mold and shape. If you are to rough with it, it is easily broken! All major projects should have a prototype stage. Before the first man was sent to the moon, a prototype was made to represent the capsule he would blast-off in. These early models help the designer to eliminate problems he did not expect or notice until he has a life size model to work with. This stage makes final production much easier.

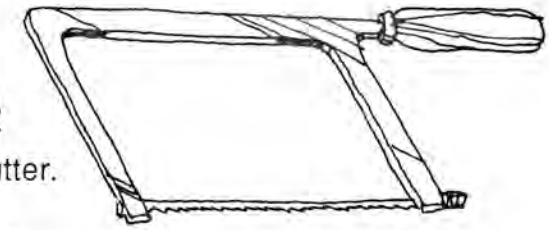
Put a check mark in the appropriate box of the supplies, tools, equipment and production check list when you have completed each step.

Supplies Equipment



☐ 1 block 1-5/8"x 2-3/4"x12" 42mm x 70mm x 300mm) precut styrofoam

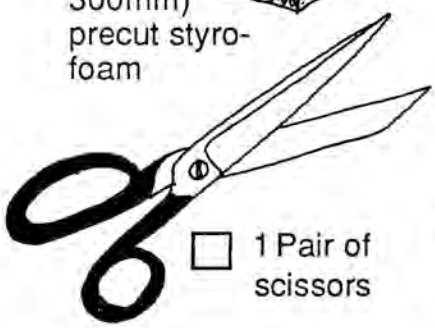
☐ Coping saw, band saw or styrofoam cutter.



☐ 1 roll of masking tape

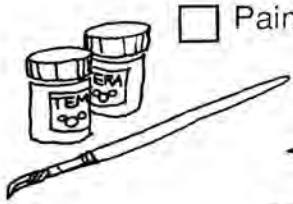
☐ Ball-point pen

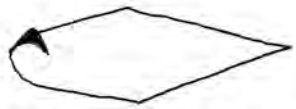
☐ 2 rubber bands



☐ 1 Pair of scissors

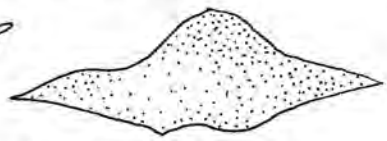
☐ Paint and brush





☐ 1 sheet of carbon paper

☐ Art knife



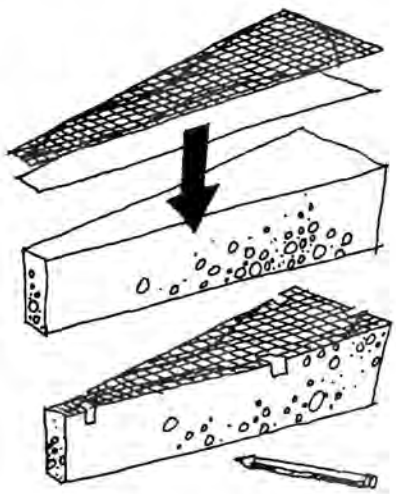
☐ 1 sheet of medium sandpaper (80-100 grit)

Making Templates

☐ 1. Place your drawing and the carbon paper together in proper order.

☐ 2. Cut out the drawing and carbon paper with scissors to make wedge shaped templates or pattern pieces.

☐ 3. Tape the side view wedge shaped template onto the styrofoam block.



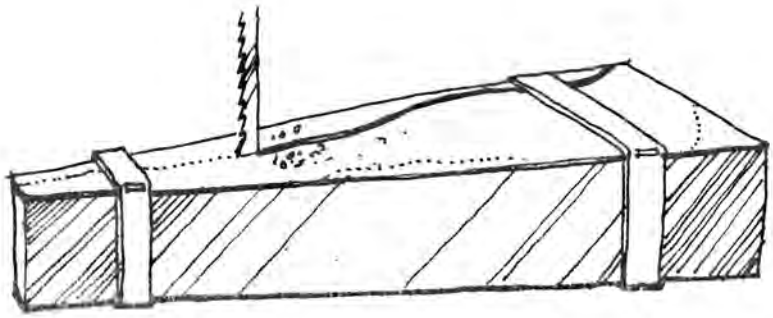
☐ 4. Trace around the template with a ballpoint pen. Then remove the template.

☐ 5. Tape the top view template to the bottom of the block. The bottom's flat surface will make tracing easy.

☐ 6. Trace around the template with the pen. Then remove the template.

Cutting

- [ ] 7. You need to put large rubberbands around the styrofoam block to hold all pieces together when cutting the block. Do not cut through the rubberbands but rather move them back and forth. All pieces need to be held together so you will know where to cut on the bottom view after cutting the side view or vice versa.
- [ ] 8. Fasten the styrofoam block lightly in a vise. Using a coping saw, saw the front view to shape.
- [ ] 9. Change the position of the block and saw the top view to shape.

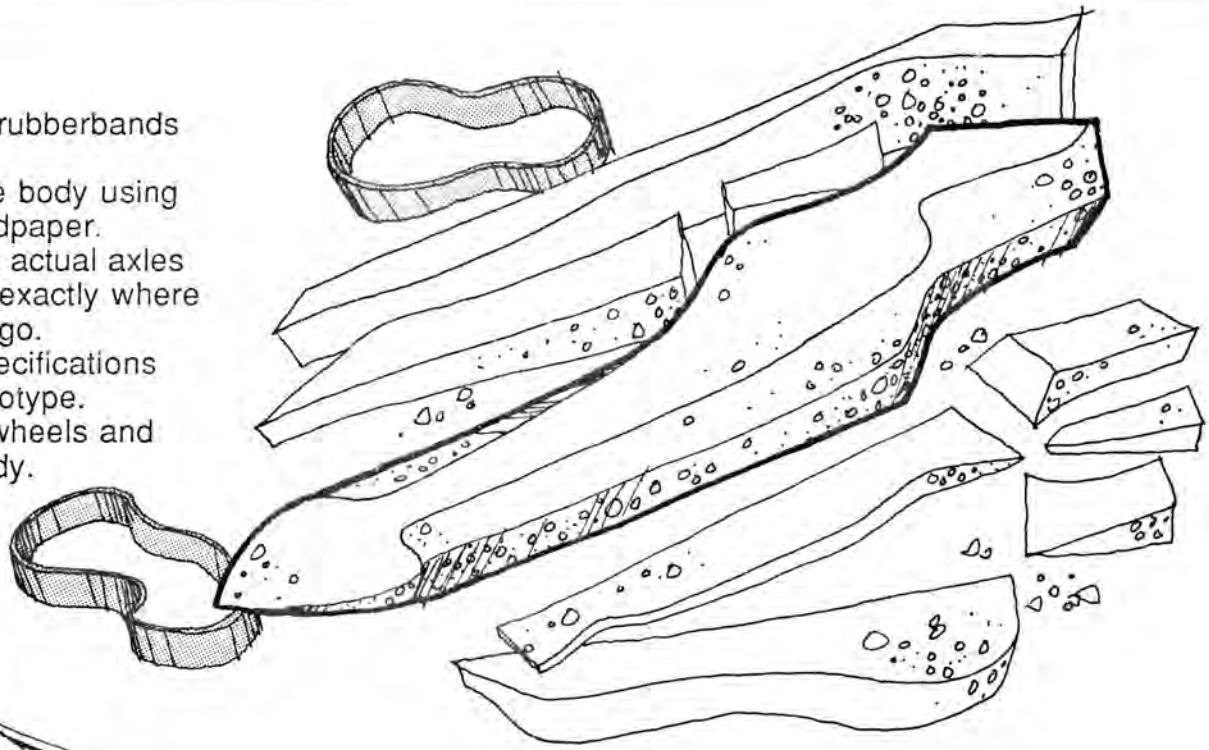


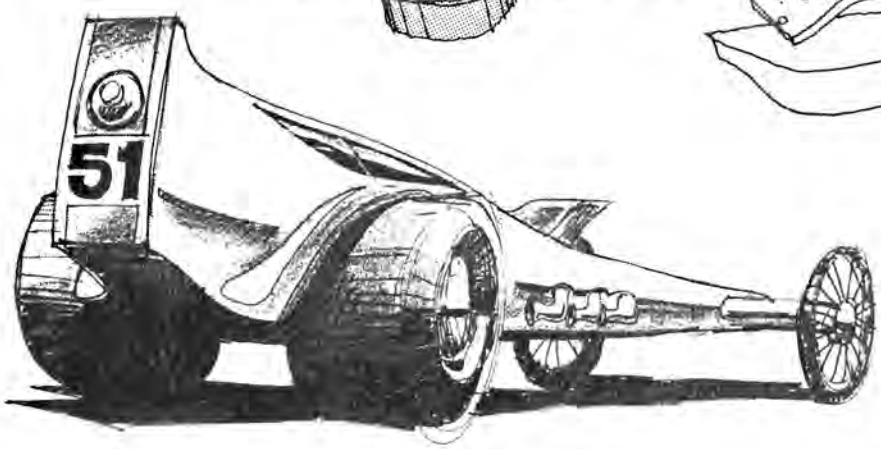
Safety Precautions

- [ ] 1 Coping saw blades have sharp teeth, so be careful. They point toward the handle and the saw cuts on the pull stroke.
- [ ] 2. Never force the saw through the material, but allow the teeth to do the cutting.
- [ ] 3. When using the art knife be sure to make all cuts away from yourself.

Shaping

- [ ] 1. Take the rubberbands off.
- [ ] 2. Shape the body using smooth sandpaper.
- [ ] 3. Mount the actual axles and wheels exactly where they should go.
- [ ] 4. Check specifications with the prototype.
- [ ] 5. Remove wheels and paint the body.





Check for Limitations

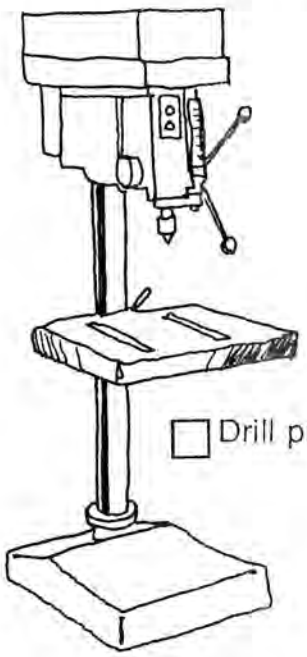
Does your mock-up meet all requirements and roll smoothly? Next, if your teacher agrees, you are ready to move on to the final step of making your dragster.

Production

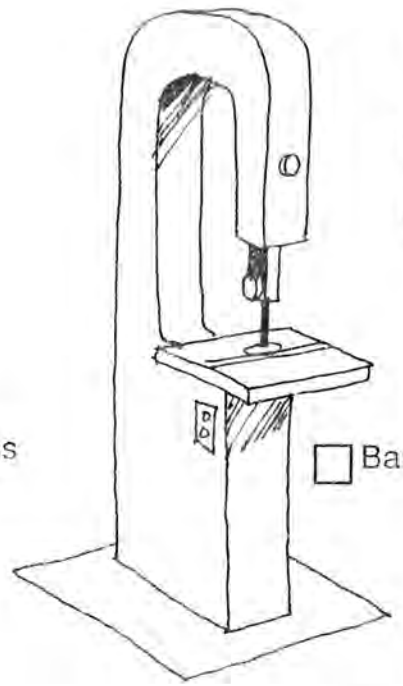
You are now ready for final production. If all previous stages have been done carefully you will not have any trouble building the final dragster. It is like making the prototype but just using a different material. Do the best job that you can using the wood block.

Caution: If you are going to use power tools, ask the teacher for help if you have any questions about proper machine operation or need assistance. Safety should come first. Follow all safety precautions and rules while working with electrical equipment.

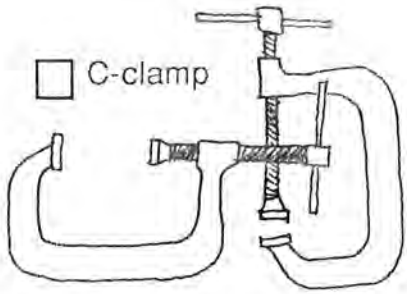
Equipment Supplies



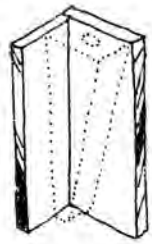
☐ Drill press



☐ Band saw



☐ C-clamp



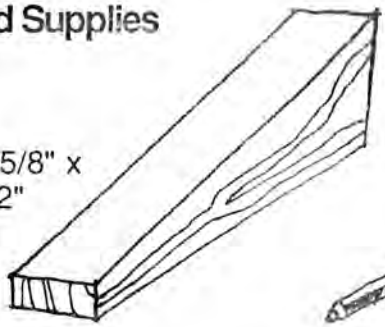
☐ Drill fixture or jig

☐ 3/4" spade bit

Complete each step in order and put a check in the appropriate box when you are finished.

Tools and Supplies

☐ 1 block 1-5/8" x 2-3/4" x 12" (42mm x 70mm x 300mm)

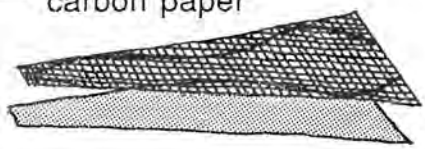


☐ Rubberbands

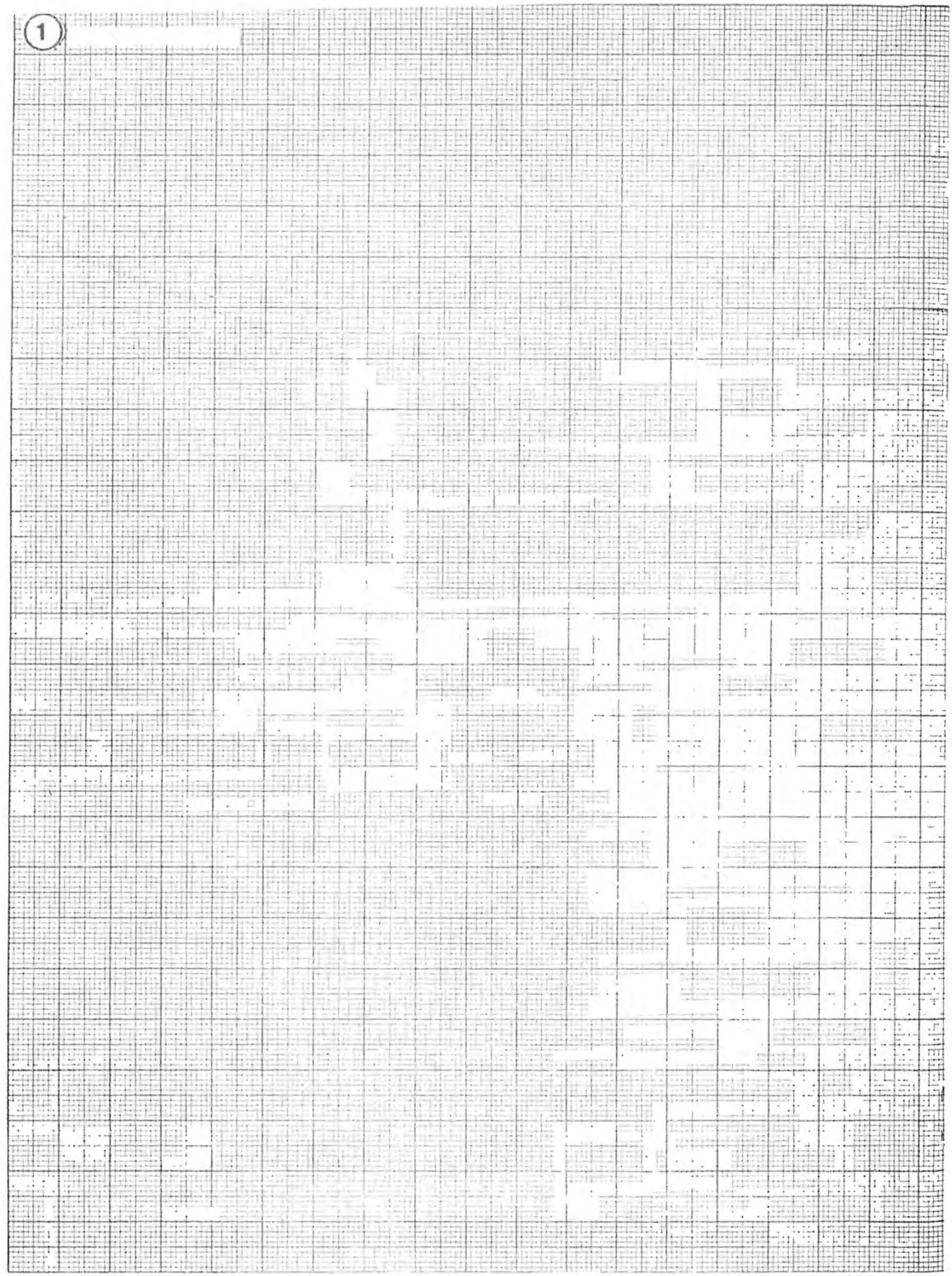
☐ 1 Half-round cabinet file

☐ Ball-point pen

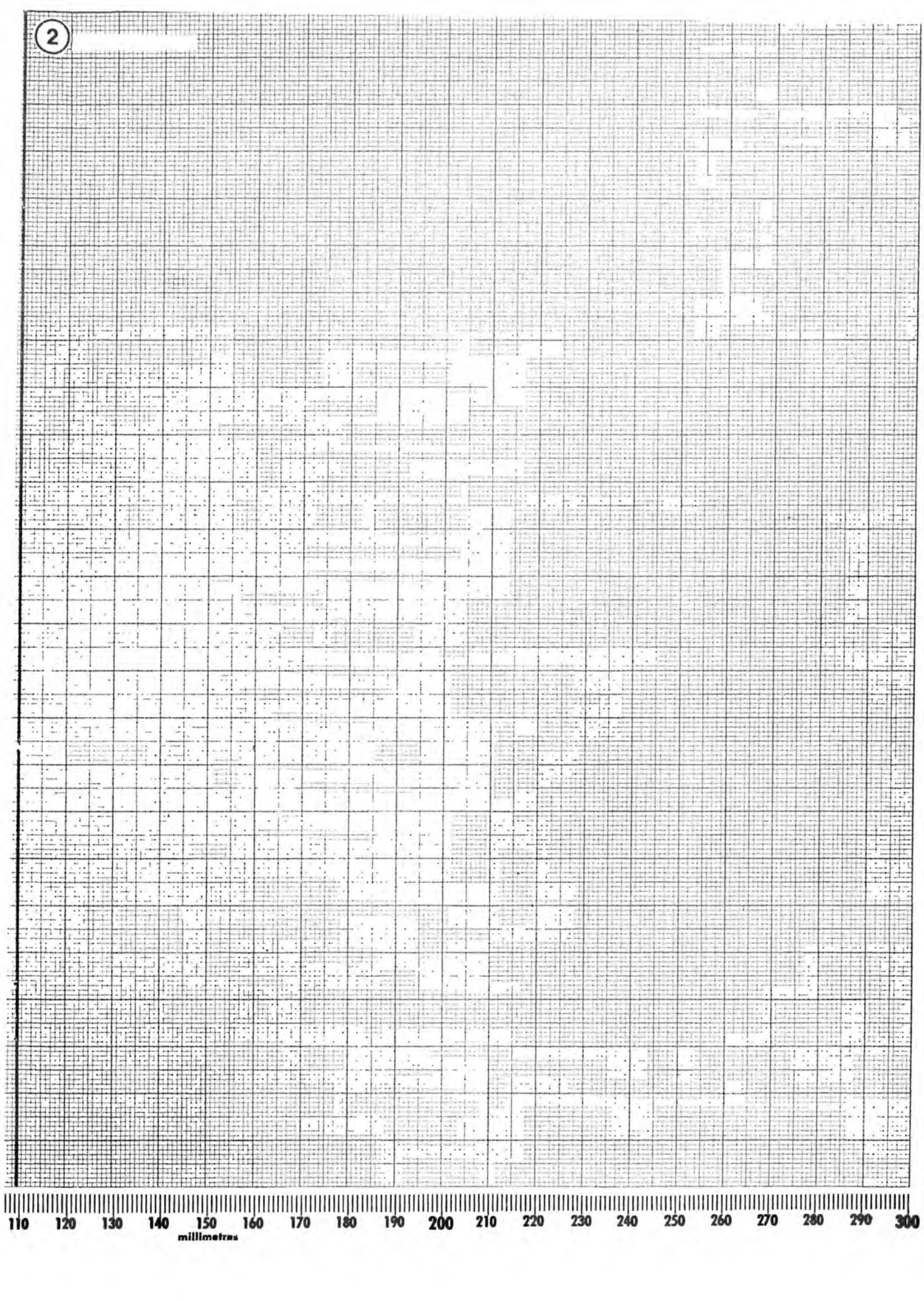
☐ Templates and carbon paper



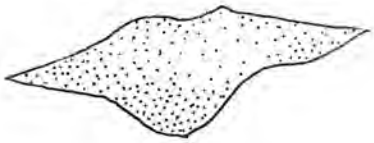
☐ 1 roll of masking tape



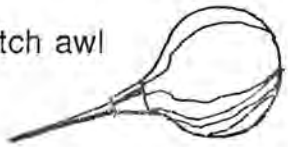
BOX 1328
PITTSBURG, KANSAS 66762


2
110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300
millimetres

☐ Course, medium and fine sandpaper

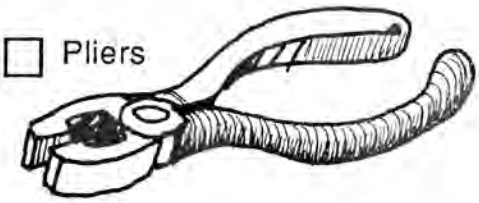


☐ Scratch awl



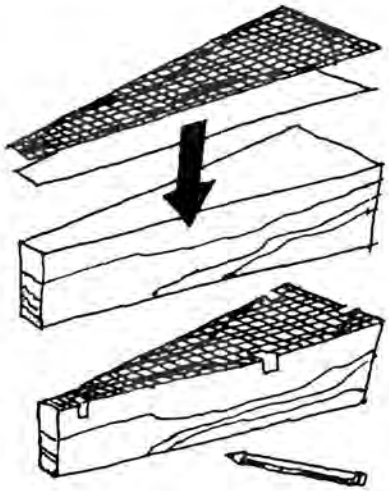
☐ 3/16" twist drill

☐ Pliers



Gather the necessary supplies at your station.

☐ Half-round wood rasp



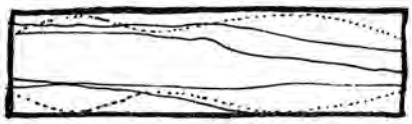
Layout

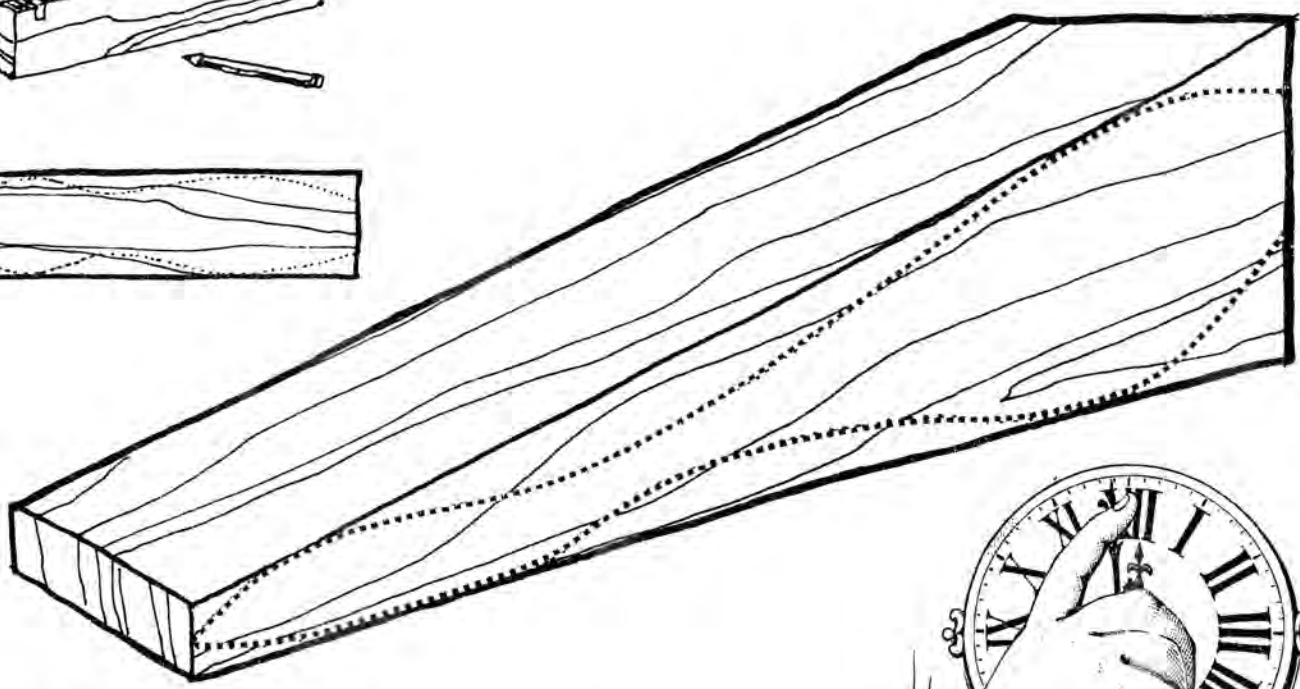
☐ 1. Place and tape the side view template to the block of wood.

☐ 2. Trace and remove template pattern. Mark axle locations!

☐ 3. Place and tape the top view template pattern to the bottom of the block.

☐ 4. Trace around this pattern and then remove.



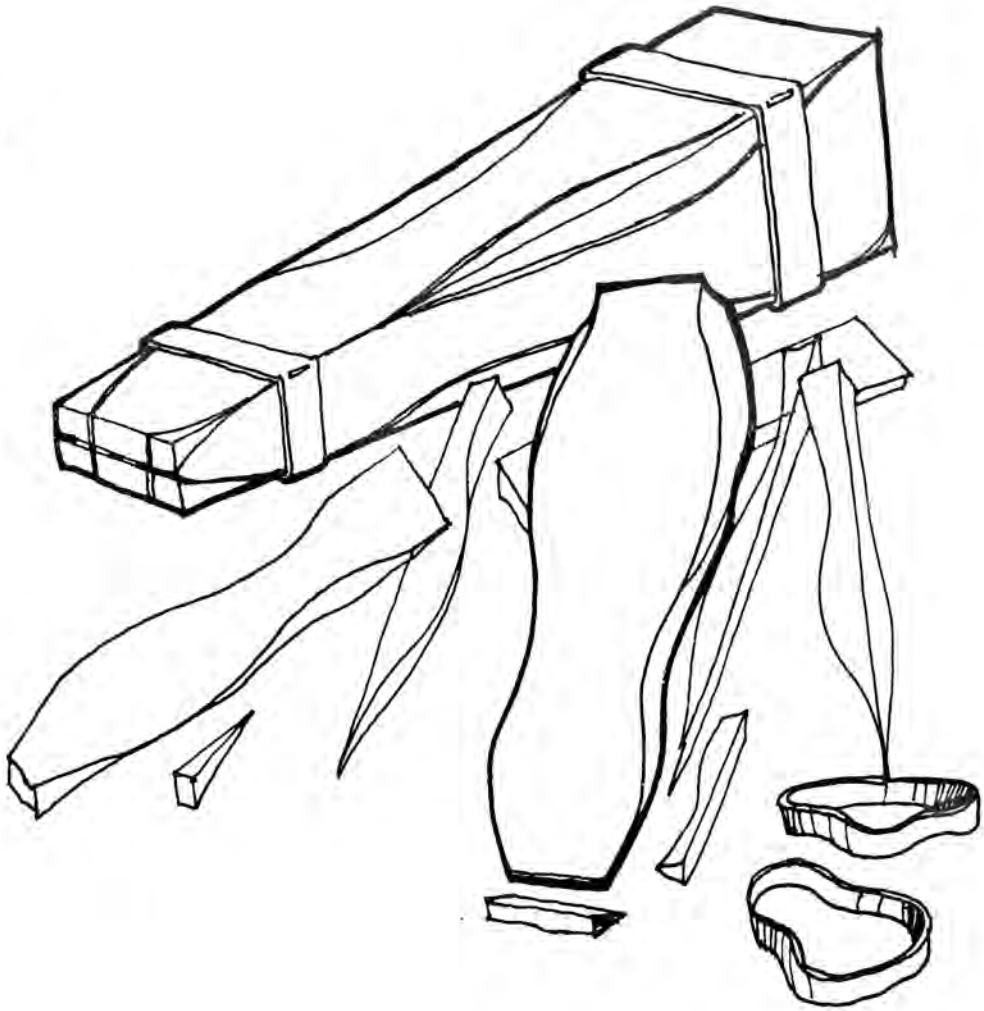


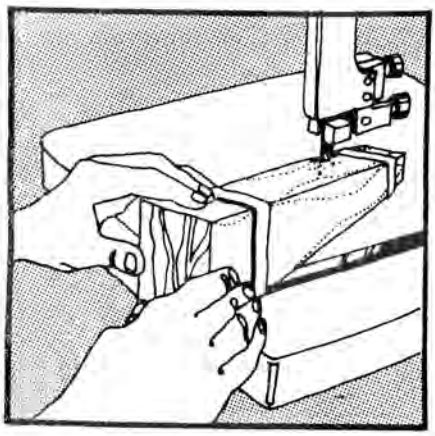
Take Your Time

Be sure to follow your patterns exactly. One major mistake can ruin the whole body design or cause your dragster to not meet specifications. Take pride in your work and try to make the best dragster in the class. Try to get the best grade possible for your craftsmanship.

Drilling and Sawing

- ☐ 1. Axle holes should be drilled first. Before drilling, check the specifications on page 5 to make sure your axle positions are within limitations.
- ☐ 2. Check for correct position and drill the power plant hole for the CO_2 cartridge engine.
- ☐ 3. Use the bandsaw to cut your outlines of the top and side view. Also like you did while making the prototype, use rubber bands to hold these pieces together while cutting.



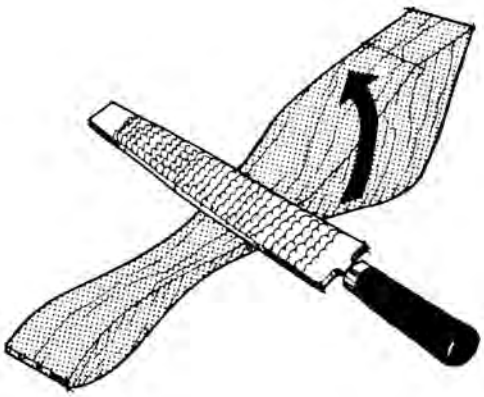


Watch Your Fingers

Do not cut into your rubber bands but adjust them as needed. Be very careful when readjusting the bands.

Shaping

- ☐ 1. Shape the body using a wood rasp and file. Many dragsters look better if they have rounded edges rather than sharp.
- ☐ 2. Smooth the wood using rougher sandpapers first and ending with finer grits.
- ☐ 3. Cut and install soda straw bearings.
- ☐ 4. Insert axles.
- ☐ 5. Position washers and mount front and back wheels.
- ☐ 6. Be sure that wheels are securely attached and that axles spin freely.
- ☐ 7. After checking for proper position, you are ready to mount the screw eyes near the axles. Using a scratch awl, make a small hole that will mark position. Use pliers to mount the screw eyes.
- ☐ 8. Make sure the location of the screw eyes will provide them with plenty of ground clearance. Look through the eyelets to be sure that the bottom curves of the body do not interfere with them being in a straight line.
- ☐ 9. After all of these steps check out OK you are ready to finish sanding and painting the body.

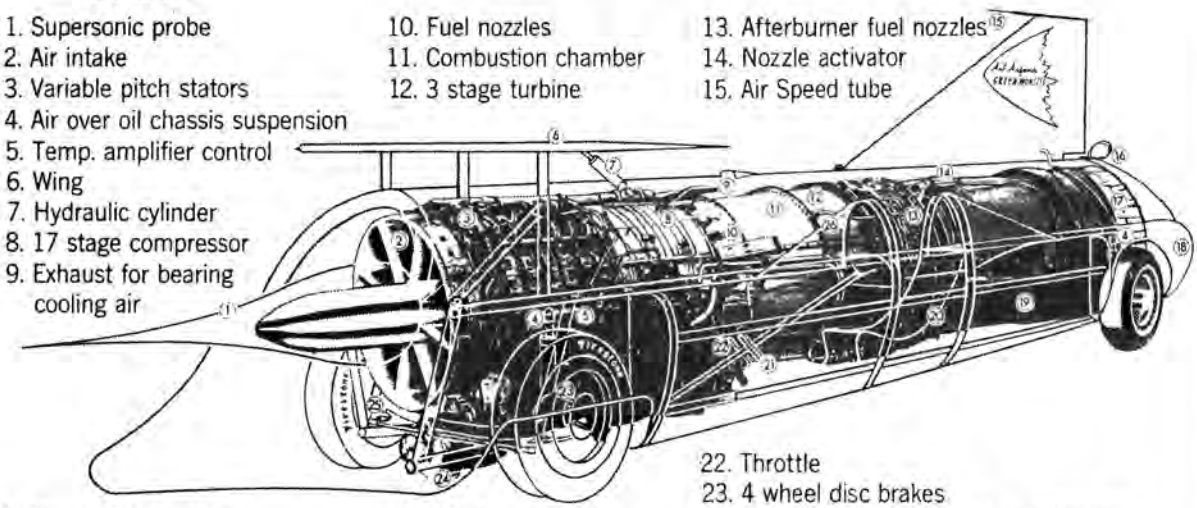


Shape your dragster to finished form.

SCHEMATIC VIEW OF ART ARFONS' "GREEN MONSTER" 17,500 H.P. JET ENGINE

LEGEND

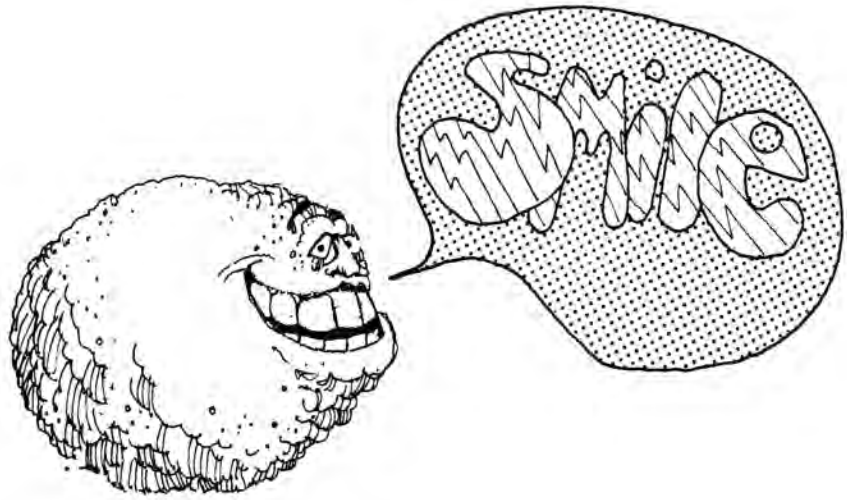
1. Supersonic probe
2. Air intake
3. Variable pitch stators
4. Air over oil chassis suspension
5. Temp. amplifier control
6. Wing
7. Hydraulic cylinder
8. 17 stage compressor
9. Exhaust for bearing cooling air
10. Fuel nozzles
11. Combustion chamber
12. 3 stage turbine
13. Afterburner fuel nozzles
14. Nozzle activator
15. Air Speed tube



16. Chute attachments
17. Burner nozzle
18. Chute compartments
19. Afterburner
20. Reclining seat
21. Brake
22. Throttle
23. 4 wheel disc brakes
24. Gear box for fuel pumps and controls
25. Truck king pins
26. 3/8 plexiglass windshield

Finishing

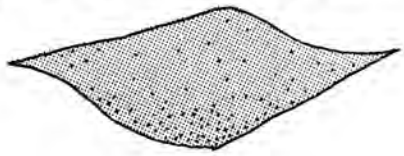
Sanding, painting and adding the final touches are probably the most fun. These activities take the body from looking like a block of wood to a nice looking miniature dragster. These steps are very critical. They must be done carefully to insure good success!



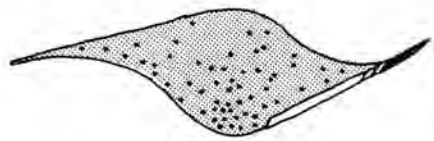
Materials Needed

☐ Smooth 3/4" (19mm) dowel 18" (457mm) long.

☐ Fine sandpaper 220 grit

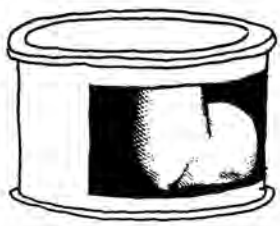


☐ Medium sandpaper 150 grit



☐ 1 can of fast drying spray paint

☐ Elbow grease



Smoothing Procedure

☐ 1. Sand and smooth the body. Start with 150 grit sandpaper to remove any lumps or nicks in the wood. When the surface is basically quite smooth and even, sand with the finer paper or emery cloth. The finer paper will prepare the wood to be painted. It must be very smooth because all flaws will show up worse after the dragster is painted.

☐ 2. Run your hand over the whole body to check for rough spots or bumps. If there are no flaws or uneven places, the wood is ready to be painted.

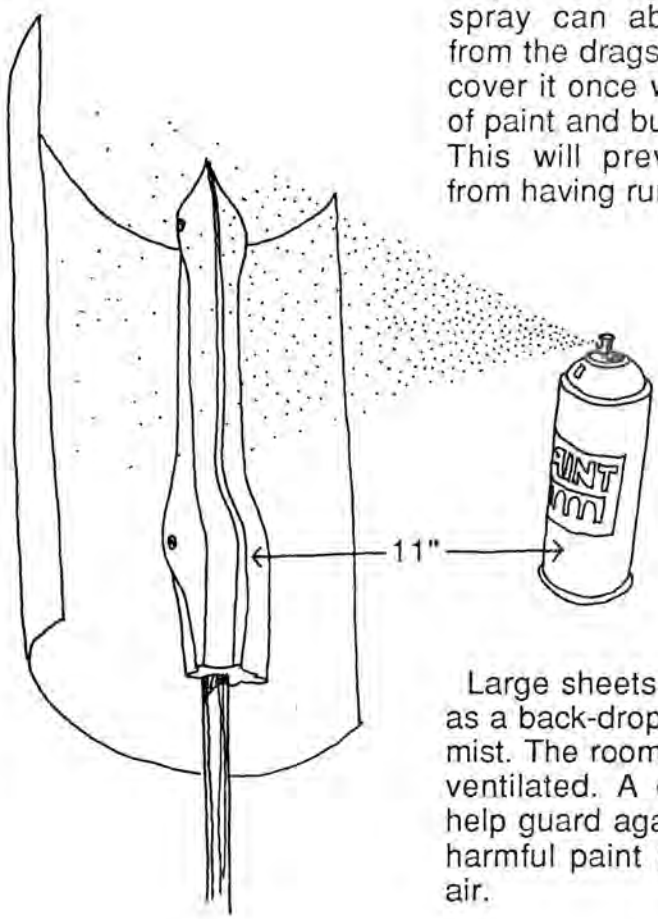
If the dragster feels good, paint it.

Painting Procedure

- ☐ 1. Stick the dowel into the engine hole drilled at the back of the dragster body. This will serve as a handle while you are painting.
- ☐ 2. If you are using a brush it should be no larger than 1/2" wide. Also you should use an acrylic paint.
- ☐ 3. Shake the paint well for at least one minute. Be sure dryed paint has not built up around the spray nozzle.
- ☐ 4. Before you begin to spray the body, test the can on a piece of paper. If it is spraying freely you are ready to begin. Follow the directions in the illustration shown on this page.
- ☐ 5. Paint in a clean dust-free area.
- ☐ 6. The dragster should have at least two coats of paint for it to look it's best. After the first coat is dry, check for any rough spots in the paint. These can be taken off by using a very fine (320) grit sandpaper. Just sand the small area that has the flaw. Now you are ready to spray the body a second time. Do not allow a heavy coat of paint to dry the dowel rod to the dragster body. The body can be dried by inserting a wire through an axle hole and hanging the car.

Insert 3/4" (19mm) dowel
into hole at the end of dragster body.

Hold the dowel in your hand or put it in a vise. Keep the spray can about 11" away from the dragster. Completely cover it once with a light coat of paint and build it up slowly. This will prevent the paint from having runs in it.

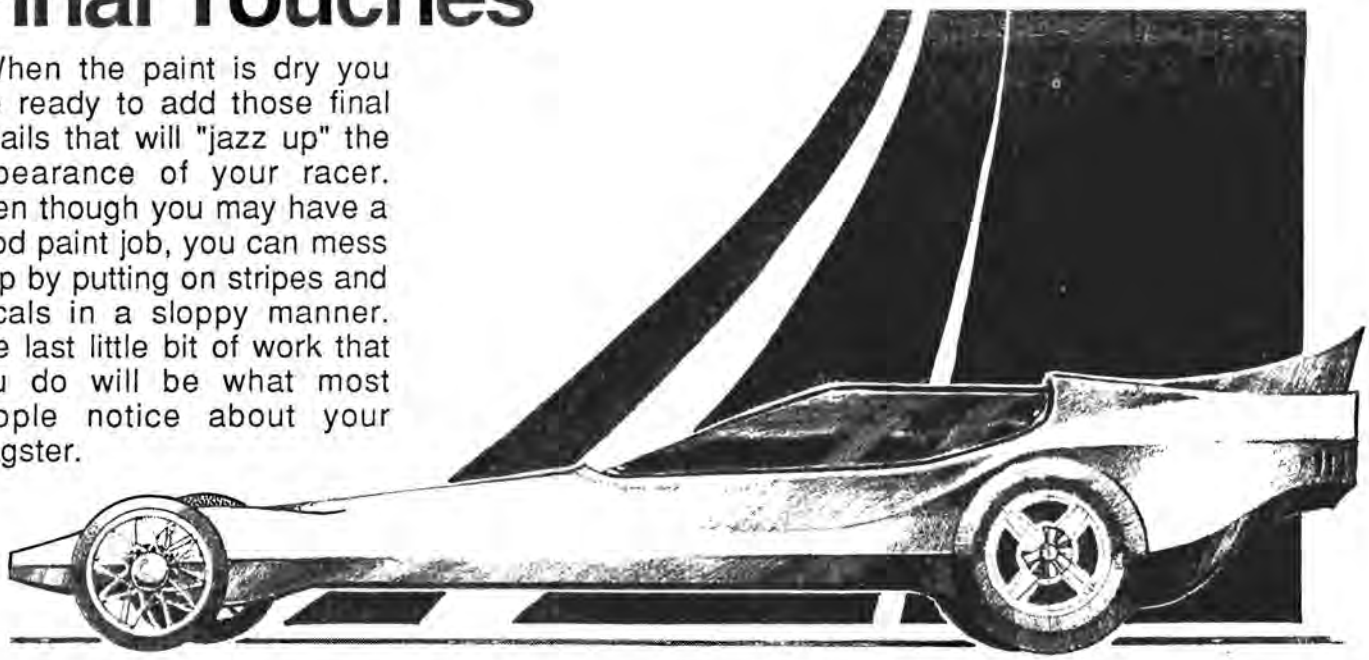


Large sheets of paper serve as a back-drop to catch spray mist. The room should be well ventilated. A dust mask will help guard against breathing harmful paint particles in the air.

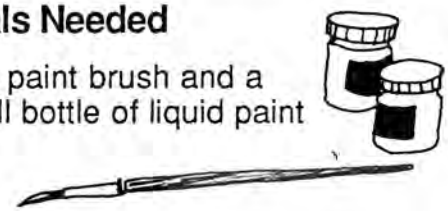
Take Your Time.

Final Touches

When the paint is dry you are ready to add those final details that will "jazz up" the appearance of your racer. Even though you may have a good paint job, you can mess it up by putting on stripes and decals in a sloppy manner. The last little bit of work that you do will be what most people notice about your dragster.



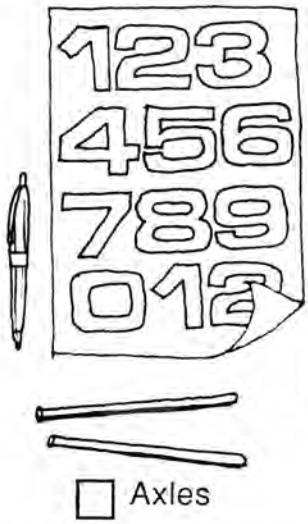
Materials Needed



☐ Fine paint brush and a small bottle of liquid paint

☐ Straw axle bearings

☐ Washers



☐ Axles

☐ Decals and transfer lettering

☐ Wheels

☐ Screw eyes

Detailing

☐ 1. Make one last check for paint flaws and correct if needed.

☐ 2. Carefully paint on any pin stripes or other contrasting designs with the small brush and liquid paint. Let them dry overnight.

☐ 3. Place decals. Rub-on letters are excellent for putting names or numbers on the body. After this is done you might want to spray a coat of clear varnish over the body. This will give extra shine to paint and also seal your decals and other paints to the dragster.

☐ 4. Insert the axle bearings.

☐ 5. Before you mount the wheels you might check them for flaws. Small bumps or irregularities in the tires may be sanded smooth.

☐ 6. Graphite will make your axles spin better. Powdered graphite may be sprayed into the bearing or you can rub the axle itself with a pencil lead. Insert axles.

☐ 7. Mount the wheels and washers.

☐ 8. Screw the eyelets into place, a minimum of 6 inches (155mm) apart.

Testing

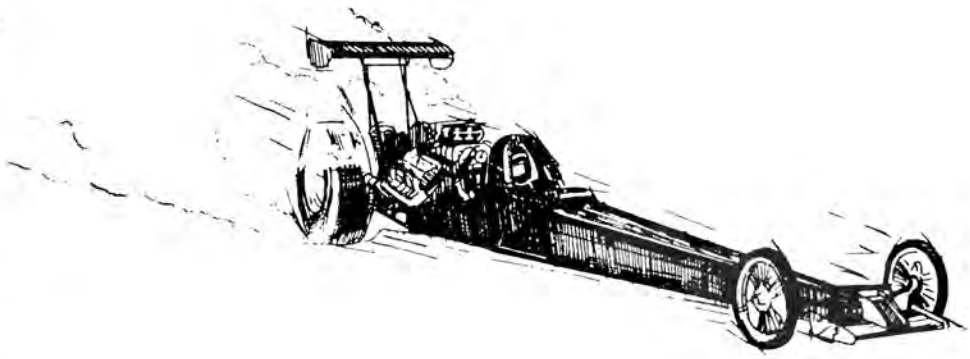
Good Luck! You're ready to roll. Now you have the race to look forward to. But before then, the dragster should be tested. The class should build an inclined test ramp by supporting a raised end of a masonite or plywood board.

STP Corp.

Pit crews waste no time as the racer comes in for a pit stop.

When you roll the dragster down the ramp, check for the following points.

- ☐ 1. Does the dragster roll in a straight path?
- ☐ 2. Are the wheels on straight?
- ☐ 3. Do the wheels spin freely?
- ☐ 4. Were the washers mounted with the axles?
- ☐ 5. Are the tires tight against the wheel hub? They should not spin on the hub.
- ☐ 6. Try to find out what might be causing problems.



The Big Race

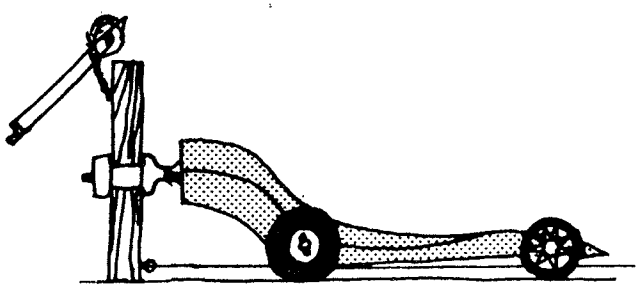
This is the day you have been working toward. Now that all of your production and testing is done, it is time to race against your classmates. Soon everyone will know who has the fastest dragster in the class.

Check the following before you race.

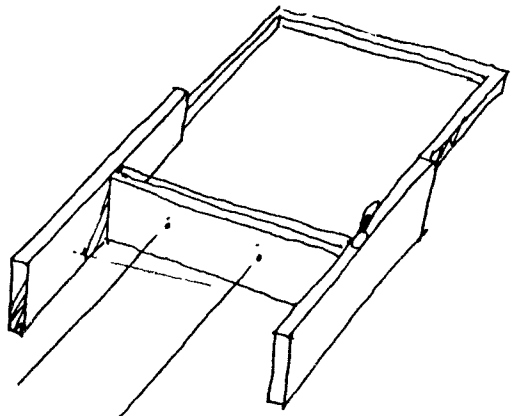
- ☐ 1. Is the track clear of debris?
- ☐ 2. Are the starting and finish gates even?
- ☐ 3. Are the dragster guide lines pulled tight between the start and finish gates?
- ☐ 4. Has the cushion pad been prepared at the finish gate?
- ☐ 5. Have people been assigned to perform certain functions of the race like: placing dragsters on the track; firing the cartridges; judging the winner; taking dragsters off of the guide lines?

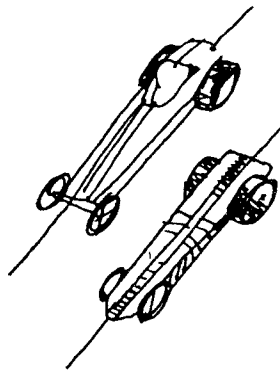
Set Up

Set up start and finish gates for the big race.

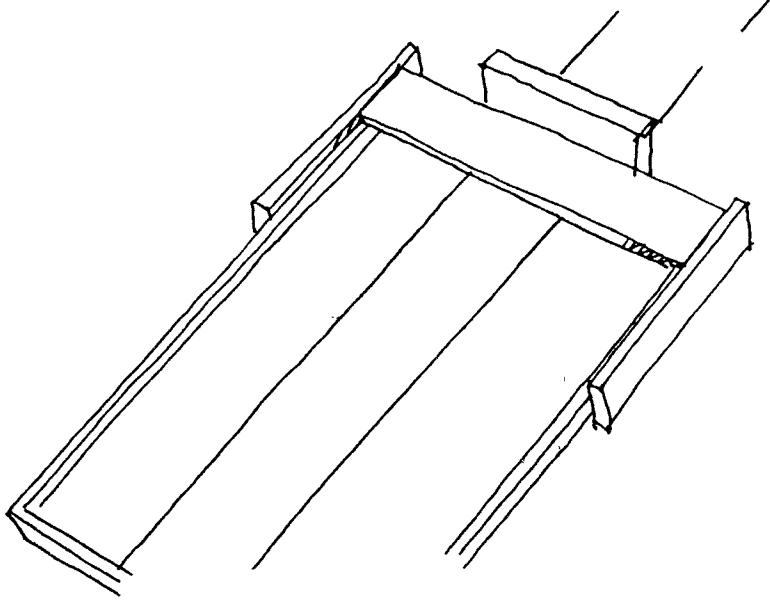


Spring fired pin.





Pull about sixty feet of nylon fish line tight between the start and finish gates.



Smooth flat surface.

SAFETY NOTE

Spectators should remain at least 4 feet from either side of the track during the races.

Well, how did you do?

Best Thumbnail Ideas

1st Place _____

2nd Place _____

3rd Place _____

Fastest Racing Time

1st Place _____

2nd Place _____

3rd Place _____

Best Finish Drawing

1st Place _____

2nd Place _____

3rd Place _____

Best Design

1st Place _____

2nd Place _____

3rd Place _____

Best Prototype Model

1st Place _____

2nd Place _____

3rd Place _____

Funkiest Dragster

1st Place _____

2nd Place _____

3rd Place _____

Best Finish On Dragster

1st Place _____

2nd Place _____

3rd Place _____

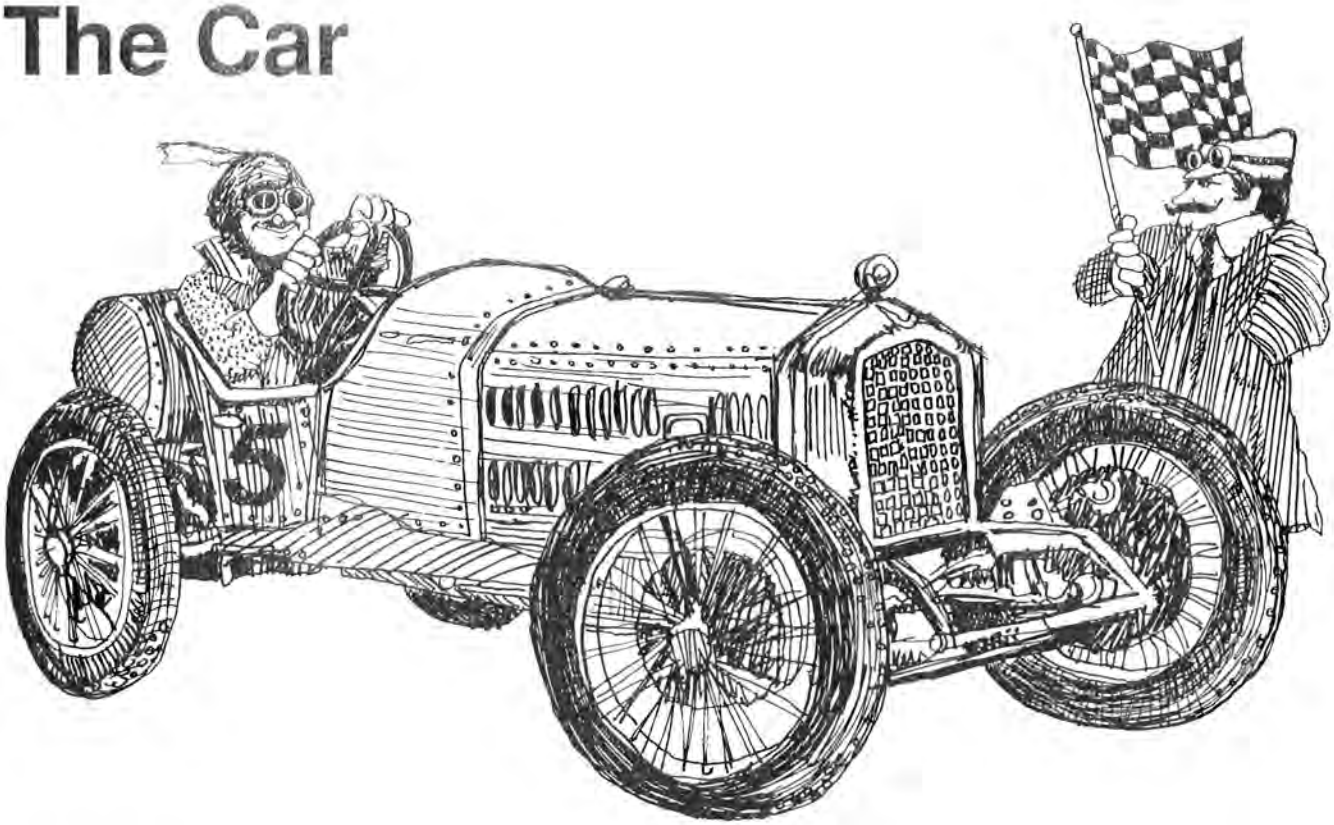
Best Overall Dragster

1st Place _____

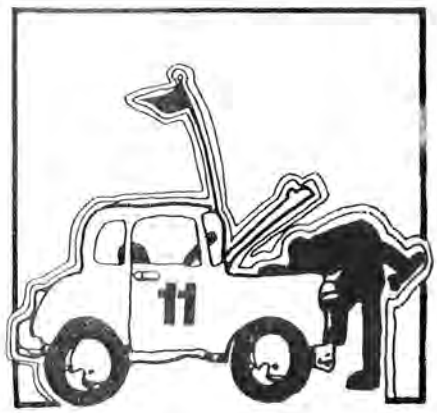
2nd Place _____

3rd Place _____

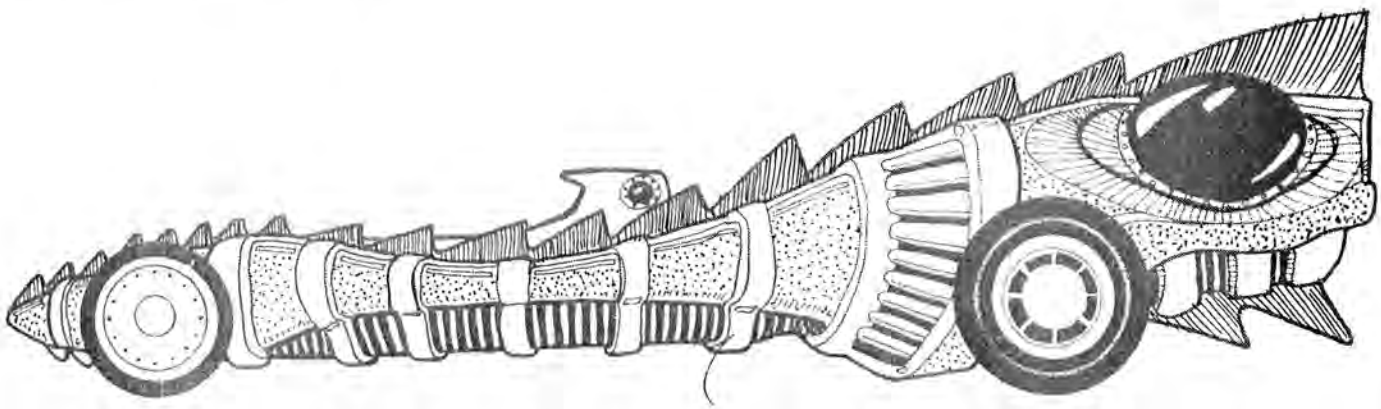
The Car



Building these miniature dragsters has been fun and challenging. Although they are small, much work, skill and caring is required to build them correctly. You have learned the importance of doing things right. You carefully painted it so that it would look nice; lubricated the axles so that it would run fast and aligned the wheels so it would travel straight. Also this project has taught you how to take a project from the design stage to production, basic wood working and craftsmanship.



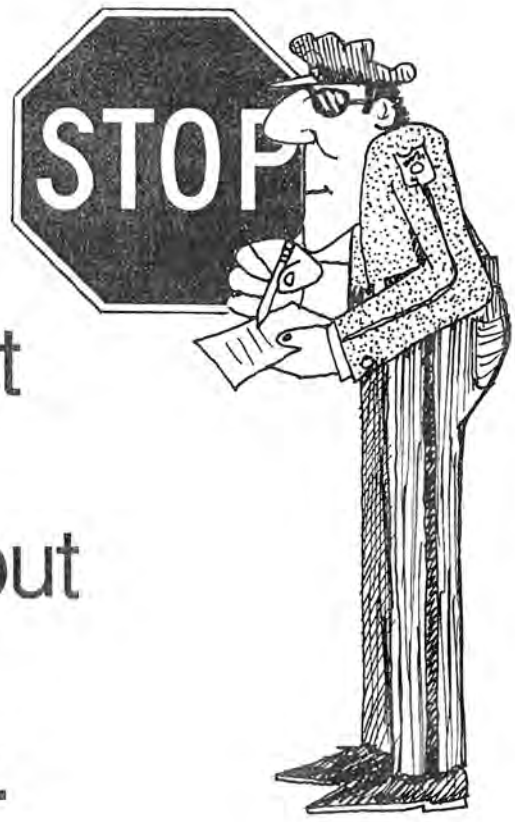
In a short time you will own and drive a full size automobile. That is a big responsibility. Proper maintenance and care of an automobile is important. Always keep your vehicle in safe working condition at all times. Plan now to have your car checked on a regular basis. Wash and polish it- be proud.



The Driver

Racing your model dragster was easy. All you had to do was thread the guide line through it's screw eyes and fire the CO_2 cartridge. But as we know, driving a real car it not as simple. When a person is driving they are operating a powerful and potentially dangerous machine, taking theirs and others lives into their own hands. When you are in this position, remember to drive safely and respect others.

Paula Murphy is shown after a successful test run at Indianapolis Motor Speedway behind the wheel of a fast running Novi race car. She became the only women in history to drive the famed 2 and 1/2 mile oval track in a racing car at high speeds. Later she held the women's land speed record, twice.



Race car drivers are some of the world's most cautious drivers. They drive fast on the track but at safe speeds on the highways and in the city.

Racing

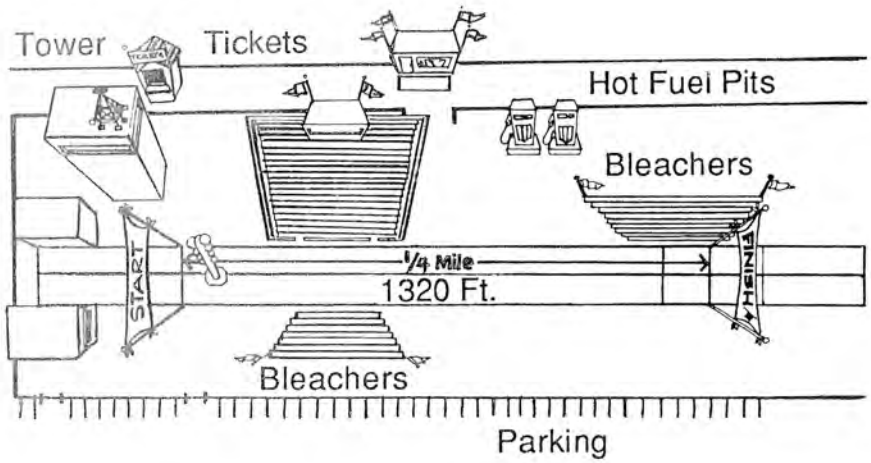
If there is a record to be broken or a race to win, someone will accept the challenge. You can bet on that.

Three types of racing are very popular. Stock Car racing involves modified family cars with extra powerful engines. Dragster racing is between two specially built vehicles that drive down a quarter mile track. Land Speed racing includes one vehicle that withstands extremely high speeds and trys to break the highest record for speed traveling on earth.

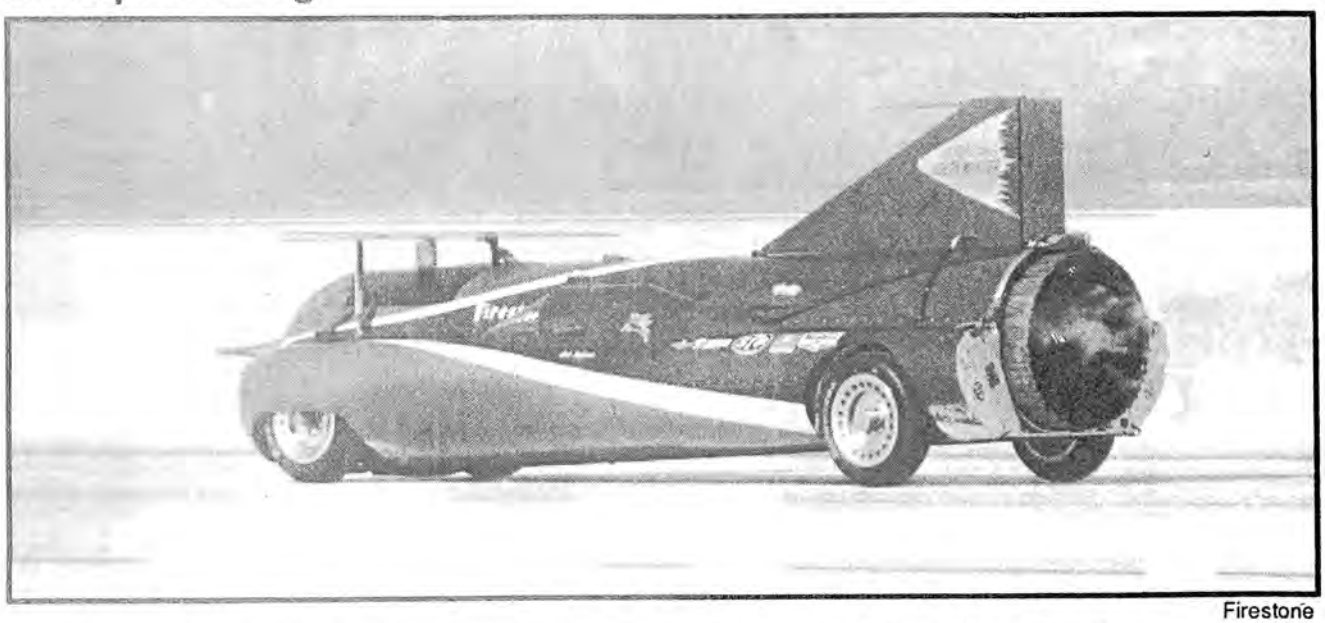
Stock Car Racing

STP Corp.

Drag Strip Layout



Land Speed Racing



Firestone

Art Arfons races his Green Monster to a new land speed record on the Bonneville Salt Flats located near Salt Lake City, Utah. His speed has since been beaten by a speed of over 600 m.p.h.

Words Used in Auto Racing

A Bone: A Model A Ford.

Back Off: Reduce or slacken speed or power.

Bad News: Dragster that performs well thus "bad news to the competition.

Big Bangers: Cars with engines of large cylinder displacement.

Big Wienie: Winning driver in drag races.

Bite: Traction of tires on the racing strip.

Blow: Failure of the engine.

Boondocks: Off the course. "He headed for the boondocks."

Boots: Tires.

Bore: Diameter of an engine's cylinders.

Broke: Washed out of a drag meet because of vehicle failure. Out of competition.

Carry the Wheels: Doing a wheel stand (Wheelie).

Christmas Tree: Drag strip starting light.

Cornering: Good cornering is when the car holds the road firmly without swaying or leaning noticeably.

Cutoff Point: The physical location on the track, before each corner, where the driver takes his foot off the throttle and puts it hard on the brakes; subject to the adjustment according to brake performance and intensity of competition.

Deuce: A 1932 Ford. Still an ideal stock car for converting into a street dragster.

Dicing: (British) Close, exciting and highly competitive driving.

Drag or Dragging: A race to get to the fastest possible speed per hour over a quarter mile distance.

D-Ring: The pull ring (or handle) for opening the safety chute at the end of the drag run.

Drop the Hammer: To engage the clutch very rapidly at the start of the race.

Elapsed Time: The total time it takes to drive the quarter mile. Given in seconds and fractions of seconds.

Eliminated: Out of the meet; beaten.

Flat Out: Full speed; straining to reach the maximum possible.

Foul: To leave the starting line before getting the green light and so getting the red "foul" light.

Four On the Floor: Stick shift for transmission with four forward gears.

Full Bore: Full speed; wide-open throttle.

Goodies: Fancy body ornaments on a customized car.

Gran Turismo: (Italian) Closed two-seat coupe designed for rapid, comfortable touring with good performance and handling.

Grease Monkey: Garage or auto shop employee who does unskilled work. Good apprenticeship for a would-be mechanic.

Hack: A hot rod.

Hairpin: Acute corner on road racing circuit.

Handler: Drag race driver.

Hauler: Extremely fast car.

Honker: Extremely fast car.

Hot Dog: (1) Said to be main diet of drag fraternity; (2) to show off; (3) a winning driver.

Hot Shoe: A fast capable driver.

Injected: Engine with fuel injection.

Juice: Fuel specifically blended for race cars.

Lunched an Engine: An engine completely destroyed or failing completely during a race.

Match Race: Race in which winner must take two out of three drag runs (or three out of five).

Mickey Mouse Circuit: Small, winding, race circuit.

Moon: Hubcap.

Nerf Bar: Bumper.

Off the Line: Actual start of the race.

Pace Car: Vehicle used to pace race cars at flying start.

Pinstriping: Painting narrow stripes at handles and other parts of car's body.

Pipes: Fancy exhaust system.

Rollbar: Bar firmly installed on racing vehicles to protect driver in case the car rolls over.

Screamer: A hot rod.

Shaving: Removing body trim preliminary to customizing.

Sleeper: Car with more horsepower and getaway than you would expect by just glancing at it.

Slick: Oversized tire for better traction. Usually wide and flattened where it contacts the road surface.

Stand on It: (1) To step all the way down on the throttle pedal. (2) To race aggressively.

Stock Car: A drag racing class.

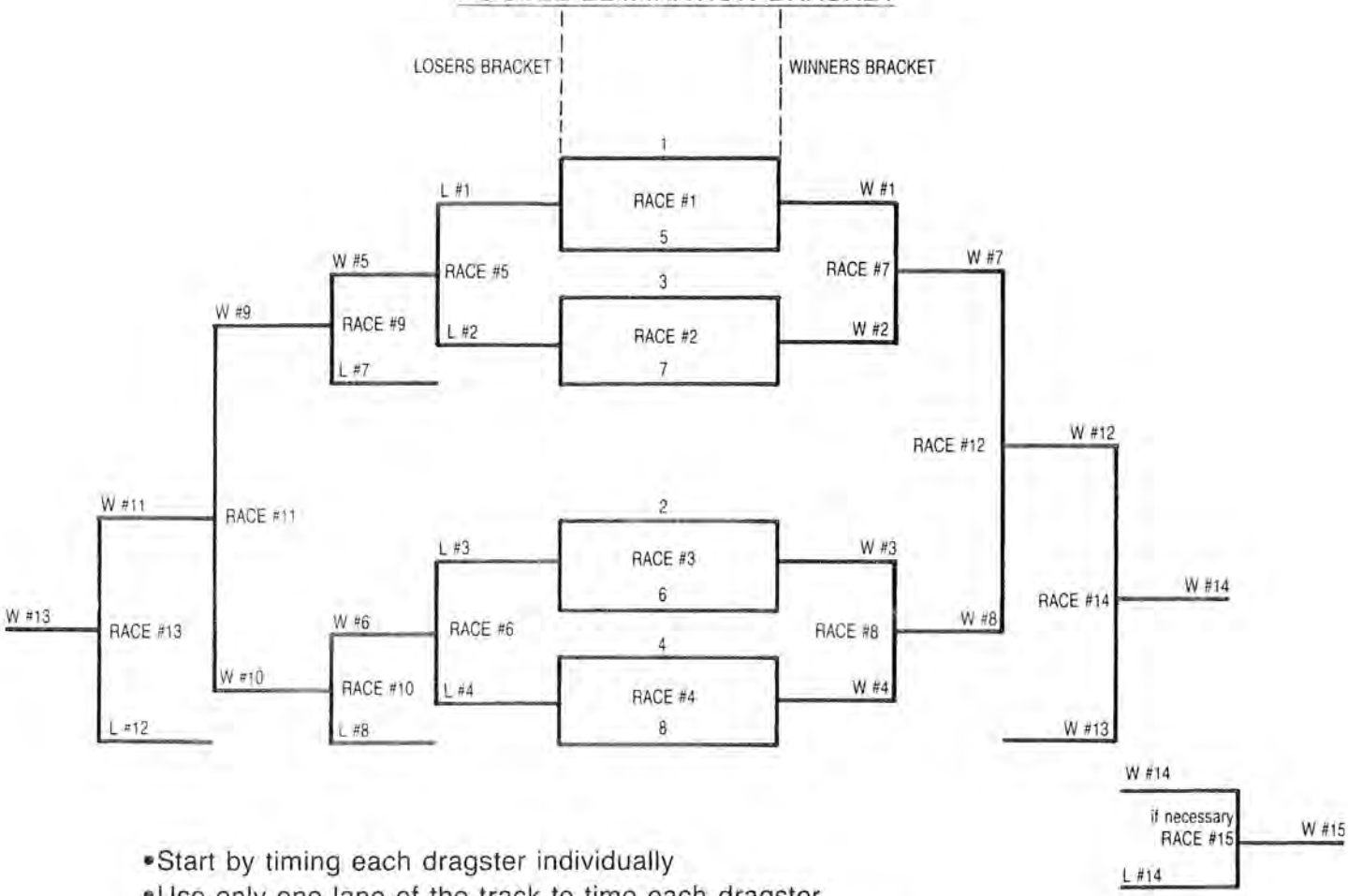
Top: Top Eliminator.

Zoomies: Exhaust headers on a dragster that sweeps upward, thus directing smoke and heat away from vehicle and driver.

Contest Bracket

TSA METRIC 500

DOUBLE ELIMINATION BRACKET



- Start by timing each dragster individually
- Use only one lane of the track to time each dragster
- Rank the dragster's speeds from fastest to slowest times
- Number the ranked speeds, beginning with the No. 1 next to the fastest speed
- Place a small piece of masking tape on the dragster to identify its rank number
- Line up the 8 fastest dragsters in heats according to the described bracket above, i.e., No. 1 against No. 5, etc.
- Procede to race the dragsters according to the bracket. Those cars which lose twice are eliminated from the competition.

For competition involving more than 32 Dragsters increase the bracket by quantities of 4.

NOTE: The top sixteen qualifiers for the double elimination bracket will be determined by the following TSA rules beginning in 1988

1. *Points will be tallied for each dragster in the categories of design, drawing, and construction.*
2. *Points will be assigned for each dragster's rank in the qualifying round. See VIII B. 4 for points breakdown.*
3. *Points accumulated in 1 and 2 above will be added together to determine the sixteen entries with the most points.*
4. *The dragsters with the most accumulated points will advance to the double elimination bracket.*
5. *After the double elimination bracket races, final entry standings will be determined by adding together the points accumulated in the categories of design, drawing, construction and final ranking in the double elimination race.*

Portfolio Review

Event Overview: This event is designed to assist students in developing and refining their personal portfolios. As a participant you will bring your portfolio including letter of introduction, resume, letters of recommendation, work samples, completed applications, college or employment and other materials you feel are necessary to complete your portfolio to the contest site. There it will be evaluated by a team of judges and awarded one of the following levels of competencies: Limited, Basic, Proficient, and Advanced.

The Portfolio will address:

- **Presenting your Portfolio:** A table of contents and a letter of introduction, presenting you and your portfolio to any outside reviewer.
- **Career Development Package:** An application for employment or college, letters of recommendation and resume.
- **Work Samples:** Four samples of your work that demonstrate mastery of important career-technical skills. Must include one writing sample that demonstrates your investigative, analytical, and writing abilities.
- **Supervised Job or Community Service Participation:** A sample or examples, using photos, written statements, etc., of the career skills you have developed with your project or work experience.

■ = CTE Anchor Standards addressed in this competition

CTE ANCHOR STANDARDS		
■ Academics - Analyze and apply appropriate academic standards required for successful industry sector pathway completion.	■ Problem Solving and Critical Thinking - Writing Standard: Conduct short as well as more sustained research projects to answer a question or solve a problem.	■ Leadership and Teamwork - Speaking and Listening Standard: Work with peers to promote civil, democratic discussions and decision making; set clear goals and deadlines; and establish individual roles as needed.
■ Communications - Acquire and accurately use general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening.	■ Health and Safety - Reading Standards for Science and Technical Subjects: Determine the meaning of symbols, key words, and other domain-specific words and phrases as they are used in a specific scientific or technical con-text.	■ Technical Knowledge and Skills - Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products.
■ Career Planning and Management - Speaking and Listening Standard: Integrate multiple sources of information presented in diverse formats and media in order to make informed decisions and solve problems.	■ Responsibility and Flexibility - Speaking and Listening Standard: Initiate and participate effectively in a range of collaborative discussions.	■ Demonstration and Application - Demonstrate and apply the knowledge and skills contained in the industry-sector anchor standards, pathway standards, and performance indicators in classroom, laboratory, and workplace settings.
■ Technology - Writing Standard: Use technology, including the Internet, to produce, publish, and update individual or shared writing products in response to ongoing feedback.	■ Ethics and Legal Responsibilities - Speaking and Listening Standard: Respond thoughtfully to diverse perspectives.	

For specific information regarding this event contact Renae Chance, Orestimba High School (rchance@nclusd.k12.ca.us)

Robotics: WARRIOR Assault Course

This event is a team event (2 members per team), maximum of 5 teams per school. Team members may not switch to another team during the competition.

Teams are to complete the attached Team Registration form and each participant is to complete the OOCE Student Registration form.

Event Overview: The participants will demonstrate knowledge and skill using the VEX Robotics system to score points in a modified VEX Arena.

The participant will: This is a driver controlled, competition-based event. Robots will race through an assault course designed to test both robot and driver.

■ = CTE Anchor Standards addressed in this competition

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For specific information regarding this event contact: Hardy Reeves, Orestimba High School 862-2916 or hreeves@nclusd.k12.ca.us

Robotics Technology
WORLD CUP CHALLENGE

TEAM REGISTRATION*

Registrations are due by February 1, 2019

Return this registration form along with each Student Registration form to:

Melody Pickford
Educational Options – Route #000
Stanislaus County Office of Education *or*
mpickford@stancoe.org

School	
Team Advisor (Teacher)	
Team Advisor Phone	
Team Advisor Email	

***Students are required to also complete the Stanislaus County Occupational Olympics and Career Exposition Student Registration form. Please attach a Student Registration form for each team member.**

TEAM 1

Student	Grade

TEAM 2

Student	Grade

TEAM 3

Student	Grade

TEAM 4

Student	Grade

TEAM 5

Student	Grade

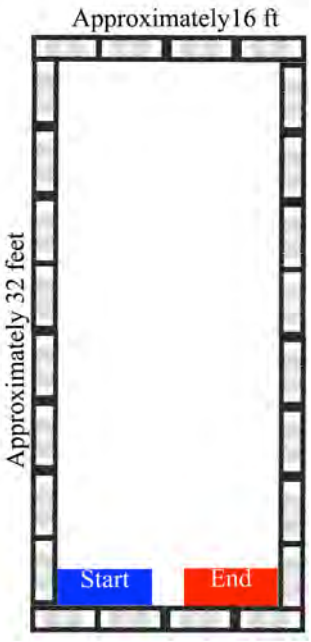
ROBOTICS COMPETITION
WARRIOR Assault Course

GAME OVERVIEW

Robots will race through an assault course consisting of a series of obstacles designed to test both robot and driver. The fastest eight robots go forward to the finals competition. Each obstacle must be completed before the robot may move on to the next obstacle. If the course is not completed within 2 minutes the distance travelled is recorded.

PLAYING FIELD

The game will be played on a modified vex arena. The arena will be setup to the approximate image for the beginning assault course:



MATCH FORMAT

For the beginning assault course, the robot and driver will be expected to do the following in no particular order:

- Slalom through four Push-Broom poles set at 2.5 feet apart
- Move a vex competition ball (3" foam ball) into a scoring zone
- Place a vex competition ball (3" foam ball) on top of a platform that is 3 feet tall
- Make a right turn
- Move an 8" Vex Cube, that weighs 508 grams, from one spot to another
- Break through a shoebox "brick" wall
- "Kick" or remove a Vex Football from it's stand for a "Kickoff" type of action

For the Fastest 8 Robots moving forward, through double elimination, a head-to-head race will occur on the Playing Field. Robots will race forward to complete some of the following obstacles in no particular order:

- Slalom through four Push-Broom poles set at 2.5 feet apart
- Move a vex competition ball (3" foam ball) into a scoring zone
- Place a vex competition ball (3" foam ball) on top of a platform that is 3 feet tall
- Move an 8" Vex Cube, that weighs 508 grams, from one spot to another
- Break through a shoebox "brick" wall
- "Kick" or remove from it's base a Vex Football for a Kickoff type of action

General Match Rules

- At the beginning of a match, each ROBOT must not exceed a 30 inch by 36 inch footprint
- A robot cannot pin or inhibit the movement of another robot while on the game floor by blocking or pushing it against a wall or assault course object.
- During a match, only the driver may remotely operate the robot. If a coach touches their team's controls anytime during a match, that team will be disqualified
- A referee may disable a robot that has damaged the playing field / carpet, barriers or another robot, if the referee feels that further damage is likely to occur. The referees may require a corrective action, such as eliminating a sharp edge, before the robot will be allowed to compete in subsequent matches. Repeat offenses will result in that team being disqualified.
- Strategies aimed solely at the destruction, damage, tipping over, or entanglement of robots are not in the spirit of the Competition and are not allowed. Accidental tipping over of a robot is not considered damaging and may be allowed at the discretion of the referees. Intentional stabbing, cutting, etc., is illegal. If a breach of this rule occurs, the team will be disqualified for a match.

Salad Preparation & Display

Event Overview: To evaluate contestant on his/her ability to prepare an attractive, flavorful and nutritious salad. Participants will also be judged on their display of the prepared salad and table setting.

The salad will be a serving vessel to be presented in conjunction with an individual table setting, table covering and centerpiece which depicts a theme to compliment the prepared product. The table setting can be developed using pottery, china, glass, metal, plastic and/or paper goods. The table/surface covering may be of any design or material that would complement the display. The centerpiece, which may be assembled prior to arrival at the contest, must be an original design.

Note: No Alcohol in recipe or as part of the theme or table display. Parents, friends and instructors will not be allowed access to the event area during competition.

Participants will prepare a salad for home use:

- Salad greens and/or other ingredients may only be washed and separated, if appropriate; they may not be sliced, diced, peeled, etc. **Exceptions:** Onions and garlic may be washed and peeled only
- Canned goods may be opened and drained. If appropriate, ingredients may be measured and placed in storage containers
- All meat products must be prepared prior to competition
- Eggs, potatoes, and other items requiring cooking may be cooked in advance but not peeled
- Garnishes may only be washed. Completion of garnishes must be done during the performance portion of this event
- Salad dressing, if appropriate, may be prepared during the competition or brought already prepared

The contestant will prepare four (4) typed copies of an information sheet which will be given to the event chairperson during orientation. The information sheet shall include the title of the recipe, a list of ingredients and the amounts, and the directions and methods of preparation.

The contestant will prepare an original table setting display with suitable materials and design with theme not to exceed the dimensions 36" wide by 36" deep.

Materials to be supplied by contestant;

a. All ingredients for salad
b. Knives
c. Cutting Boards
d. Proper mixing and serving dishes and all equipment for salad preparation.
e. Table covering, centerpiece and table setting which depicts a theme to compliment the prepared product.
f. Clothing appropriate for salad preparation – no school logos to appear on attire
g. Aprons

Materials to be supplied by event Chair;

a. Work stations
b. Electrical power
c. Sink and water

- CONTINUED ON BACK-

Participants will be evaluated on the following:

- Salad information Sheet
- Sanitation and Personal Appearance
- Taste and Texture
- Table Setting and Display
- General Appearance and Suitability
- Attractiveness and Neatness

■ = CTE Anchor Standards addressed in this competition

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For specific information regarding this event contact Brent Rodriguez at brodriguez@stancoe.org or Stanislaus Culinary Arts Institute 238-8703

Small Engine Technology

Event Overview: THIS EVENT IS LIMITED TO 20 PARTICIPANTS (3 PER SCHOOL). Participants will complete the following tasks in the area of small engine repair:

- Read and use a micrometer or dial caliper to complete measurements on engine parts.
- Identify engine parts (Briggs and Stratton).
- Identify tools used in small engine repairs (general and specialty types).
- Look up specifications for a specific Briggs and Stratton engine.
- Correctly answer safety questions pertaining to small engines.
- Install valves in an L-head engine (Briggs and Stratton).
- Adjust valve clearance on an overhead valve engine (Briggs and Stratton).
- Correctly use a multi meter to determine continuity in switches, diodes and wires.

■ = CTE Anchor Standards addressed in this competition

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For specific information regarding this event, contact Tony Traini, Central Valley High School (556-1900)

Welding

This event is limited to 40 students who will be accepted on a first-come, first-serve basis with no more than 3 students per school site.

Event Overview: Participants will be assigned exercises in both shielded arc and oxy-acetylene welding processes.

The Participants will:
Complete the following series of welds or similar procedures:

A. **Shielded Arc (stick)**
- Butt-joint E7018-1/8 (1/4" mild steel) flat
- Pipe to plate E6011 or E7018-1/8 (1/4" mild steel) flat
- Fillet weld (single or 3 pass) E7018-1/8 (1/4" mild steel) Horizontal
- Butt-joint E6011-1/8 (1/4" mild steel) vertical up

B. **Oxy-Acetylene**
- Butt joint with 3/32 rod (16 ga mild steel) flat
- Pipe to plate with brazing rod
- Lap-joint with 3/32 rod (16 ga mild steel) flat & Horizontal
- Outside corner without rod (16 ga mild steel) flat

C. Understand safety procedures for welding (50 question test)
D. Understand basic welding procedures (50 question test)
E. Knowledge of tools and materials used in the welding field. (50 tool and materials ID test)
F. The following materials will be provided by the event chairs or **students may bring their own if they so desire:**
- Chipping hammers
- Rod
- Gloves
- Wire brushes

Equipment required of participants:
- Safety glasses
- Coveralls or leathers
- Hard-soled shoes

■ = CTE Anchor Standards addressed in this competition

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For specific information regarding this event contact Co-Chairs; Michael Costa, Patterson High School (892-4750) or William Douglas, Waterford High School (874-9060)

Stanislaus County Occupational Olympics and Career Exposition

STUDENT REGISTRATION FORM

(Please print or type)

Student Last Name: _____ First Name: _____ Middle: _____

Home School: _____ Grade: _____

Student Mailing Address: _____ City: _____ Zip: _____

The above named student hereby requests participation in the Stanislaus County Occupational Olympics and Career Exposition (OOCE) to be held at the Stanislaus County Fairgrounds on Thursday, March 21, 2019. My parent or guardian, whose signature is shown below, and I hereby agree to follow the OOCE rules and will accept the interpretations and decisions made by the OOCE Chairpersons. By signing this request this student and parent/guardian expressly grant authority to, and indicate consent to, the release of educational information about, or relative to, the participation of this student in OOCE activities. Such information shall include but not be limited to, the release of photographs, test results, the reproduction of sound motion picture, and/or video tape recordings. The Occupational Olympics committee shall have the right to reproduce, use, display, and disseminate in such manner as they see fit, without obligation of any kind to any person, the information resulting from OOCE activities.

Signature of student: _____ Date: _____

Signature of parent/guardian: _____ Date: _____

As the instructor, counselor, or administrator at _____ High School, I hereby indicate that the above-named student meets the Occupational Olympics requirement for the following competitive events(s): Please check the event(s) student will be participating in (2 event limit).

NOTE: Completion of the Verification of Shop & Tool Safety form is required for students participating in events with an asterisk (see back page). Intro to Business Apps and Welding events are held offsite, students cannot compete in another event.*

- ☐ *Ag Engineering/Construction Trades
- ☐ *Agricultural Equipment Technology
- ☐ *Automotive Technology
- ☐ Criminal Justice
- ☐ Fashion Design
- ☐ *Firefighter Candidate Training
- ☐ Floriculture
- ☐ General Marketing
- ☐ Hairstyling
- ☐ Hairstyling Model (see below)
- ☐ Intro to Business Applications
- ☐ Job Seeking Skills (see below)
- ☐ Marketing Mathematics
- ☐ Medical Occupations
- ☐ Pitsco Competitive Drag Racing
- ☐ Portfolio Review
- ☐ Robotics
- ☐ *Salad Prep & Display
- ☐ *Small Engine Technology
- ☐ *Welding

OTHER: ☐ Student Security Team (Ceres Criminal Justice students only) ☐ Role Player ☐ Career Pathway Booth

If you have chosen *JOB SEEKING SKILLS* as one of your competitive events - please check the specific area:

- ☐ Agriculture
- ☐ Business
- ☐ Home Economics
- ☐ Industrial Technology/Engineering
- ☐ Health and Arts
- ☐ Media and Entertainment

HAIRSTYLING MODELS: Please print the name of the Hairstylist you are modeling for: _____

_____	_____	_____
Name of Instructor/Counselor or Administrator	E-mail address	Signature

Registration materials must be received by 5:00 p.m., Friday – February 1, 2019. Registration forms may be E-mailed to mpickford@stancoe.org, Faxed (209) 238-4203, or send to:

Cindy Young, CTE Director
Educational Options - Stanislaus County Office of Education
1100 H Street, Modesto CA 95354
Route# 000

Ag Engineering/Construction Trades
Ag Equipment Technology,
Automotive Technology,
Firefighter Candidate,
Salad Prep & Display,
Small Engine Technology,
Welding

Verification of Shop and Tool Safety

In order to insure a safe and successful competitive event in the above listed competitions, the chairpersons must be certain that each student competitor is aware of shop and tool safety for any of the competitions listed.

Please read and sign the following disclaimer:

To the best of my knowledge the below named student has passed an instructor-administered safety test and has sufficiently displayed safe working habits while using shop tools.

Please print:

STUDENT NAME: _____

INSTRUCTOR NAME *(please print)*: _____

INSTRUCTOR SIGNATURE: _____

DATE: _____

Revised 10/2018