RSU 57

- Waterboro
- Alfred
- Lyman
- Line
- Shapleigh
- Massabesic Middle
- Massabesic High

Continuous Learning

LEARNING MENUS

MATH

LITERACY

SPECIALS

Printables
Week 3

RSU 57

- Waterboro
- Alfred
- Lyman
- Line
- Shapleigh
- Massabesic Middle
- Massabesic High

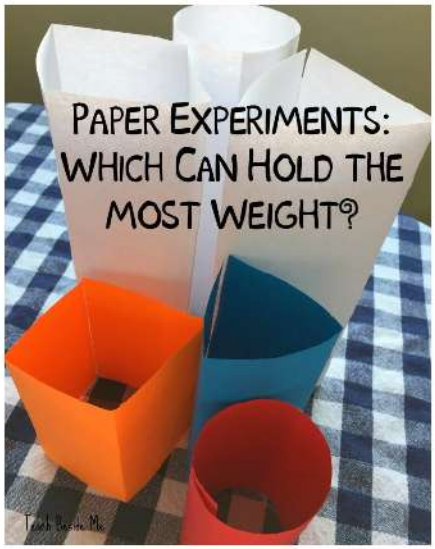
MATH

Name: _____

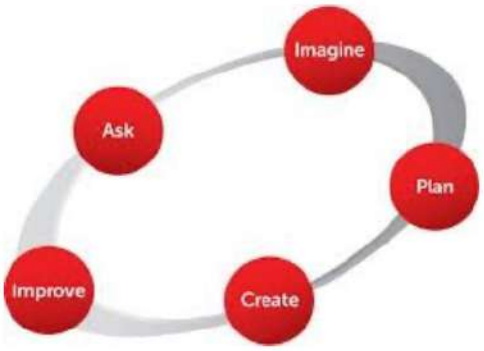
MATH BOX #1

Name: _____

Engineering Challenge



Don't forget to use our engineering design process to ask, imagine, plan, create and improve your designs!



Directions: Use any paper available to you to design and test out stands that are able to hold the weight of books on top without collapsing. Try different shape folds to see which is stronger, such as circular, triangular and rectangular (see the picture above)

Rules:

1) You may only have 4 "legs" to hold up your books
2) All 4 legs need to have the same shape fold in each experiment round
3) Count how many books each test holds up
4) Improve and retest as many times as you like
5) Show your teacher some pictures of your tests!

Here's just one example:

Name: _____

This Nest is a Mess

Spring and summer are times of bird songs and animals nesting. There are many different types of nest builders in the animal world and none do it quite as dramatically and well as the birds. Some birds don't do much but make a few scrapes on the ground in which to lay their eggs such as turkey vultures and roughed grouse, but many go to great lengths to gather or make materials, construct a safe and elaborate bowl, and pick some of the most seemingly precarious locations but rarely fail. Some birds like Osprey, Bald Eagle and Great Horned Owls will return to the same nesting location year after year if left undisturbed. Other birds like bank swallows and purple martins will nest in colonies. Tree swallows, chickadees, woodpeckers and screech owls will nest in tree cavities.
Now let's see how well you can make a bird nest.

Getting Started – It's Easy!

Where: outside or gather materials and try it inside

Materials: natural nesting materials such as dry grass, moss, lichens, small leaves, mud, small twigs, etc. (always gather from the ground don't pick live plants)
Tweezers if you want to try with them as your "bird beak"
Inside: Find a dead branch that has a few small branches close together where you can build your nest, you may want to find a way to wedge it in or stabilize so it doesn't fall over
Outside: find either a dead branch you can move near you or a live branch you can reach with a few small branches close together where you can build your nest

Length of time: 30 minute or longer (depends on materials near and how long you want to try)

***Note* This activity takes a little patience and it is okay to not have a perfect nest, birds are experts.**

Let's Begin:

Birds make this task look fairly easy with their slender and agile legs gripping on to a small perching surface, while gently weaving and tucking materials around to shape the cup and walls of the nest. It's not quite as easy as it looks.

Give it a try:
Gather up several handfuls of good nesting materials, small twigs, grasses, leaves, shredded bark, vines or other natural materials. Pick a good branch at an easy to reach height and try to construct a nest using your hands. For young children it might be a good idea for an adult to help. Be sure to not pick any nest materials that are still alive.

Try it Like a Bird:
Now attempt the same activity but this time using only tweezers to hold and manipulate the materials, or just use two fingers to be your "bird beak."

- Which way was easier? Can you think of other methods to construct a better nest? Did you use mud? Look online or in a book to see what materials different bird species use.

Name: _____

MATH BOX #4

Math Boxes

1 Solve. Show your work.

$3\frac{1}{4} + 7\frac{4}{5} =$ _____

SRB 177, 191

2 Jasmine's family is taking a bus to get to a baseball game that starts in 4 hours. The bus leaves in 1.5 hours and the trip takes 2.75 hours. Will Jasmine's family make it to the game on time?

Fill in the circle next to the best answer.

(A) They'll be a little early for the game.

(B) They'll be a little late for the game.

(C) They'll be on time for the game.

SRB 128

3 Carmen's mom is buying rice. Brand A's package contains $\frac{3}{4}$ lb. Brand B's package contains $\frac{2}{3}$ lb. Which brand has more rice?

Answer: _____

How much more? _____ pound

SRB 174, 176, 189–190

4 Solve.

a. $\frac{1}{5} * 25 =$ _____

b. $17 * \frac{3}{4} =$ _____

SRB 195–196, 199–200

5 **Writing/Reasoning** Write a number story that can be modeled by Problem 4b.

_____

_____

_____

SRB 178–180

Name: _____

MATH BOX #5

Name: _____

M.5-6

MATH BOX #6

Real Life: Take a virtual field trip to see how math and science are used in real life!

After you finish, write a reflection of your trip and share it with your teacher. Include 3 things you learned, 2 examples of how they use math and/or science in their work and 1 question you have.

Using Nature to Create New Products - bit.ly/2zl4nG9

Cars Of The Future - bit.ly/3abJMfq

Madden NFL - bit.ly/3cmlJJr

Spacecraft Operations Simulation Center - bit.ly/2RIk2ku

Name: _____

1) $3\frac{1}{4} + 6\frac{1}{2} =$

2) $2\frac{3}{5} + 7\frac{2}{3} =$

3) $3\frac{4}{5} + 9\frac{9}{10} =$

4) $4\frac{1}{10} + 8\frac{3}{5} =$

5) $2\frac{1}{4} + 4\frac{3}{5} =$

6) $5\frac{1}{5} + 6\frac{1}{2} =$

7) $3\frac{3}{4} + 8\frac{1}{2} =$

8) $6\frac{9}{10} + 9\frac{2}{3} =$

9) $3\frac{1}{4} + 7\frac{1}{2} =$

10) $2\frac{4}{5} + 8\frac{2}{4} =$

1) $7\frac{6}{7} - 4\frac{5}{7} =$

2) $6\frac{2}{4} - 3\frac{2}{4} =$

3) $7\frac{2}{5} - 4\frac{1}{5} =$

4) $8\frac{1}{2} - 4\frac{1}{2} =$

5) $5\frac{1}{2} - 2\frac{1}{2} =$

6) $8\frac{5}{6} - 2\frac{2}{6} =$

7) $9\frac{2}{3} - 4\frac{1}{3} =$

8) $7\frac{5}{8} - 3\frac{5}{8} =$

9) $7\frac{3}{4} - 3\frac{1}{4} =$

10) $9\frac{3}{4} - 2\frac{1}{4} =$

Name: _____

M.5-8

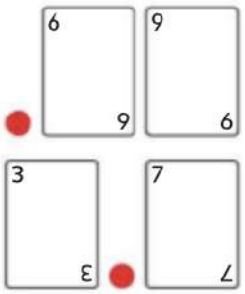
6.8 x 7.3	8.3 x 6.2	1.4 x 6.2	6.3 x 2.5
9.3 x 3.8	1.5 x 8.1	5.2 x 2.5	2.8 x 2.7
3.9 x 2.6	6.1 x 7.9	1.9 x 1.3	5.2 x 8.1

Name: _____

Decimal Domination

Materials	☐ number cards 0–9 (4 of each) ☐ 2 counters per player ☐ 1 coin ☐ calculator (optional)
Players	2
Skill	Predicting decimal products; multiplying decimals
Object of the Game	To get the most points.

Directions



1. Shuffle the cards and place them number-side down in a pile.
2. Players take turns flipping a coin. Heads means to create the largest possible product. Tails means to create the smallest possible product.
3. After the coin flip, each player draws 4 cards and uses them to create 2 numbers, at least one of which is a decimal. Players use counters to indicate decimal points.
4. Players calculate their product. The player whose product is larger or smaller (depending on the coin flip) gets a point.
5. Players may use a calculator to check their partner's products.
6. Play continues until one player reaches 5 points. Players may have to reshuffle used cards and add them back into the deck.

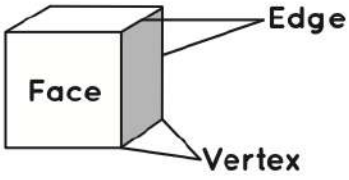
Example

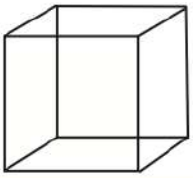
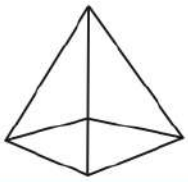
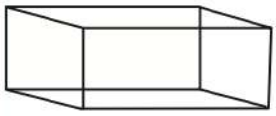
Naomi flips a coin that lands on tails, so the goal is to make the smallest product. Naomi and her partner, Alex, each draw 4 cards. Naomi draws 4, 1, 0, and 8. Alex draws 6, 9, 7, and 3. Naomi makes the problem .14 * .08 and calculates the product to be 0.0112. Alex makes the problem .69 * 3.7 and calculates the product to be 2.553. Naomi has the smaller product, so she gets a point.

Name: _____

3-D Shape Scavenger Hunt Activity

Directions: Find two real-world examples for each shape from your classroom, school, or home. How many faces, vertices, and edges does each shape have? What 2-D shape or shapes does your 3-D shape remind you of?



3-D Shape	Real-World Example # 1	Real-World Example # 2	Attributes (What does it look like?)
cube 			_____ faces _____ vertices _____ edges It reminds me of a _____ _____.
cone 			_____ faces _____ vertices _____ edges It reminds me of a _____ _____.
square-based pyramid 			_____ faces _____ vertices _____ edges It reminds me of a _____ _____.
rectangular prism 			_____ faces _____ vertices _____ edges It reminds me of a _____ _____.

Name: _____

M.5-11

We've probably all heard that famous story about how Sir Isaac Newton 'discovered' gravity by observing an apple falling from a tree above his head. What everyday experiences can you think of that can be explained by gravity? Make a list. For example, when a cat pushes a bottle cap off a tabletop, why does it land on the kitchen floor? Gravity! Choose three to five of your favorite examples of gravity at work (like that pesky cat pushing things off the table). Turn these examples into short comicstrip to teach someone else about gravity.

Template: bit.ly/2VfiBfn

Name: _____

What are some of the things aerospace engineers do in their jobs? You probably already know that aerospace engineers design and create parachutes. Make a list of all of the other projects you can think of that might involve the work of an aerospace engineer. Meet Victoria Garcia, an aerospace engineer who works for NASA by watching this 3-minute clip. What surprised you the most about her work? What kinds of things do you think Victoria had to learn in order to become good at her job? What part of her job would interest you the most and why?

Video: to.pbs.org/2RHPD5G

RSU 57

- Waterboro
- Alfred
- Lyman
- Line
- Shapleigh
- Massabesic Middle
- Massabesic High

LITERACY

Name: _____

L.5-1

Name: _____

Name: _____

Name: _____

L.5-4

Name: _____

Name: _____

L.5-6

Name: _____

Social Distancing Journal: Keep a journal of what you do each day and your personal thoughts as you "social distance."

Name: _____

L.5-8

Westward Expansion Vocabulary

*Choose **5** Westward Expansion vocabulary words and sketch a picture to represent each word.*

Word:
Word:
Word:
Word:
Word:

Name: _____

Westward Expansion Vocabulary

1. **expansion** - the act of increasing (something) in size or volume or quantity

1. **pioneer** - (noun) - one of the first settlers in a new territory
   or
   (verb) - develop or be the first to use

1. **manifest destiny** - the belief that the United States was destined to stretch across the continent from the Atlantic Ocean to the Pacific Ocean

1. **territory** - a geographical area belonging to or under the rule of a government

1. **frontier** - a wilderness at the edge of a settled area of a country

1. **homestead** - is a house and surrounding land owned by a family — often, it includes a farmhouse.

1. **transcontinental** - extending or going across a continent

1. **forty-niners** - a prospector in the California gold rush of 1849

1. **uncharted-** an area of land or sea not yet mapped or surveyed.

1. **colony-** A territory ruled by another country

Name: _____

L.5-10

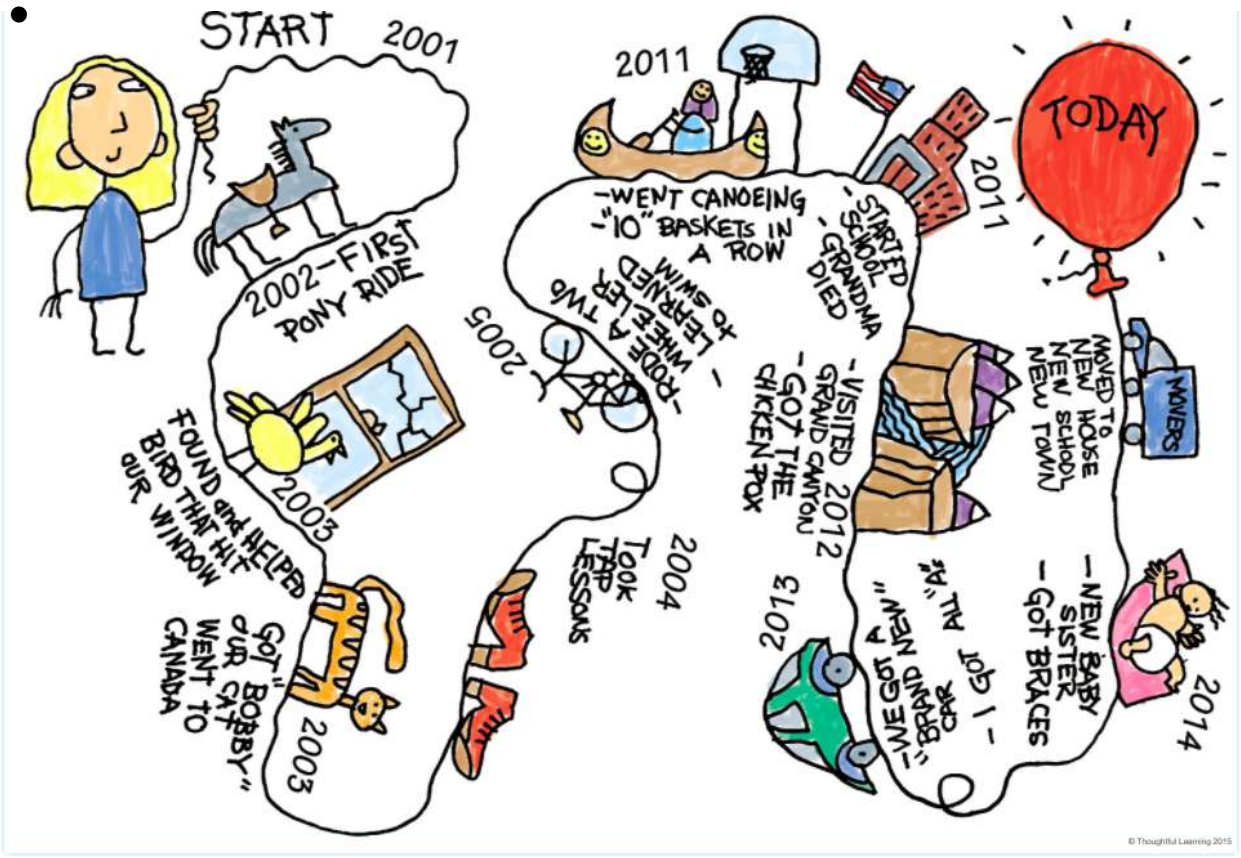
After going on each “field trip,” explain the **challenges** people may have faced in each area during Westward Expansion.

Mississippi River:
Oregon Trail:

Name: _____

Writing Prompts

- **"Who You Are" Create a map of your life- your experiences, places, emotions, family, etc. (See example below.)**



A life map is a visual time line. It traces key moments in your life from the time you were born until the present day. The events and experiences you draw in your life map can make great starting points for writing topics, particularly for personal writing.

Name: _____

L.5-12

- **Choose a villian from a movie or book. Pretend this villain has the day off and create a “To Do” list for them. What kinds of things would they do?**

RSU 57

- Waterboro
- Alfred
- Lyman
- Line
- Shapleigh
- Massabesic Middle
- Massabesic High

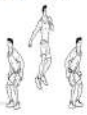
SPECIAL S

Name: _____

Luck of the Dice

Directions:

- Find a die or pair of dice. You can play with one die, just choose six of the below exercises. OR play with two dice, and use the entire table.
- Roll your dice, what did you roll? If it was a 2 and a 5, you can choose what to complete; find the number 2 row and match it up with the number 5 column, that box has 10 squats, or find the 5 row and the 2 column, that box has 20 mountain climbers, you get to choose!

	1	2	3	4	5	6
1	20 Jumping Jacks 	5 Push-ups	20 second plank 	5 Jump and turn 	10 tuck jumps 	Bear Crawl 12 "steps" 
2	20 alternating walking lunges 	20 sit ups 	20 second wall sit with knees at 90 degrees	5 burpees	10 squats 	10 second side plank- both sides 
3	30 seconds of high knees	20 seconds of arm circles (forward and back)	Reach for the sky and count to 20	10 Superman 	Sit and reach for your toes, hold for 20 seconds.	Butterfly stretch for 20 seconds
4	20 Soldier Walks 	30 seconds of flutter kicks (lay on back and "swimmer feet")	30 seconds of butt kicks	10 Star Jumps (Don't forget, "I'm a STAR")	20 sec. each side, arm across your chest (palm up)	10 hip bridges 
5	30 seconds jog in place	20 mountain climbers	20 skier jumps (side to side)	20 bell jumps (forward and back)	10 high knee skips	5 single leg jumps, both sides
6	30 seconds of invisible jump rope	10 sumo squats (toes out)	10 Frog jumps	Crab walk 10 steps forward and back	30 second wall sit with knees at 90 degrees	12 Burpees

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

Name: _____

What song did you listen to?

Was there someone singing?

Describe the ensemble (group of musicians) that performed the song. What instruments did you hear? Was it a large group or a small group?

Circle the tempo/speed of the song:

Fast

Medium

Slow

What did the song make you think of? How did it make you feel?

Anything else you would like to share about the song you chose?

Name: _____

Playing a Known Song on Water Glasses

For this activity, you will be using 3 water glasses/bottles to play either the song, "Hot Cross Buns" or "Mary Had a Little Lamb." If you want, try playing the song on different glasses, directions below. ***Send your music teacher a video of your work, we would love to see it!***

Materials:

- 3 water glasses/glass bottles/wine glasses
- A metal or wooden spoon
- Water

Fill the first glass with a little water, fill the second glass about halfway, and fill the third glass almost full of water.

Water Glasses

Gently tap on the side of each glass to make a sound. Try playing "Hot Cross Buns" or "Mary Had a Little Lamb" on the glasses. You can experiment with more or less water in your glasses to make it sound more in tune. Check out the videos below for other examples.
https://www.youtube.com/watch?v=t26-nbRs2KY

Glass Bottles

Fill the bottles the same way as the water glasses. Gently blow straight over the top of the bottles to make the sound. Try playing "Hot Cross Buns" or "Mary Had a Little Lamb" on the glasses. Experiment with what direction you are blowing to get the best sound. Also, you can experiment with more or less water in the bottles to make it sound more in tune. Check out the example below.
https://www.youtube.com/watch?v=G0RF7UcyJO0

Wine Glasses

Fill your wine glasses the same way as the water glasses. Gently wet your pointer finger and shake off the excess water. Gently run your pointer finger around the rim of the wine glass. It should make a light, ringing sound. Try playing "Hot Cross Buns" or "Mary Had a Little Lamb" on the glasses. Experiment with adding a very slight amount of pressure to make the best sound. Also, you can experiment with more or less water in the glasses to make it sound more in tune. Check out the example below. This is the toughest one to do, so if you can't figure this one out, try one of the other ways!
https://www.youtube.com/watch?v=NJ-O_nfOhDY

Name: _____

S.5-10

SPECIALS BOX #10

5

Name: _____

Name: _____

Let's Take a Mindful Walk!

Mindful walks are good for our bodies and emotions. They are a great way to take a break from the screen and focus on the moment. Mindful walking is a great tool to have in your emotional tool kit. During a mindful walk we pay attention to what is going on around us, not the thoughts in your head. Mindful walking is great because you can do it inside, in nature, or in the city. Pick a day this week to take a mindful walk.

Start by noticing your body, use deep, calming breaths to focus your attention. Finish this sentence, "My body feels....."

Walk forward with slow, steady steps. Notice how your feet feel on the ground.

- What do you see as you walk? Can you name four things?
- What do you hear on your walk? Can you name three things?
- What do you feel on your walk? Can you name two things?
- What do you smell on your walk? Can you name one thing?