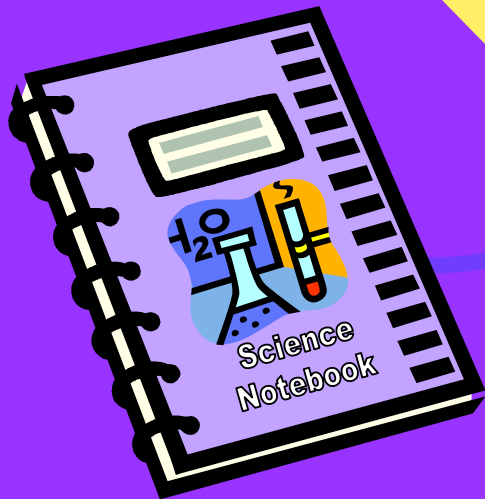


Interactive Notebooks Professional Development



By Jaime Deming

Have you ever heard your students say...



I can't find my...
notes, homework, old quizzes...

I can't remember what
we did in class yesterday.

I'm sure it's somewhere in...

What do I
use to study
for the quiz
or test?

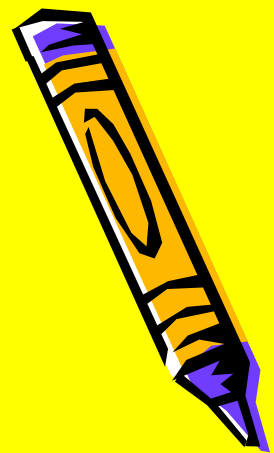
my desk
my cubby
my book bag
my room

I don't
know how
to do my
homework!



I was absent yesterday, did I miss anything?

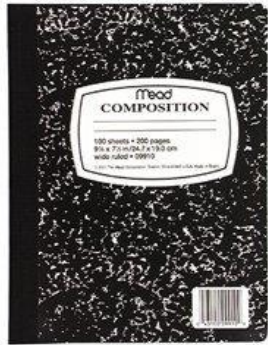
What is an interactive notebook?



- Personalized Text Book
- Easy Differentiation
- Student CHOICE!
- Fun!
- Independent Thinking
- Working Portfolio of the Entire Year
- Study Tool
- Great Resource for End of the Year Review
- Organizational Device
- Allows for the 4 C's: Creativity, Critical Thinking, Collaboration, Communication!



Interactive Notebook Supplies



scissors



pencils



glue sticks
(about 2 PER MONTH)



MEAD Notebook
NOT SPIRAL!!!
Science (1)
Social Studies (1)

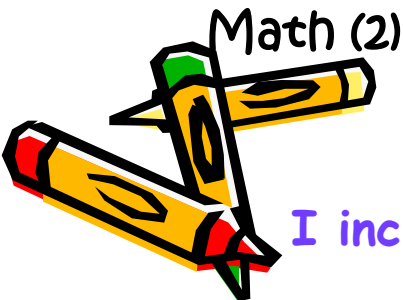
8x11" paper
white and
colored



Markers: Optional and
only allowed for
outlining

Colored pencils
1-2 packs

I include all materials on the supply list at beginning of the year!



How is it organized?

- **The Right Side** is teacher directed and is restricted for the teacher only. This side is where the content goes that the students must learn based on the common core standards. It's up to you how you would like to display this content.
- **The Left Side** is the student product. Students complete this after the lesson is taught. It is the "independent practice" part of the lesson. This is how they show they have learned the content from the right side. The left side allows for creativity, choice, and differentiation!
 - **Table of Contents:** Students keep their notebooks organized by using a table of contents in their notebook. When we begin the notebook I have students skip the first 4 pages for a table of contents.



Examples of Right Side

- The right side is the content. It is your teaching and what you want the students to know. It should be some form of content/notes that the students can reference back to (teacher created, guided, cloze procedure, student written) based on one of the following:
 - Video
 - Article
 - Lecture
 - Smart Board Lesson
 - Power Point Presentation
 - Guest Speaker
 - Text Book
 - Chapter Book
 - Internet
 - Field Trip



Example of Right Side:

Cornell Notes (SS/Science)



ANIMAL SURVIVAL - LESSON 8

Camouflage

Key Ideas/Pictures

Notes

What Are Adaptations?
Camouflage - an adaptation by which an animal
Example: brown moths blend in with bark
Protective Resemblance - the fact that an animal resembles
Adaptations - are traits that help you survive
Example: The long legs of a horse help it run fast

What is Mimicry?
Mimicry occurs when one organism imitates another
Explain how mimicry has helped the Viceroy butterfly survive:
They look just like the Viceroy butterfly, so predators don't eat him.

How Do Animals Behave?
Inherited Behavior - a behavior that is inborn, not learned
Give one example of an inherited behavior and explain how it has helped the animal survive: a reflex is automatic, like salivating or eye-blinking.
Instinct - a pattern of behavior that requires no thinking; it is programmed in the animal.
Give one example of an instinctual behavior and explain how it has helped the animal survive: when salmon swim thousands of miles to mate and they eggs. They are migrating.
Learned Behavior - behavior that is not inborn
Give one detailed example of a learned behavior: newborn ducks follow their female parent, wherever she goes. They copy her to learn to find food.

How Can Quick Responses Help Animals Survive?
Explain how two animals protect themselves using quick responses.
1. A skunk sprays liquid that stinks
2. Peacocks bring their feathers out to protect

Summary: In this mini-lesson I learned that camouflage is important to animals. Inherited Behavior is a behavior that is inborn; not learned. Learned Behavior is behavior that is not inborn. That's what I learned!

Example of Right Side: Math



121374

SF 5-10 Multiplying 3 Digit Factors

Objective:
I can use the commutative and associative properties to simplify multiplication with three factors.

Vocabulary:
Commutative Property of Multiplication - You can multiply any two numbers in any order and get the same answer
Ex. $5 \times 6 = 6 \times 5$
Associative Property of Multiplication - You can change the grouping of the factors
Ex. $(5 \times 2) \times 3 = 5 \times (2 \times 3)$

How do I Multiply with Three Factors?
Step 1: Start by multiplying any two numbers together
Step 2: Multiply the answer you got in the first step by the third number.

Example: $25 \times 2 \times 10$
Step 1: $25 \times 10 = 250$
Step 2: $250 \times 2 = 500$

Guided Practice

Directions: Solve each problem.

1. $50 \times 32 \times 2 =$ 164 $\begin{array}{r} 500 \\ \times 4 \\ \hline 2000 \end{array}$ $\begin{array}{r} 2000 \\ \times 6 \\ \hline 12000 \end{array}$

2. $86 \times 4 \times 9 =$ 3096

3. $4 \times 500 \times 6 =$ 12000 $\begin{array}{r} 100 \\ \times 4 \\ \hline 400 \end{array}$

4. $4 \times 25 \times 4 =$ 400

5. $9 \times 12 \times 17 =$ 1,836

Read World Multi-Step Word Problems

6. What is the cost of 8 cartons of pens if there are 5 boxes per carton, 5 pens per box, and each pen costs \$2?

7. How many stamps are in one section of the collection?

Left side ideas: Have students create a 5 tab foldable. On the

Stamp Collection
1 section = 5 pages
1 page = 9 rows
1 row = 8 stamps

Handwritten notes for problem 7:
 $\begin{array}{r} 40 \\ \times 5 \\ \hline 200 \end{array}$ $\begin{array}{r} 200 \\ \times 2 \\ \hline 400 \end{array}$ $\begin{array}{r} 400 \\ \times 9 \\ \hline 3600 \end{array}$ $\begin{array}{r} 400 \\ \times 9 \\ \hline 3600 \end{array}$

Example of Right Side: Science

Inquiry Based Learning



Magnetism Worksheet

Name Zori Jones @ 4/14/13

Directions: Fill in the table and complete the graph below.

Table 1 - Number of magnets and how many paper clips can be held

	# of Paper Clips Prediction	# of Paper Clips Test Results
1 Magnet	2 paper clips	2 paper clips
2 Magnets	4 paper clips	3 paper clips
3 Magnets	5 paper clips	5 paper clips

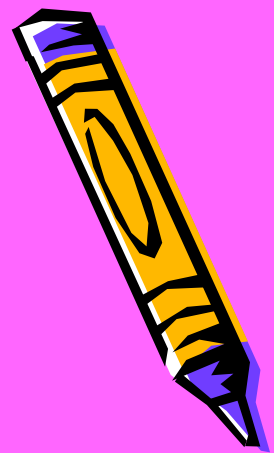
Graph 1 - Number of paper clips vs. Number of Magnets

Comparing Magnets

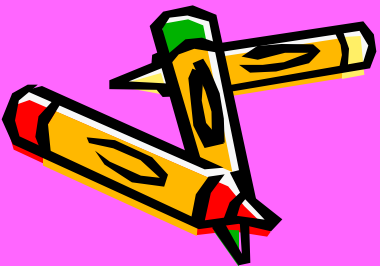
Number of Magnets	Number of Paper Clips
1 magnet	2
2 magnets	3
3 magnets	5

39

Examples of Left Side "Product" Assignments



- Graphic Organizers
- Draw/Analyze Pictures
 - Poems
 - Foldables
 - Brochures
 - Comics
 - Experiments
 - Song Rewrite
 - Sensory Figures
- Advertisements
- Short Cut Comic
- Be the Teacher: Create a Quiz
 - Technology
- Text Message Summary
- Wanted Hero Poster
 - Timeline
- Magazine Cover
- Newspaper Article
- On Your Own Research



The list goes on and on... I have typed up and created task cards for 48 different left side ideas. This is the most difficult part!

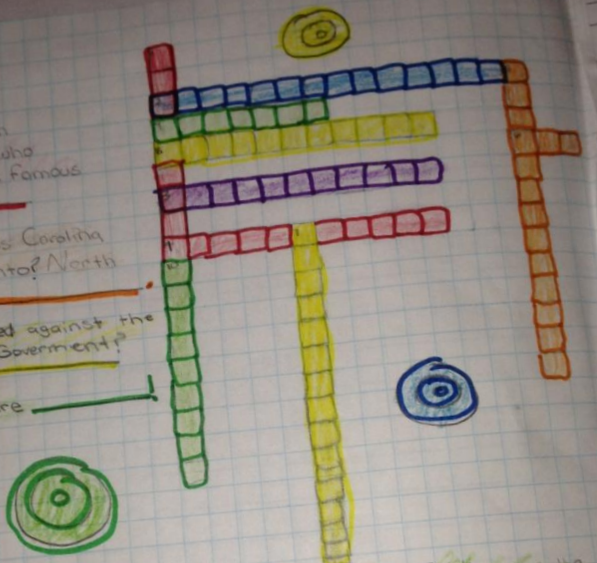
Left Side Examples



Left Side Examples


Down

- Other than a pirate, who was Edward Famous for? _____
- What was Carolina divided into? North and _____
- Who turned against the English Government? _____
- Pirates are _____

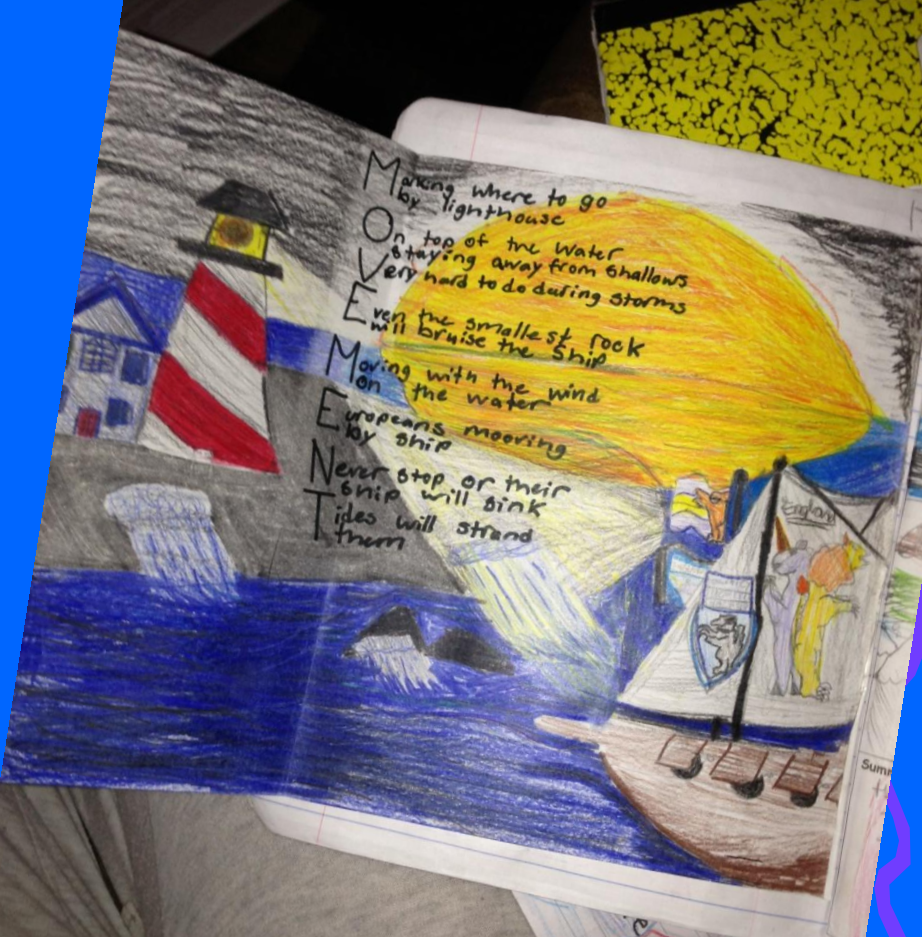


Across

- Who attacked Bath and New Bern? _____
- Who is Blackbeard? _____
- What is a colony ruled by a King? _____
- Who does the government collect to pay services? _____
- Who gave the English something? _____
- Who was the King of England? _____

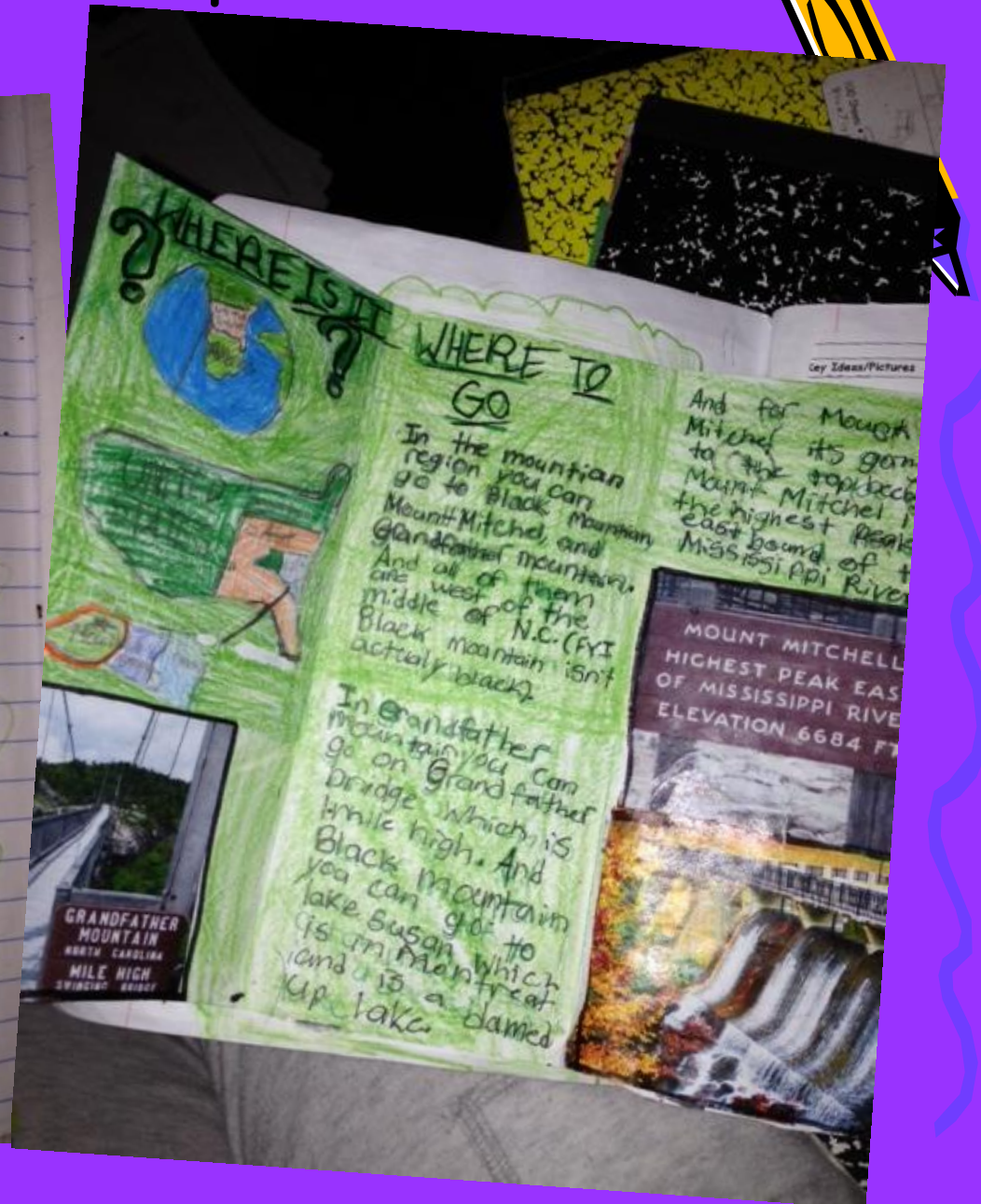


Answers: 1-Blackbeard, 2-American Indians, 3-Edward Teach, 4-royal colony, 5-South Carolina, 6-fox, 7-culper rebellion, 8-king Charles, 9-Charter, 10-dangers

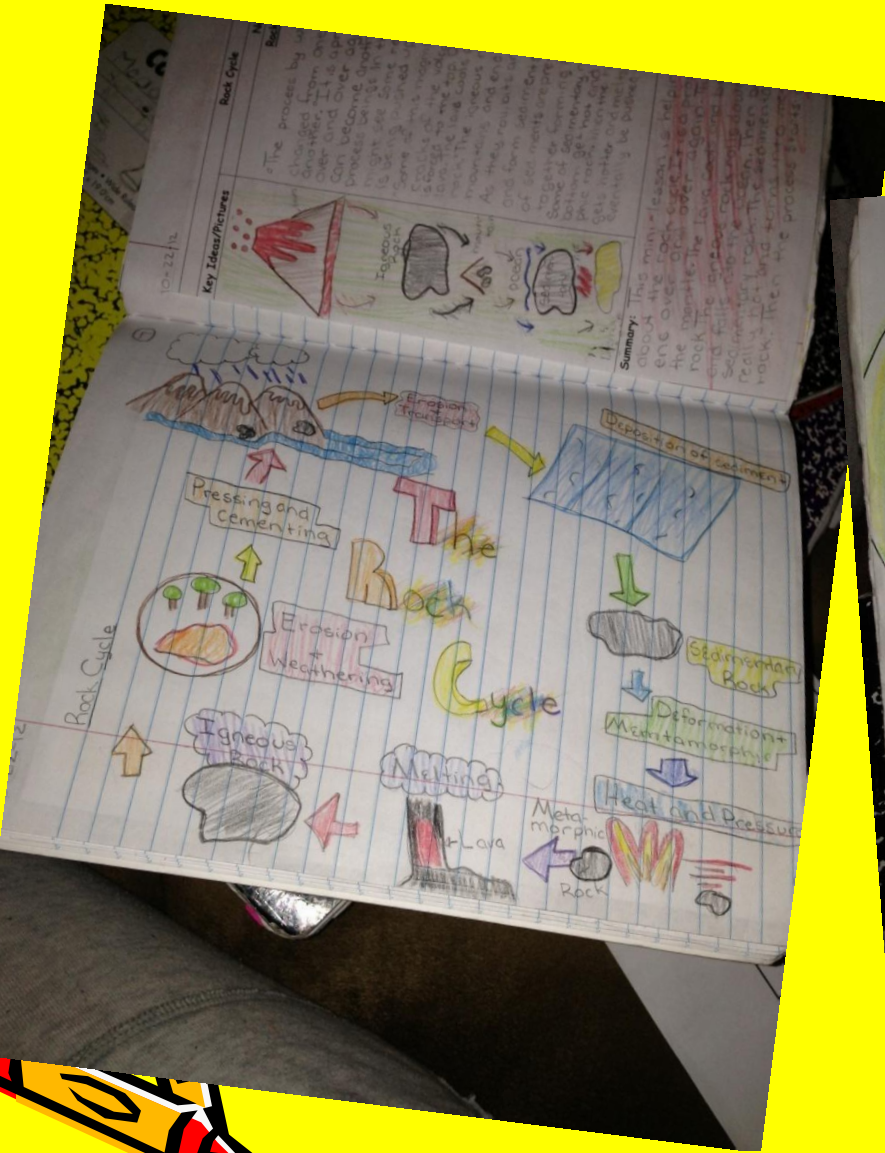
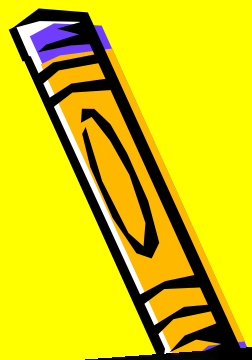


Making where to go by lighthouse
 On top of the water staying away from shallows
 Very hard to do during storms
 Even the smallest rock will bruise the ship
 Moving with the wind on the water
 Europeans mooring by ship
 Never stop or their ship will sink
 Tides will strand them

Left Side Examples



Left Side Examples



Animal: Peacock

Animal: Emu

Animal: Turkey

Directions: Choose 3 animals. Write the animal's name in the space provided and draw a picture. Complete the Venn diagram by writing 5-10 characteristics about each animal (cells, reproduction, movement, growth, food, habitat, survival, symmetry, vertebrate vs. invertebrate). Remember your left side must be neat.

Peacock Characteristics:

- They live in India
- They national bird of India
- They have patches
- They eat grubs etc
- Peacock babies are called Peachicks
- Both male & female are colorful
- love grass
- spread their feathers
- have some feathers on their head

Emu Characteristics:

- Emus live in Australia
- A native bird
- A 'ratite' from Australia
- Have big eggs
- Scientific name: Dromius Novaehollandiae
- Make oil + nest
- have thin legs
- live in grassy fields
- found in 2000
- We eat

Turkey Characteristics:

- Turkeys live in the mountain region
- A turkey has wattle
- A turkey has a snood
- A turkey has a caruncle
- Turkeys are grass eaters
- make noise

Shared Characteristics (Peacock & Emu):

- Their feathers are used to decorate
- Both eat rice
- The male and female are same

Shared Characteristics (Peacock & Turkey):

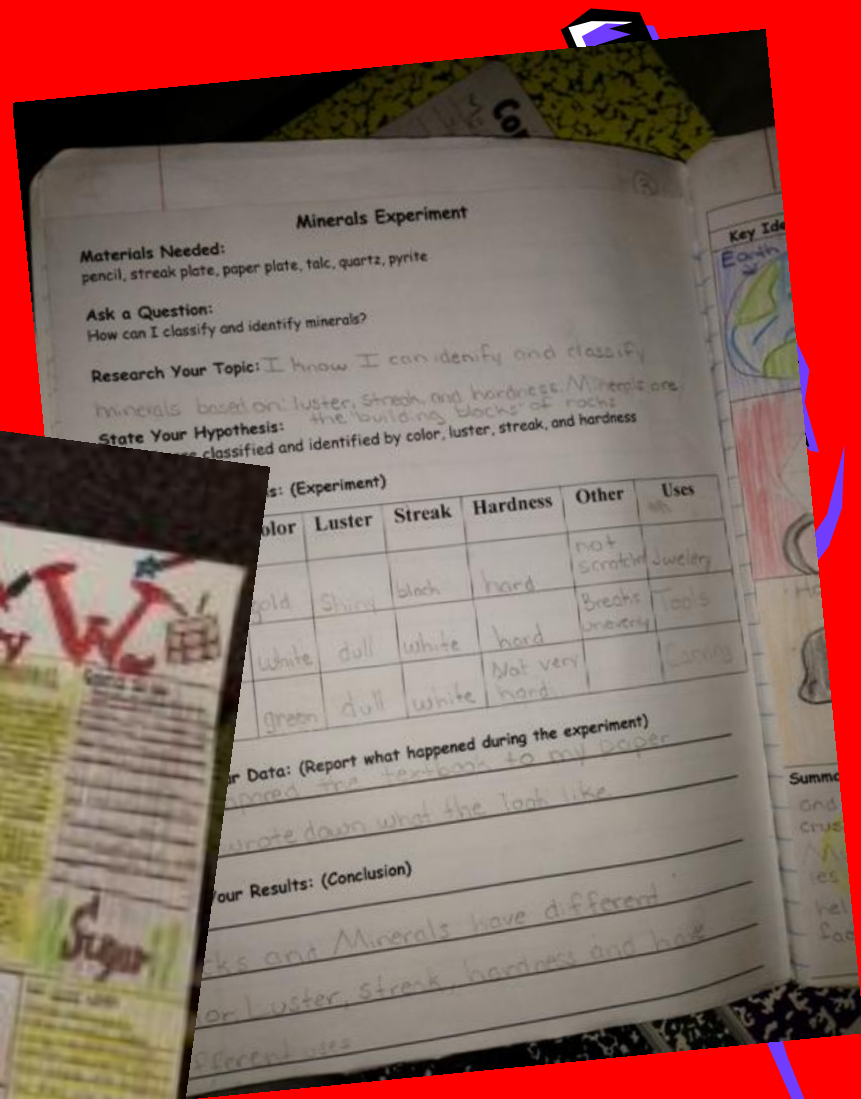
- They all do not fly
- They all have feathers
- They are wild animals
- They are mammals

Shared Characteristics (Emu & Turkey):

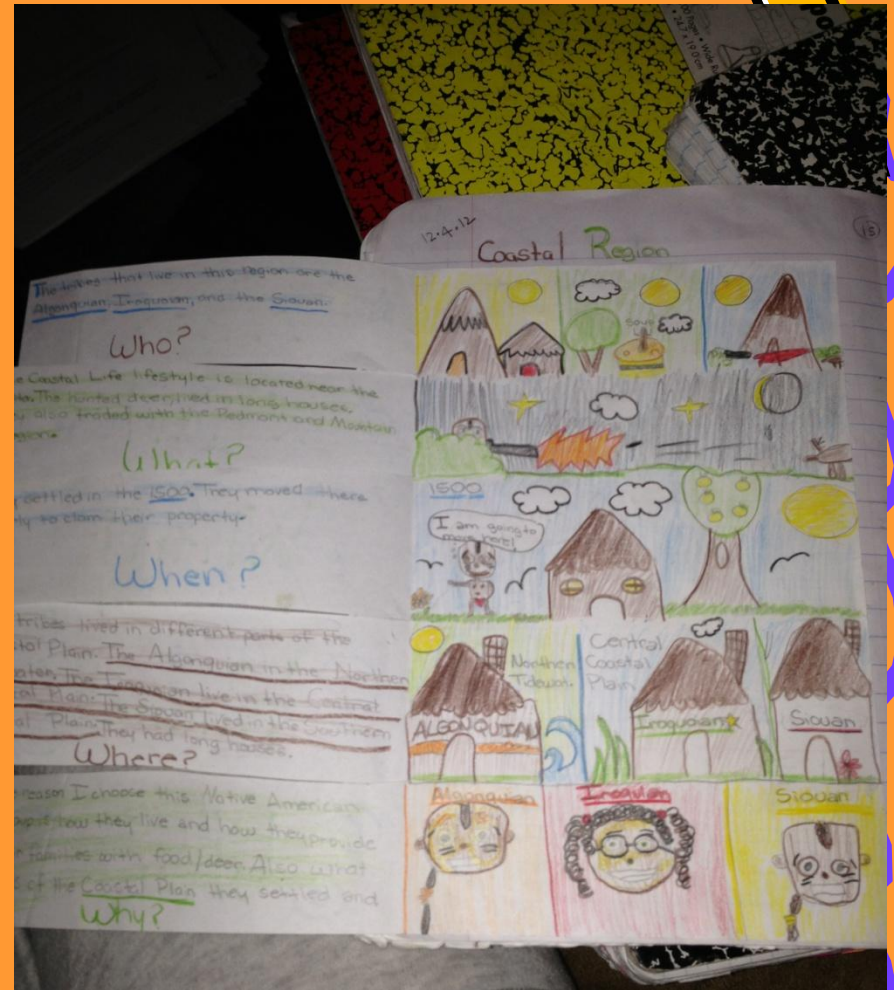
- They are birds
- They are mammals



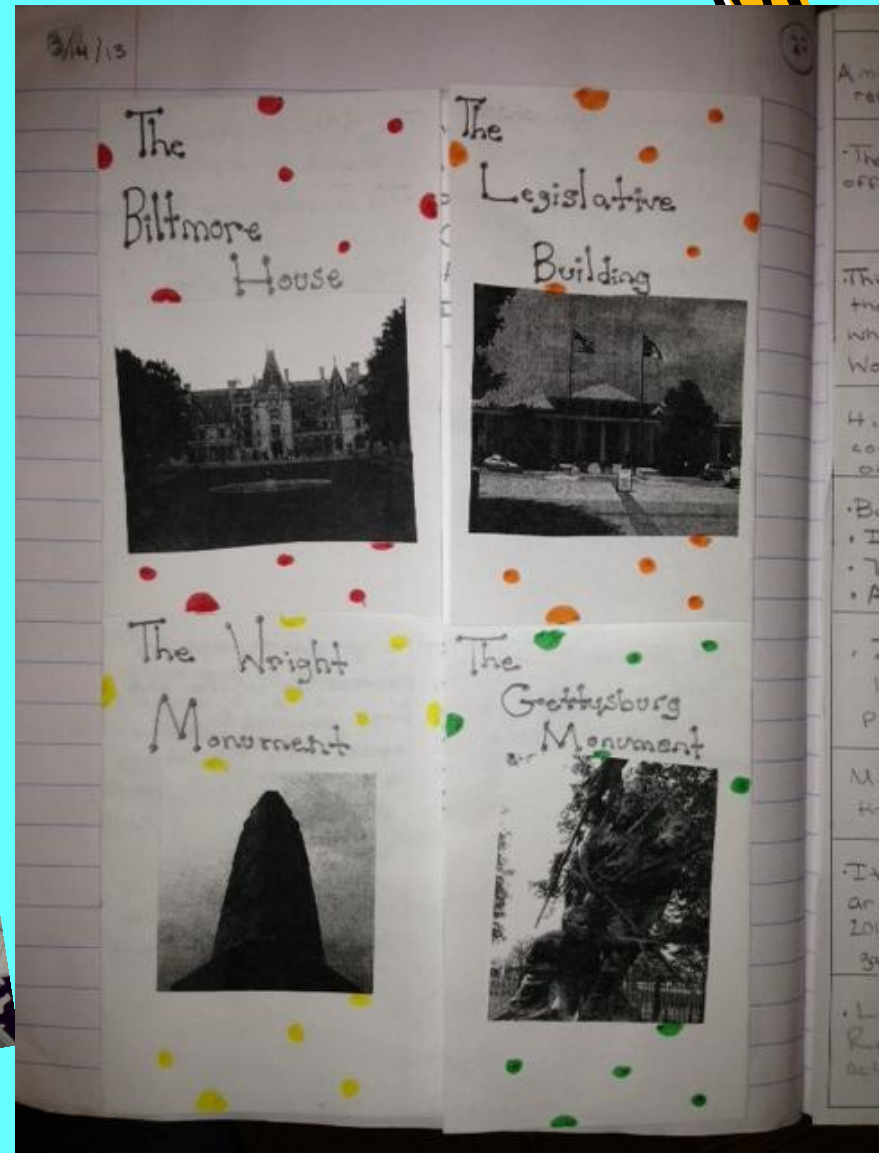
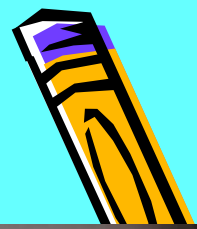
Left Side Examples



Left Side Examples Dinah Zike's Foldables



Left Side Examples: Dinah Zike Foldables!



Dinah Zike's Foldables



Customary Units

Length



Ruler

Scale



Capacity

Weight

Measuring Cup



A collection of foldable cards for math word problems.

Word Problems

Problem 1: A measurement system used in the US and Liberia.
 $224 \text{ gallons} = 896 \text{ quarts}$
 $30 \times 12 = 360$

Problem 2: Father's mass is 200 kg . He is 4 ft tall. He can lift 200 lbs per week.
 $200 \text{ kg} = 440 \text{ lbs}$
 $200 \text{ lbs} \div 12 \text{ weeks} = 16 \text{ lbs/week}$

Problem 3: John is putting up a new fence in his backyard. He needs a total of 8 yards of fence. He has 4 feet of fence.
 $8 \times 3 = 24 \text{ feet}$
 $4 + 4 = 8 \text{ feet tall}$

Problem 4: Lisa wants to send a box of oranges to a friend by mail. The box of oranges cannot exceed a weight of 20 lb. If each orange has a weight of 20 ounces, what is the maximum number she can send?
 $20 \times 16 = 320 \text{ oz.}$
 $320 \text{ oz.} \div 20 = 16 \text{ oranges}$

Conversion Table:

Unit	Abbreviation	Ex.
inch	in.	paper
foot	ft.	room
yard	yd.	football
mile	mi.	field

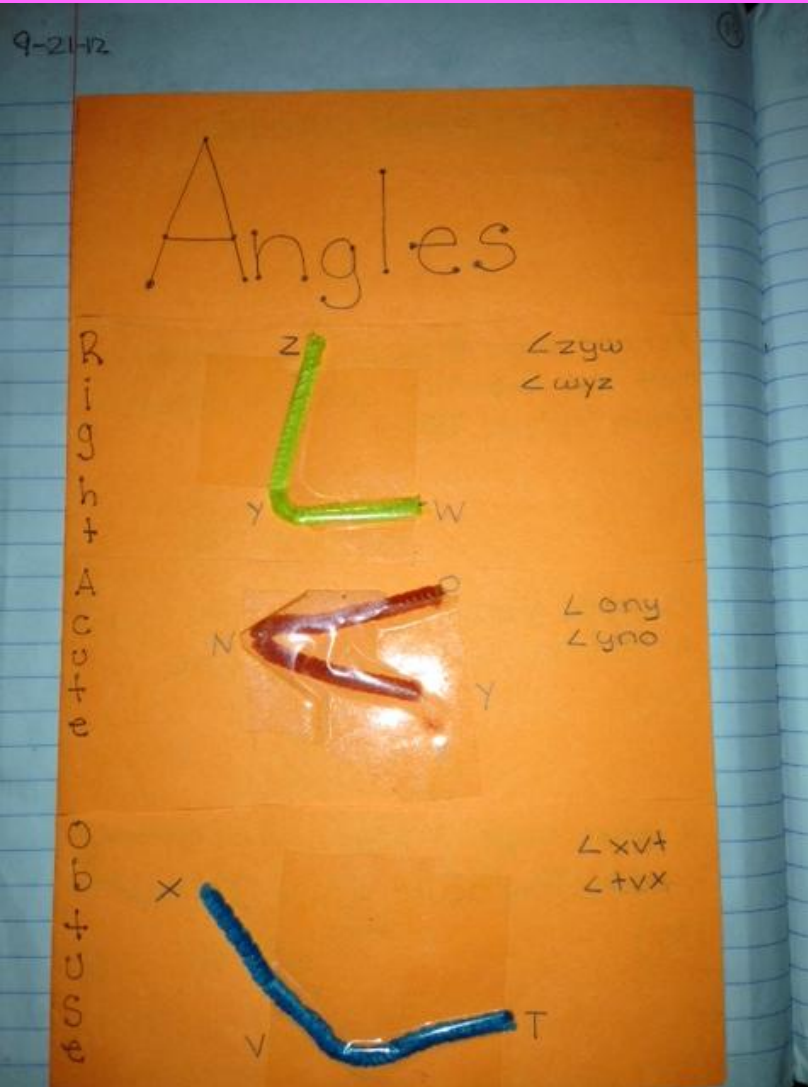
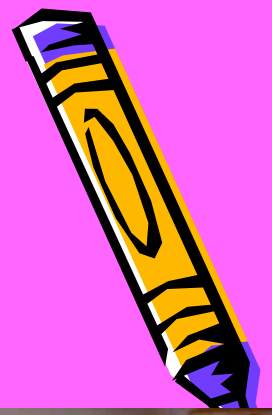
How hard gravity is pulling on it

Unit	Abbreviation	Ex.
ounce	oz.	pen
pound	lb.	baby
tons	T.	car

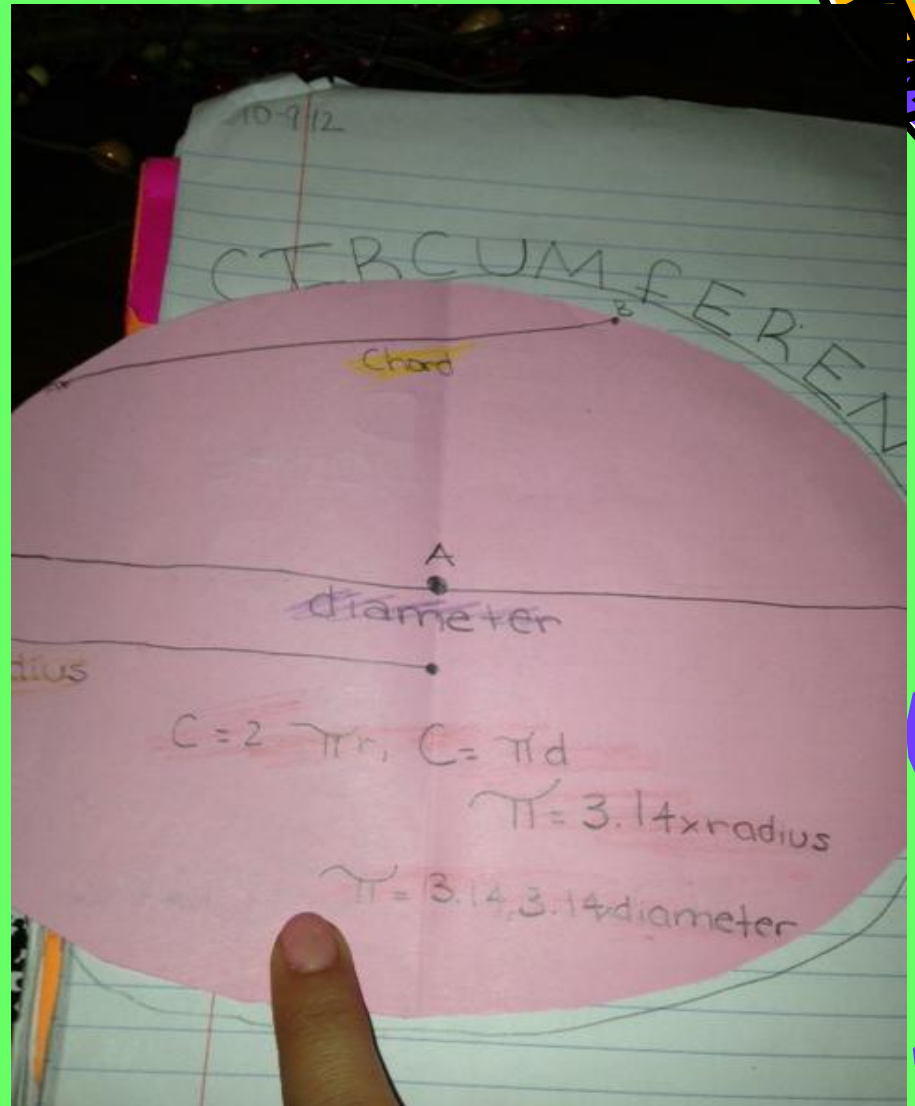
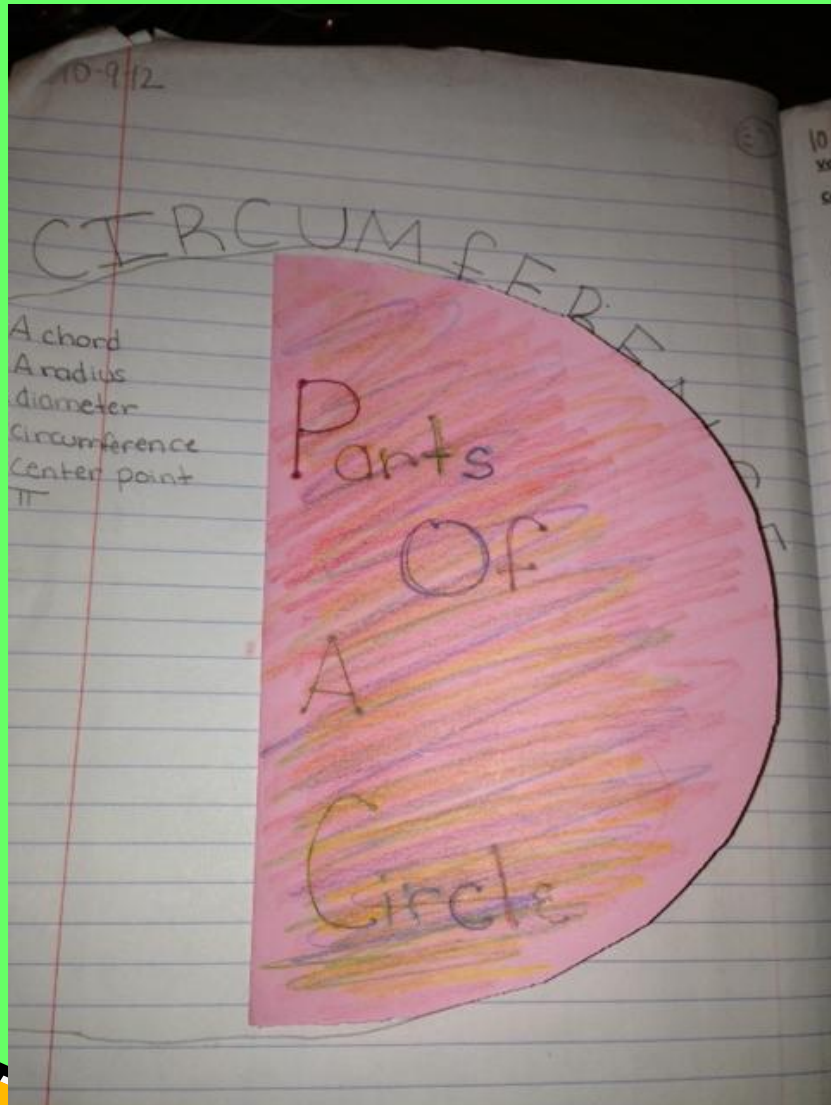
Other cards:

- A measuring system used in the US and Liberia.
- The longest dimension of an object.
- Amount a container can hold (Abbreviation | Ex.).

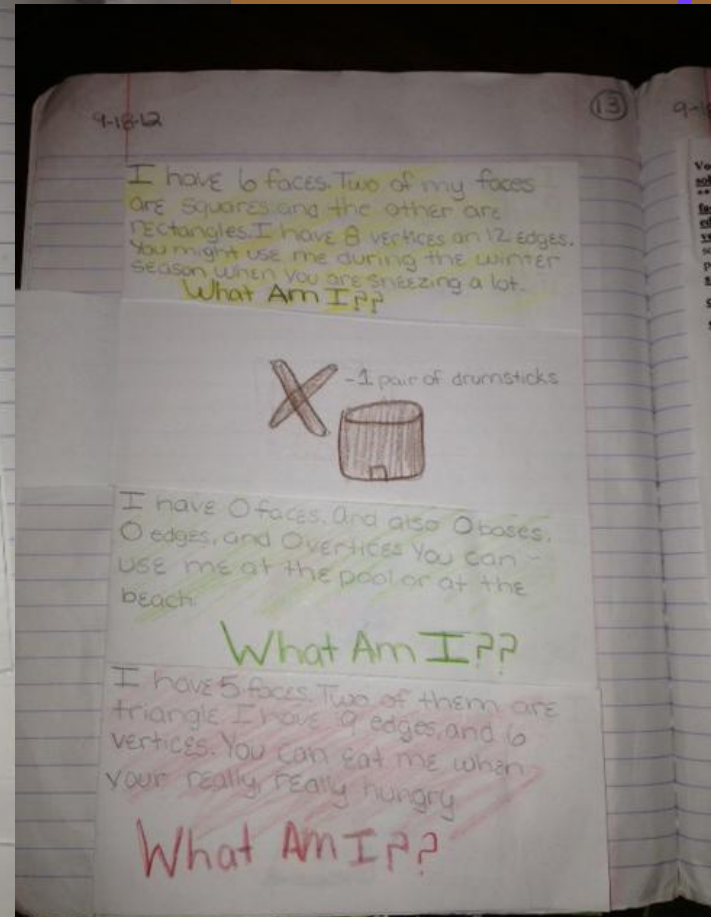
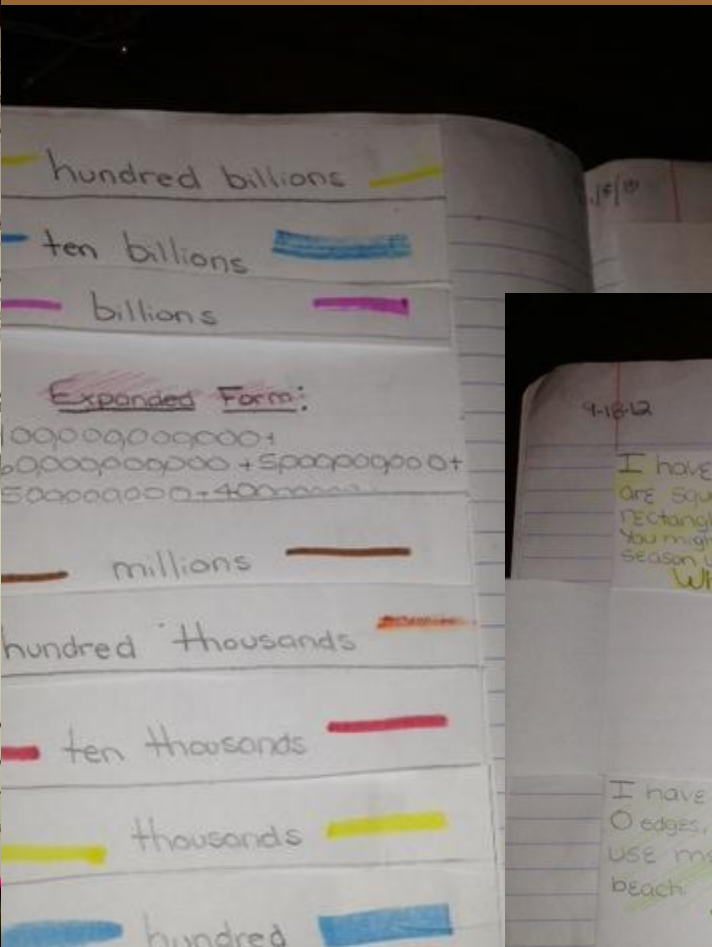
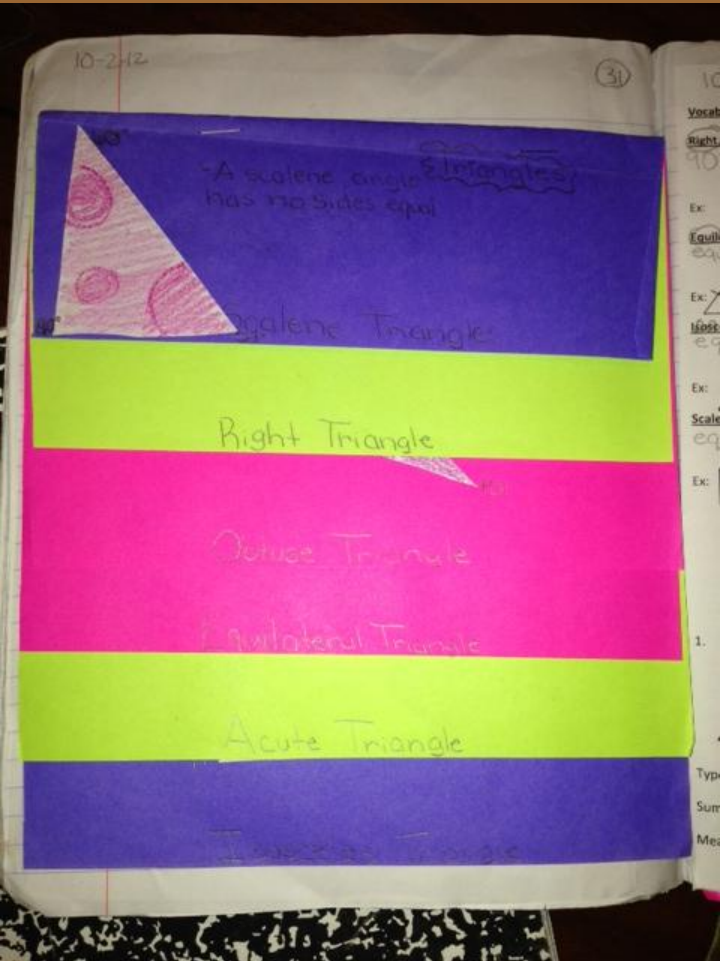
Left Side Examples: Dinah Zike Foldables!



Left Side Examples: Dinah Zike Foldables!



Left Side Ideas: Dinah Zike's Foldables

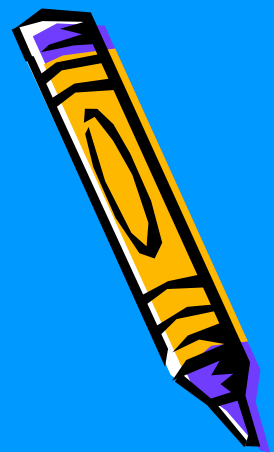


Differentiation Right Side:

- Content
- Process

• Differentiation Left Side


Interest
Ability
Multiple Intelligences




Math Differentiation Left Side Examples w/ Technology




They used this a long time ago. They also stand for balance.




People use these today. They usually use them in stores to check the weight of food.



People use these to measure the weight of small things like meat, fruit and even frozen yogurt!



They also measure your weight at the doctor's.



←

+

Measuring Mania!

Length is used to see how long does it take from one place to another




Capacity can be used to measure how much liquid in a bottle of juice



Weight is used to see how heavy something is



Once is OZ



Pound is lb



Ton is T



Inch is in

2,000 pounds = 1 ton

10,560 feet = 2 miles

32 cups = 2 gallons

Pint is pt

Feet is ft

Yard is yd

Mile is mi

Cup is c

Gallon is gal

Quart is qt

←

→


MEASURING IS FUN

Measuring capacity

Capacity is used in the real world by when you cook

FL OZ, CUP, PINT, QUART, GALLON, TABLESPOON

18 Cups = 64 FL OZ


Measuring Length

You use length in the real world by measuring a house when you sell it!

Inch, feet, yards, miles

16 ft = 180 in





Measuring weight

Weight is used in the real world by weighing yourself

Ounce, pound, ton

16 tons = 32,000





←

→



3 Branches of Government Video

Example of Differentiation Science:

Science Interactive Notebook Left Side Assignment Choices Weathering & Erosion
Due: Thursday, December 12, 2012-12-11

Timeline

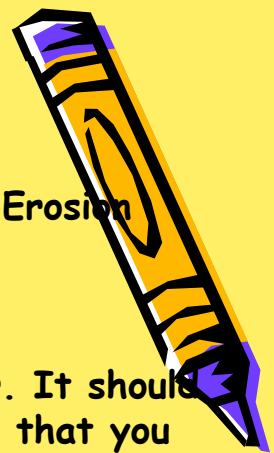
Create a 6 tab timeline foldable. You will need one white 8x11" piece of paper. It should be over a time span of at least one hundred years. You may choose the year that you start with and end with. You will draw a picture of a piece of land and then each picture should show the changes that took place because of weathering and erosion. Remember, that most changes do not happen overnight. Pictures should be drawn on the outside of the foldable and on the inside you will need to explain what is happening in your picture. You must use the words weathering and erosion.

Writing Piece

Create a 4-5 paragraph (about 1 page) writing piece. You will pretend that you are a rock and you will write about your life over the time span of 100 years. Be as creative as you would like. You must show evidence of your understanding of weathering AND erosion. Your writing may be typed and glued into your notebook or you may write directly in your notebook. If you wish to draw or print pictures to put in your notebook you may.

Picture/Acrostic Poem

Draw a picture to represent weathering and erosion. You must label your picture with weathering and erosion. Write an acrostic poem of weathering and erosion over the picture. You will want to draw your picture first. The words weathering and erosion must be written vertically. Your weathering poem must show me that you understand weathering and your erosion poem must show me that you understand erosion. You may want to go over the poems with black marker when you are finished so that you are able to see your writing.

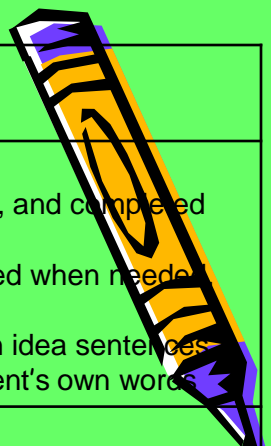


Grading Rubric

"I always have science and social studies grades with these notebooks!"

You can choose to grade every assignment or the notebook as a whole!

Math I give two grades for whole notebook!



Proficient	Basic	Beginning	Criteria
3	2	1	Right Side (Teacher Side) <ul style="list-style-type: none"> ○ The assignment including handwriting is neat, and completed with care ○ Pictures/Key ideas are complete, clear, labeled when needed and colored ○ Summary is complete (topic sentence, 3 main idea sentences, from notes, concluding sentence) and is in student's own words
6	4	2	Left Side (Student Side) <ul style="list-style-type: none"> ○ The assignment including handwriting is neat, and completed with care ○ The assignment is complete ○ The assignment is completed according to instructions given ○ The assignment is correct ○ The left side shows a thorough understanding of the right side ○ Color has been used to make the assignment neat and attractive.
3	2	1	Organization and Timeliness <ul style="list-style-type: none"> ○ Pages are attached securely, left side/right side order intact ○ Pages numbers and dates are on each page ○ The notebook assignment was completed and turned in on time
1			Creativity <ul style="list-style-type: none"> ○ Student's assignment is creative and thought provoking.
2			Evidence of Additional Thinking/Effort - WOW Factor <ul style="list-style-type: none"> ○ Student put exceptional effort into both right and left side assignments. Assignment goes above and beyond the requirements.

13 = 100, 12 = 95, 11 = 90, 10 = 85, 9 = 80, 8 = 75, 7 = 70, 6 = 65, 5 = 60, 4 = 55, 0-3 = 50
13 + WOW Factor = 102



Final Grade: _____ / 100 Teacher Comments:

Teaching Resources:



Binder

Dinah Zike's

Big Book of Science

ELEMENTARY K-6

Read, Write, Research
 find similarities and differences
 investigative experimentation
 compare and contrast
 illustrate and label
 cause and effect
 pros and cons
 hypothesize

Dinah Zike's

Big Book of Social Studies

FOR ELEMENTARY K-6

Read, Write, Research
 find similarities and differences
 investigative experimentation
 compare and contrast
 illustrate and label
 cause and effect
 pros and cons
 hypothesize
 investigate
 measure
 explain
 inquire
 define
 prove
 graph
 map
 list
 chart
 justify
 identify
 discuss
 observe
 discover
 determine
 make tables
 draw diagrams
 search the web
 sequence events
 develop a time line
 differentiate between
 who, what, when, where
 what, where, when, why/how

Dinah Zike's

Big Book of Math

ELEMENTARY K-6

Read, Write, Research
 find similarities and differences
 investigative experimentation
 compare and contrast
 illustrate and label
 cause and effect
 pros and cons
 hypothesize
 investigate
 measure
 explain
 inquire
 define
 prove
 graph
 map
 list
 chart
 justify
 identify
 discuss
 observe
 discover
 determine
 make tables
 draw diagrams
 search the web
 sequence events
 develop a time line
 differentiate between
 who, what, when, where
 what, where, when, why/how

Dinah Zike's

Notebook Foldables[®]

For Spirals, Binders, & Composition Books

Strategies for All Subjects 4th - College

CD Included

TEACHERS CHOICE AWARD
 EDUCATION MAGAZINE
 For the Classroom

ALSO RECOMMENDED FOR
 ESL/ELL

Dinah Zike, M.Ed.



What are students and parents saying?

- "I always see her notebook next to her for reference if she gets stumped."
- "...easy to understand/study for assignments."
- "... a great way of seeing what our children are doing in school."
- "All the information needed for an assignment or to study is right there and is easy to look up."



- "I think it is a wonderful learning tool."
- "The rubric style grading makes it easy for us to know how he is doing and what the expectations for state and classroom tests are."
- "What a great way to add fun to learning!"
- "This is a skill we know he needs that can carry with him all the way throughout high school and into college"



Important Tips



- WOW factor is a must!!!
- Consistency...If it is a routine it will get easier, I PROMISE!
- Assign a buddy checker for page numbers, dates, and table of contents
- Don't wait until the end of the marking period to collect to grade
- If you don't care about them, your students' won't either
- Buy a paper cutter and cut the notes yourself!
- Have students glue in any notes for morning work
- Put materials on your supply and wish list at the beginning of the year



Left Side Ideas Created:



- I have create task cards with 48 different left side ideas! By the end of the year the students have more choice in what they choose for their left side.



Questions???

