

ACTIVITY GUIDE WEEK 3 - EXPLORE, DESIGN, CREATE GRADES: 3-5

Hello Parent/Guardian,

We hope you are doing well. Here is a guide full of fun activities for your child to try out this week at home! This educational guide is meant to be engaging and fun for your child. Complete the tic-tac-toe board with them on the front sheet, or challenge them to complete each of the activity squares. Included you will find: stories to read; letter, and sound activities; science and art activities; and some great math graphing practice. This week's theme is parts and pieces. We hope you enjoy your activity guide for week 3.



In partnership with









Grades 3-5 Week 3: PARTS AND PIECES

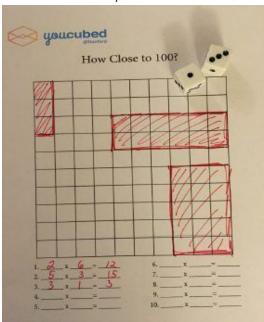
STEM: Invent a new toy Use cardboard and tape (or any supplies you can find!) to create a new toy.	READ: Choose 1: - A real book about a machine - A fiction book about a machine - One of the stories in this packet	SOUNDS (Phonemic Awareness): Final Phoneme Pie *Phoneme = sound
WRITE: -Draw an imaginary toy. Label each part. Describe in writing what each part does. What might happen to the toy if one part is missing?	FREE SPACE	LETTERS (Phonics): Word Ladders - Choose one page
MATH: Choose 1 How Close to 100? Penny Collection	SCIENCE: Find something that is broken. Take it apart to identify all of its pieces. Develop (create) a model to explain how all of the parts work together. Explain what happens when a piece is broken. What questions do you have about the parts?	LANGUAGE: Find something you love to play with. Hide it from someone. Tell them about it using describing words. Tell what each part does. See if the other person can guess your toy!

Math How Close to 100?

Task Instructions

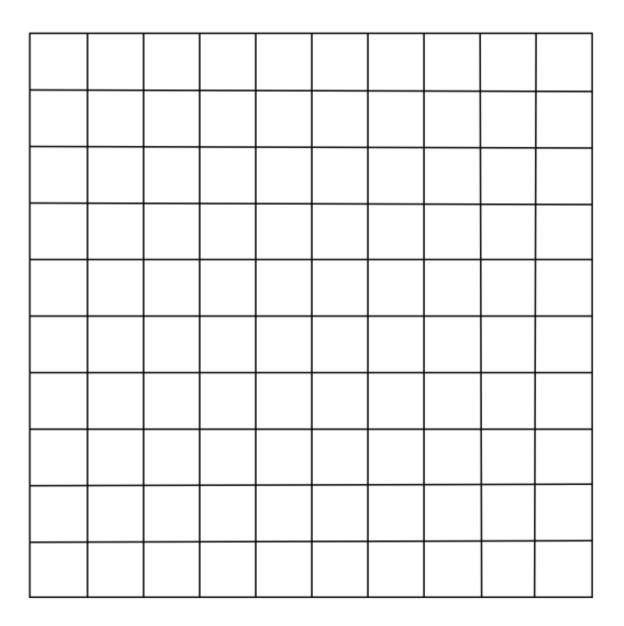
- This game is played in partners. Two players share a blank 100 grid. The grid is on the next page.
- The first partner rolls two number dice. There is a dice you can make in this packet.
- The numbers that come up are the numbers the player uses to make an array on the 100 grid.
- They can put the array anywhere on the grid, but the goal is to fill up the grid to get it as full as possible.
- After the player draws the array on the grid, she writes in the number sentence that describes the grid.
- The second player then rolls the dice, draws the number grid and records their number sentence.
- The game ends when both players have rolled the dice and cannot put any more arrays on the grid.
- How close to 100 can you get?

Here is an example:

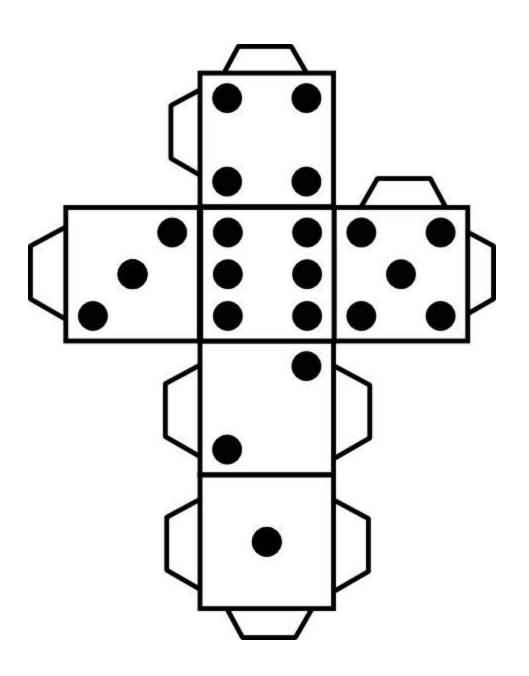




How Close to 100?



1.	•	X	=		





Penny Collection

Consider a collection of pennies with the following constraints:



When the pennies are put in groups of 2 there is one penny left over. When they are put in groups of three, five and six there is also one penny left over. But when they are put in groups of seven there are no pennies left over.

How many pennies could there be?



Hundred Chart

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

Use Partial Products to Multiply

Materials: Multiplication Equations Board (2 x 1-digit or 3 x 1-digit)

- 1. Work with a partner. Choose a line of four problems from the board (vertically, horizontally or diagonally) that you will both solve.
- 2. Solve each problem by multiplying each digit of one factor by each of the digits in the other factor, taking into account the place value of each digit.
- 3. Add the partial products to find the total product.

Examples:
$$\begin{array}{r}
 39 \\
 x \underline{4} \\
 120 (4 \times 30) \\
 \underline{36} (4 \times 9) \\
 \hline
 156 \\
 \end{array}
 \begin{array}{r}
 746 \\
 \underline{x} \underline{5} \\
 3500 (5 \times 700) \\
 \underline{200} (5 \times 40) \\
 \underline{30} (5 \times 6) \\
 \underline{3,730}
 \end{array}$$

4. Check your work with your partner. Then repeat with another line of problems.

28 x 4	64 x 5	27 x 6	82 x 7
8 x 23	9 x 34	3 x 42	6 x 36
15 x 9	18 x 4	22 x 4	31 x 4
7 x 33	4 x 82	3 x 44	6 x 32

212 x 4	126 x 5	232 x 6	148 x 7
8 x 213	9 x 324	3 x 344	6 x 235
137 x 9	215 x 5	262 x 4	131 x 7
7 x 124	8 x 225	4 x 145	2 x 623

Phonemic Awareness



Phoneme Manipulating

PA.020

Final Phoneme Pie



Objective

The student will manipulate phonemes in words.



Materials

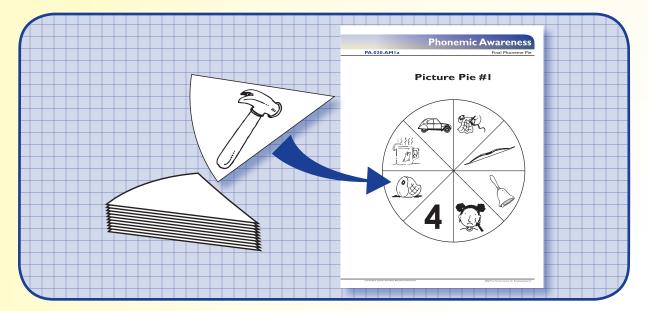
- ▶ Picture Pie (Activity Master PA.020.AM1a PA.020.AM1b) Names of pictures are listed below instead of on Activity Master to conceal from students. Picture Pie #1: sew, bow, bell, scar, four, ham, tea, car Picture Pie #2: bee, two, pen, ten, cow, jug, hand, tie
- Pie pieces (Activity Master PA.020.AM2a PA.020.AM2b) Cut pieces out and laminate. Add velcro to gameboards and pieces to assure placement.



Activity

Students manipulate final phonemes and match new word to pictures.

- 1. Place pie pieces in a stack face down at the center. Provide each student with a different Picture Pie.
- 2. Taking turns, students select the top pie piece from the stack.
- 3. Say the name of the picture on the pie piece, delete final phoneme, and say the new word (e.g., "hammer" becomes "ham").
- 4. Find the picture of the new word ("ham") on the Picture Pie and place the pie piece ("hammer") on top of it. If picture of the new word is not on student's game board, return pie piece to the bottom of the stack.
- 5. Continue until all pie pieces are placed.
- 6. Peer evaluation

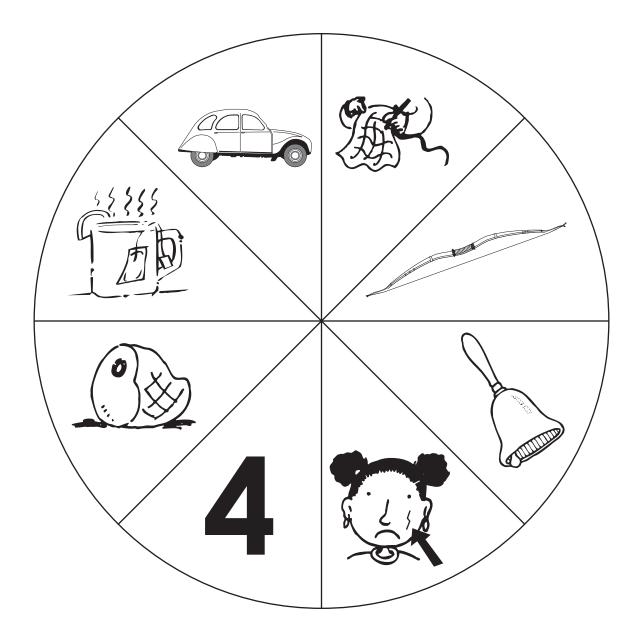




Extensions and Adaptations

Swap game boards and repeat activity.

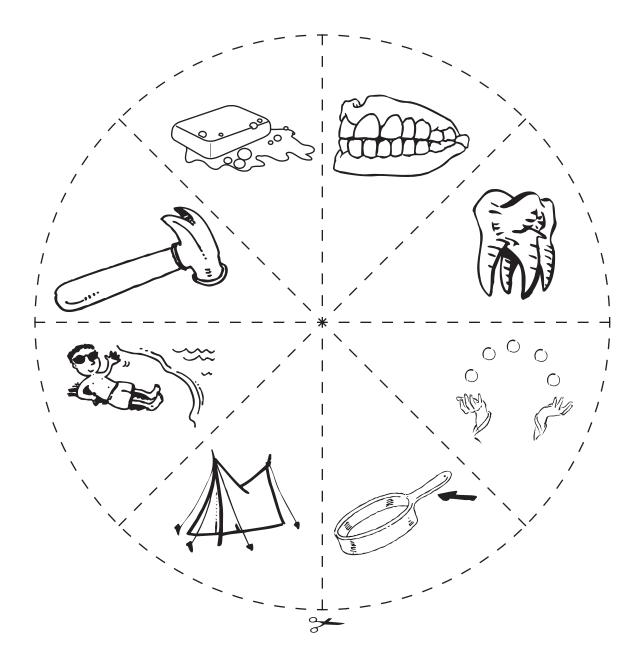
Picture Pie #1



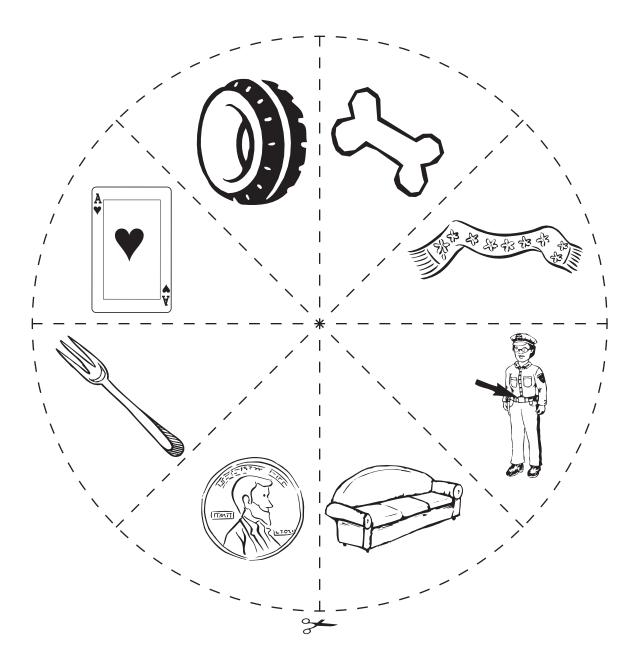
PA.020.AMIb

Picture Pie #2

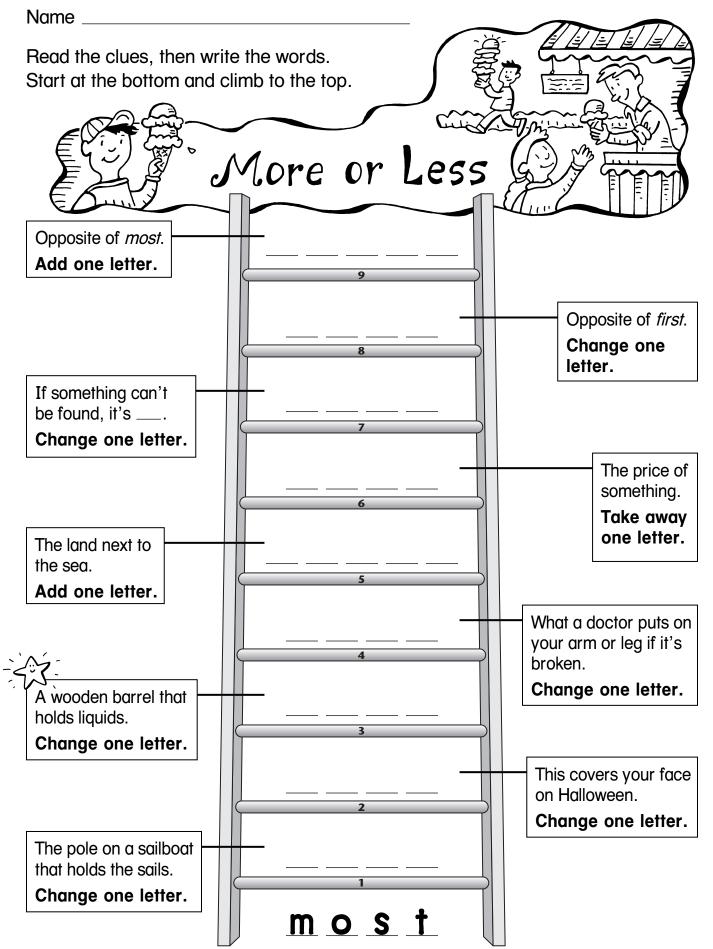




teeth, tooth, juggle, handle, tent, beach, hammer, soap



bone, scarf, belt, couch, penny, fork, card, tire



Adding Up Pennies





Do you have a piggy bank for saving money? How many pennies, or one-cent pieces, do you have? Some people have lots of pennies because they rarely use them. Some countries, too, rarely use pennies. In addition, it can cost more to make pennies than they are worth. For these reasons, some countries are phasing out small coins.

In 2012, Canada

began to phase out pennies. This process helps the Canadian government save about \$11 million dollars a year. But what would happen if you needed pennies? Suppose you were visiting Canada, and you wanted to buy a bottle of water and a key chain. You would owe the store \$5.92. Because you were paying with cash, though, your total would be rounded down to \$5.90. No pennies would be needed.

If you were paying with a credit card or check, however, the amount would not be rounded. Instead, people who use credit cards and checks pay the exact

amount. Businesses in Canada can accept pennies, but they cannot give pennies back to customers.

The process of making coins is called minting. Many countries have their own mint, or place that makes coins. That's because most countries have their own system of currency, or money. Coins are made by melting metals. The liquid is poured into sheets and cooled. A metal stamp is used to cut out the coins. Then they're stamped with images. This process is called striking. For example, in the United States, the mint strikes Abraham Lincoln's head on pennies. After striking, coins are inspected and counted. Finally, trucks take them to banks.

Some countries are phasing out more than pennies. Australia is one country that is becoming a cashless society. A cashless society uses no paper money or coins.

Despite these examples, the United States is not

planning to phase out pennies. So for now, keep saving pennies. Soon, you'll save enough to buy something special.



Young Inventors: Chester Greenwood





Ear protectors are designed to keep people's ears safe. For example, workers who use loud machines often wear special ear protectors to save their hearing.

The original ear protectors, however, were designed to protect people's ears from the cold. In fact, the first pair was invented more than 150 years ago by Chester Greenwood, a fifteen-year-old boy from Maine.

It's very cold in Maine during the winter. Chester wanted to ice skate, but his ears hurt too much. First, Chester wrapped a wool scarf around his head, but that didn't work. The wool made his ears itch.

Next, Chester formed two loops of wire to fit around his ears. Then he asked his grandmother to sew cloth and fur over the loops. These ear warmers solved his problem.

Soon, Chester's friends and neighbors wanted a pair of ear warmers like his. His grandmother and mother began to sew ear warmers for their friends and

neighbors. Then Chester changed the design. He added a flat piece of steel that went over the top of the head to hold the ear warmers in place. Soon, Greenwood's Ear Protectors were selling in several nearby states.

In 1877, Chester patented his design. Later, during World War I, he supplied ear warmers to US soldiers. At that time, soldiers were spending long hours outdoors, where it was very wet and cold. Chester's invention helped them protect their ears.

Although he is best known for inventing ear warmers, Chester also patented many other inventions. These include a wide-bottom tea pot, a rake with steel

teeth, and a machine that drills holes in wood.

In 1997, the state of Maine named December 21, the first day of winter, as Chester Greenwood Day. Each year on that day, people in his home town hold a parade and a coolest-ears contest to honor Chester Greenwood, their young inventor.



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Young Inventors: Caine Monroy





Caine Monroy needed something to do. So 9-year-old Caine created arcade games with cardboard boxes at his dad's used-car parts shop in Los Angeles, California.

Nirvan Mullick was Caine's first customer. Nirvan was so excited by Caine's creativity and imagination that he asked Caine's father if he could make a movie about the arcade. Nirvan invited

the city of Los Angeles to play Caine's games. Hundreds of people came, which surprised Caine.

Soon people of all ages began creating games with cardboard and other materials. So many people were excited by Caine's invention that he and Nirvan created the Imagination Foundation, an organization that encourages and funds creativity in kids. The Imagination Foundation is doing this in several ways.

Caine's Arcade for Schools is a program that works with teachers and schools to bring hands-on learning to classrooms. Teachers use the film to encourage students

to use their imagination to create something. This program also allows teachers to talk with each other about what has worked with their students.

Another program, Imagination Chapters, creates spaces around the world for creative learning. The Imagination Foundation gives money to help pay for meeting places, activities, and supplies.

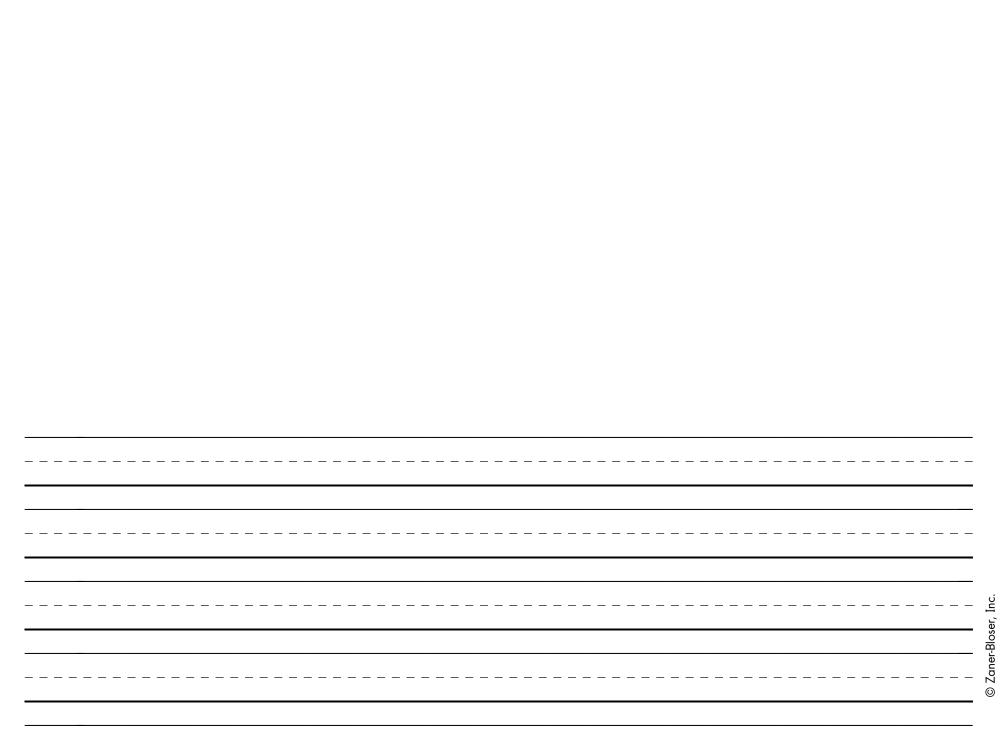
Finally, The Annual Cardboard Challenge is open to kids of all ages. Held in October each year, schools, families, and other groups around the world host a Challenge event. Each group builds creations with cardboard and other materials. Then everyone gets together to share the projects. In October 2013, 76,936 people participated. Kids from 43 countries built cardboard creations.

Caine Monroy has encouraged millions of people

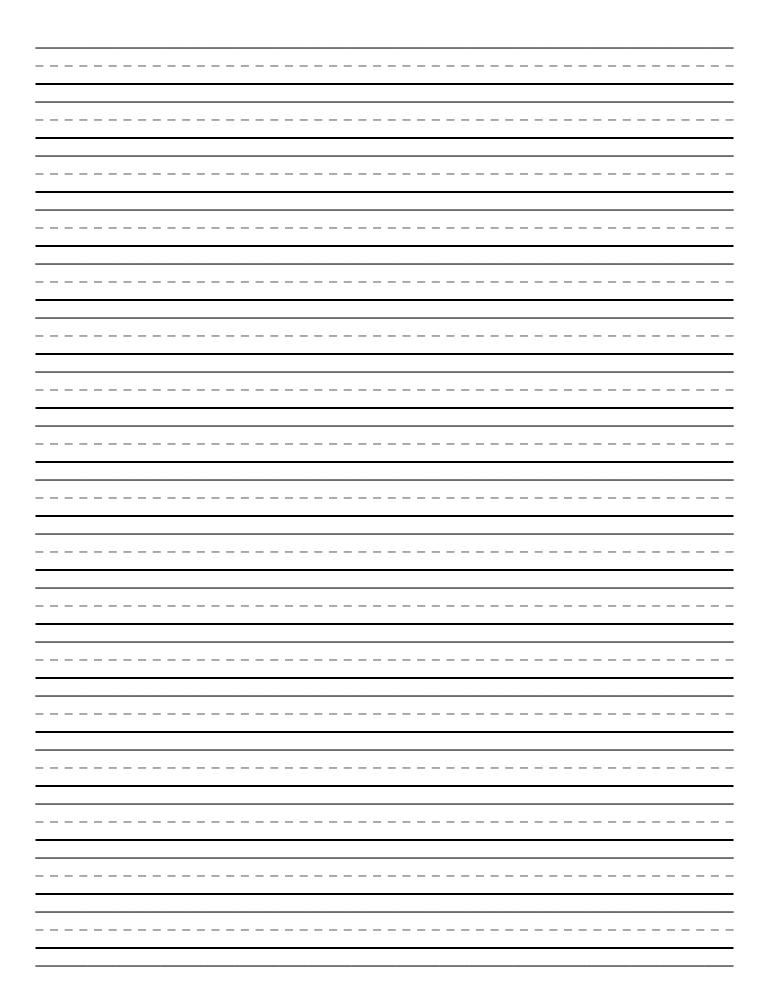
around the world to use their imagination to invent something. Using his imagination helped him change the world.







Grade 2 Story-Writing Grid Practice Master 142



Credits

Math:

Youcubed.org

k-5mathteachingresources.org

Stories: https://www.readworks.org/

Sounds: https://fcrr.org/resources/resources_sca_k-1.html

Letters: https://fcrr.org/resources/resources_sca_k-1.html

STEM:

https://drive.google.com/drive/folders/12OQtEcSkhsxLgiXAltn8kxJFwq8dbKB7?usp=sh

aring

Science: https://padlet.com/jessicaashley/Wonderfilled_Elem_Science