STUDENT FIRST & LAST NAME:_____

SCHOOL:_____ **GRADE:**_____ **ID# / LUNCH#**_____

Christina School District Assignment Board

Grade Level: 1

Week 11 (6.15.20)

	Day 1	Day 2	Day 3	Day 4	Day 5
ELA	Read *Squirrels Build Nests.* Write to tell what you learned.	Read *Squirrels Build Nests* again to increase fluency. Answer questions 1-4.	Read *Squirrels Build Nests* again to increase fluency. Answer questions 5-8.	Nouns are words that identify people, places, and things. Circle all of the nouns in *Squirrels Build Nests.*	Start a Summer Bucket List with all of the fun activities you want to do this summer!
Math	**More Swimming Penguin Problems Page 1** *Please complete the attached activity called More Swimming Penguin Problems Page 1*	**More Swimming Penguin Problems Page 2** *Please complete the attached activity called More Swimming Penguin Problems Page 2*	**More Diving Penguin Problems Page 1** *Please complete the attached activity called More Swimming Penguin Problems Page 1*	**More Diving Penguin Problems Page 2** *Please complete the attached activity called More Swimming Penguin Problems Page 2*	**Adding Doubles & Neighbors** *Please complete the attached activity called Adding Doubles & Neighbors*
Science	**Inventions and Engineering:** Think about, draw and label your best answer to the following: What kinds of inventions do you think we will have when you are a grown up?	**Save Bobby (part 1):** The story of every invention is filled with trying and failing again and again and again. But each time inventors learned from their mistakes and were not afraid to try again and again. You are going to be an inventor and try to invent a way to "Save Bobby": Activity: Get your supplies. You will need bobby pins or paper clips, scissors, and paper, plus the attached handout.	**Save Bobby (part 2):** Draw an idea for your "Bobby Dropper" (something to help the bobby pin or clip fall much slower". Write or label why you think it will work. Take a new piece of paper and make your first Bobby Dropper. You may cut, fold, or tear. Then slide on a bobby pin (clip). Test your invention. Hold a Bobby Dropper in one hand and your Fall Fast in the other. Make sure the pin/clip is at the top. You	**Save Bobby (part 3):** Make and test another Bobby Dropper. Make sure to use new paper because you want to keep your original one. Test the new Bobby Dropper against the Fall Fast AND the original Bobby Dropper to see which one works better. Test 3 times, holding your invention with the pin/clip starting in 3 different orientations. Complete 2nd handout	**Edison Tried and Tried Again:** Read the article. Read as much as you can on your own, but you may ask for help if needed. Draw and write something you learned from the article that you want to remember.

STUDENT FIRST & LAST NAME:_____

SCHOOL:_____ **GRADE:**_____ **ID# / LUNCH#**_____

Christina School District Assignment Board

		Slide bobby pin (or paper clip) onto a piece of paper. Carefully crumple paper around clip. You have made a "Fall Fast". Hold it up as high as you can and drop it. It should fall fast. Think of things that float or fall slowly. Draw a picture of 2-3 things, then think and write: What do you notice about these things? What do you see that might help them float or fall, slowly? (Hint: examples might include parachutes, leaves, dandelion seeds, etc.) **[Keep Fall Fast for next part]**	may want a helper to be your "Expert Eye" and watch the drop. Pay attention to how the Bobby Dropper drops. Notate what happens on your handout. If you worked with a helper, make sure to switch so you can also see the drop. Circle the path it takes on the handout. Now test again, but make sure to hold the Bobby Dropper so the pin/clip is NOT straight up. Repeat investigation and circle path on handout. Try a 3rd time, holding it yet another way. Think and write/draw: Did something fail in one of your drops? What did you learn from that? **[Keep Fall Fast and Bobby Dropper for next part]**	with new Bobby Dropper. Draw/write on back: Which one worked better? Why do you think that? Is there something in real life that is similar to your Bobby Dropper that gave you that idea? Congratulations! You are an inventor!	
Social Studies	Complete Activity 1 from the document titled, "Goods and Services"	Review Activity 1 from the document titled, "Goods and Services." Make sure you understand Goods and Services.	Complete Activity 2 from the document titled, "Goods and Services"	Review Activities 1 and 2 from the document titled, "Goods and Services"	Complete Activity 3 from the document titled, "Goods and Services"

STUDENT FIRST & LAST NAME:_____

SCHOOL:_____ **GRADE:**_____ **ID# / LUNCH#**_____

Christina School District Assignment Board

Week 12 (6.22.20)

	Day 6	Day 7	Day 8	Day 9	Day 10
ELA	Read *Mini Golf.* Write to tell what you learned.	Read *Mini Golf* again to increase fluency. Answer questions 1-5.	Read *Mini Golf* again to increase fluency. Answer the next question set of 1-5.	Make an advertisement for your own mini golf course!	Finish your Summer Bucket List and have a safe and healthy summer!!
Math	**Play Color 5 Fraction Game!** *Please play the attached game, Color 5 Fraction Game! Play several times.* *Who won? What strategies did they use? Can you create your own rules?*	**Play Number Line Race to 20 (or 10)!** *Please play the attached game, Number Line Race to 20 (or 10)! Play several times.* *Who won? What strategies did they use? Can you create your own rules?*	**Play Color 5 Fraction Game!** *Please play the attached game, Color 5 Fraction Game! Play several times.* *Who won? What strategies did they use? Can you create your own rules?*	**Play Number Line Race to 20 (or 10)!** *Please play the attached game, Number Line Race to 20 (or 10)! Play several times.* *Who won? What strategies did they use? Can you create your own rules?*	**Play Any Game!** ***Make a plan to play games this summer! You can use any of the ones sent home or try a new one like Uno or Sorry! You can even make up your own! Have Fun!***
Science	**Making Rock Candy:** Enjoy the attached investigation. What do you notice? What do you observe? What do you wonder?	**The Pepper and Soap Experiment:** Enjoy the attached investigation. What do you notice? What do you observe? What do you wonder?	**How to Make Invisible Ink:** Enjoy the attached investigation. What do you notice? What do you observe? What do you wonder?	**Make a Walking Water Rainbow:** Enjoy the attached investigation. What do you notice? What do you observe? What do you wonder?	**Make a Lava Lamp:** Enjoy the attached investigation. What do you notice? What do you observe? What do you wonder?
Social Studies	Review Activities 1, 2, & 3 from the document titled, “Goods and Services”	Complete Activity 4 from the document titled, “Goods and Services”	Review Activities 1, 2, 3, & 4 from the document titled, “Goods and Services”	Complete Activity 5 from the document titled, “Goods and Services”	Review Activities 1, 2, 3, 4, & 5 from the document titled “Goods and Services” AND Have a happy, healthy, and safe summer!

Squirrels Build Nests

by Rachelle Kreisman

Credit: Dendroica cerulea, CC BY 2.0

Squirrels live in trees. They build nests in the summer. The outside of their nest is made of twigs. The inside is made of grass and leaves. Those make the nest soft.

The nest is built high in the tree. Squirrels sleep in their tree nests. Most of these nests hold one or two squirrels.

Squirrels also build cold-weather nests called dens. Those nests are inside tree trunks. The dens keep squirrels warm in the winter.

Name: _____ **Date:** _____

1. Where do squirrels build their homes?

A. in trees

B. on the ground

C. in bushes

2. This text describes where squirrels live. What do we call a squirrel's summer home?

A. a nest

B. a burrow

C. a cave

3. Squirrels build nests in the summer. In the winter, squirrels build their cold-weather nests called dens inside of a tree trunk. What does this information tell us about the inside of a tree trunk?

A. The inside of a tree trunk blocks wind and cold better than a squirrel nest.

B. A squirrel nest is warmer and safer than the inside of a tree.

C. Most trees do not have space inside for a squirrel den.

4. What is "Squirrels Build Nests" mostly about?

A. the characteristics of squirrel homes

B. how squirrels build a den

C. what squirrels eat

5. What do squirrels do in their tree nests?

In their nests, squirrels

6. What did you learn from "Squirrels Build Nests"?

7. Class Discussion Question: Squirrels build nests for the summer and nests for cold weather. Use information from the text to help you compare and contrast these two types of nests.

8. Draw a picture of a squirrel nest in the summer.

Mini Golf

by ReadWorks

You can play mini golf with parents and friends!

Are you looking for a fun summer activity? Try mini golf! Mini golf is a smaller version of golf. In mini golf, you use a club to hit the golf ball. A club is a long metal or plastic stick with a head at the end. The goal of mini golf is to try to hit golf balls into holes. Many mini golf courses have obstacles that get in the way of the holes, so watch out!

There are many mini golf courses in Florida. One mini golf course is called Smugglers Cove. This mini golf course has waterfalls and pirate ships. It also has real live alligators!

Here is an animal-themed mini golf course.

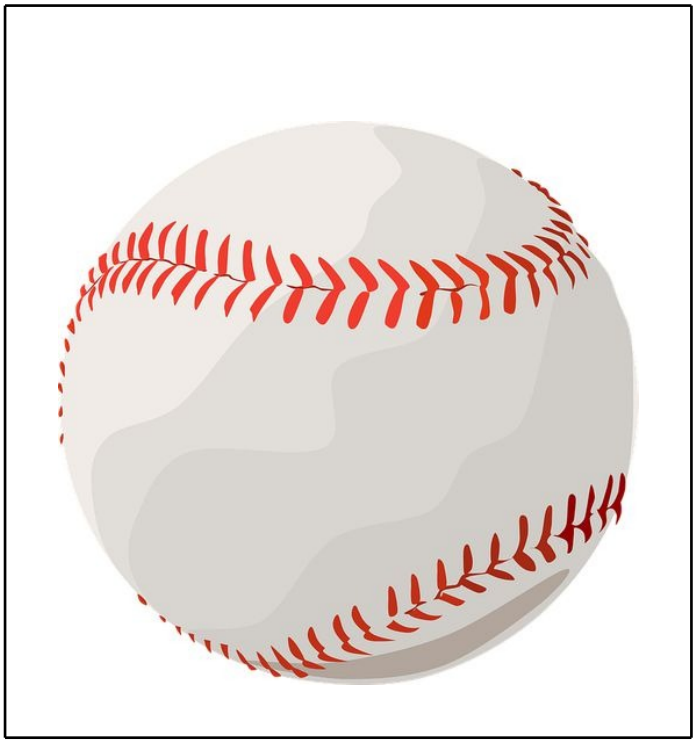
Name: _____ **Date:** _____

These pictures show a hole:

1. Please say the word **hole** out loud.

2. Please write the word **hole**.

3. Look at the pictures below. Which picture shows a **hole**?

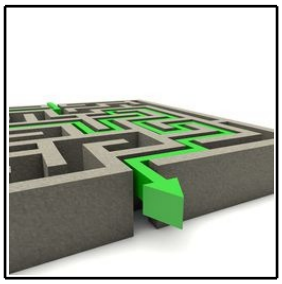


4. Draw a picture of a **hole**.

5. Create a sentence that uses the word **hole**. Say the sentence out loud with a partner or write it down.

Name: _____ **Date:** _____

These pictures show a goal:



1. Please say the word **goal** out loud.

2. Please write the word **goal**.

3. Look at the pictures below. Which picture shows a **goal**?

4. Draw a picture of a **goal**.

5. Create a sentence that uses the word **goal**. Say the sentence out loud with a partner or write it down.

Summer Bucket List

○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____
○ _____	○ _____

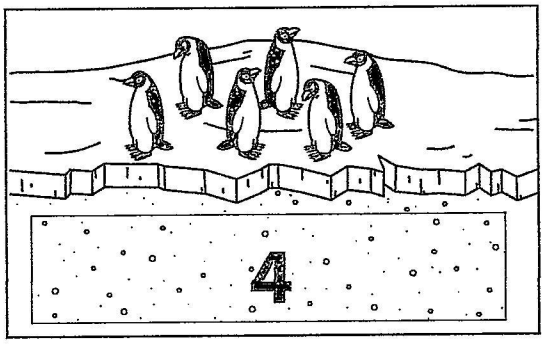
NAME | DATE

More Swimming Penguin Problems page 1 of 2

Read and solve each of the problems below. Show your work.

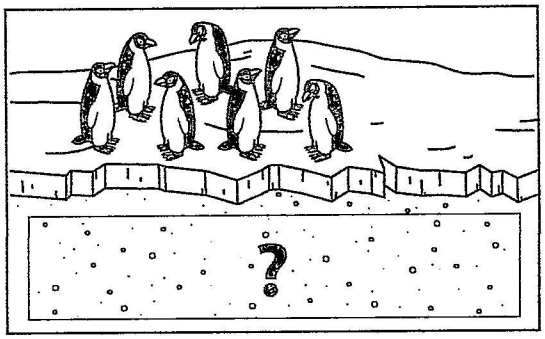
- Use numbers, pictures, or words to help solve the problem.
- Fill in the missing number in the equation when you find the answer.

1 Six penguins are on the ice. Four penguins are in the water. How many penguins in all?



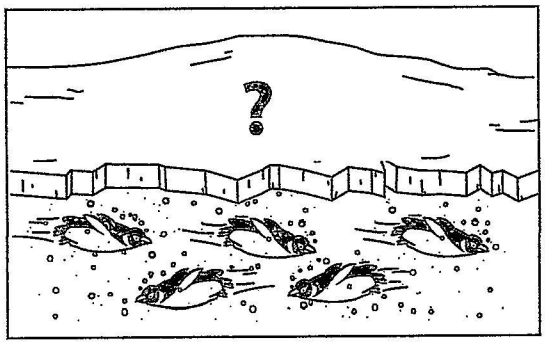
6 + 4 = ☐ penguins

2 There are 7 penguins on the ice and 11 penguins in all. How many penguins in the water?



7 + ☐ = 11 penguins

3 There are 5 penguins in the water and 15 penguins in all. How many penguins are hiding behind the hill?



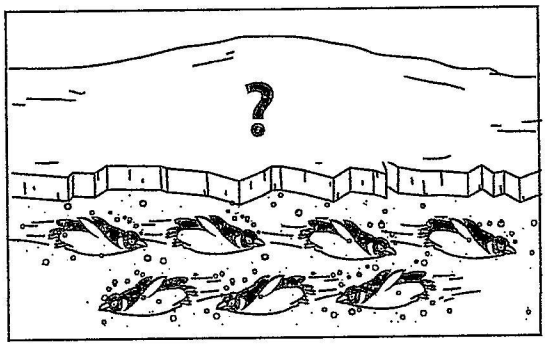
☐ + 5 = 15 penguins

(continued on next page)

NAME | DATE

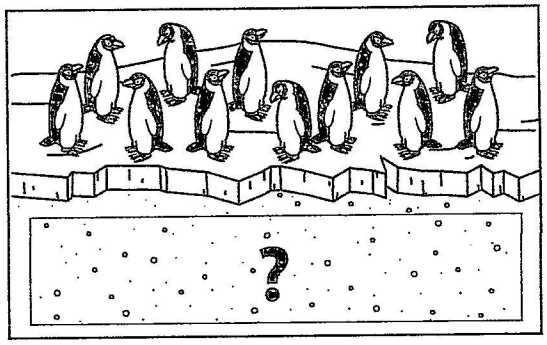
More Swimming Penguin Problems page 2 of 2

4 Seven penguins are in the water, and there are 14 penguins in all. How many penguins are hiding behind the hill?



☐ + 7 = 14 penguins

5 There are 12 penguins on the ice and 20 penguins in all. How many penguins in the water?



12 + ☐ = 20 penguins

6 There were some penguins swimming in the water. 3 more penguins jumped in. Now there are 23 penguins in the water. How many penguins were in the water to start with?

☐ + 3 = 23 penguins

7 **CHALLENGE** The penguin brothers, Ollie and Sammy, are having a fishing contest with their sisters, Molly and Pammy. Ollie caught 9 fish and Sammy caught 4 fish. Molly caught 7 fish and Pammy caught 6 fish.

a Who caught more fish—the brothers or the sisters? Use extra paper to show your work.

b How many fish did the brothers and sisters catch in all? Use extra paper to show your work.

NAME | DATE

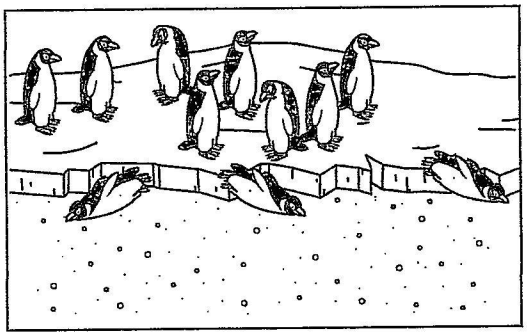
More Diving Penguin Problems page 1 of 2

Read and solve each of the problems below. Show your work.

Use numbers, pictures, or words to help solve the problem.

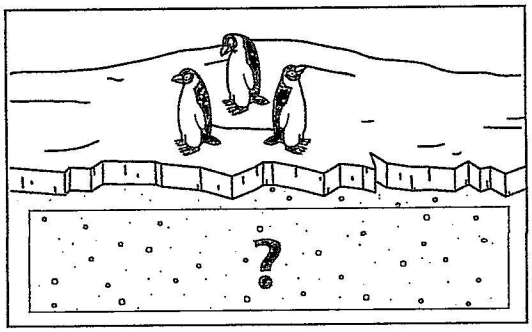
Fill in the missing number in the equation when you find the answer.

1 There were 11 penguins on the ice. Then 3 of them dove into the water. How many penguins are left on the ice?



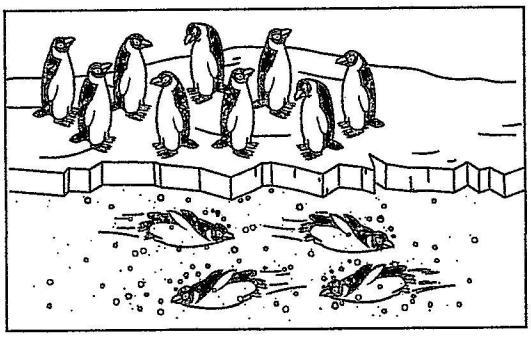
11 – 3 = ☐ penguins

2 There were 10 penguins on the ice. Some of them dove into the water, and now there are only 3 penguins left on the ice. How many penguins dove into the water?



10 – ☐ = 3 penguins

3 Some penguins were on the ice. Then 4 dove into the water. Now there are only 9 penguins left on the ice. How many penguins were on the ice to start?



☐ – 4 = 9 penguins

(continued on next page)

NAME | DATE

More Diving Penguin Problems page 2 of 2

4 Solve each of the equations below. Write the answers in the empty boxes. Use numbers, pictures, or words to show how you got the answers.

$20 - \square = 10$	$\square - 10 = 3$

5 Some penguins were playing on the ice. Then 10 of them dove into the water, and only 8 penguins were left on the ice. How many penguins were on the ice to start? Use numbers, pictures, or words to show how you got the answer.

$\square - 10 = 8$

6 **CHALLENGE** Some penguins were playing on the ice. Then 8 of them dove into the water. A few seconds later, 5 of those penguins jumped back onto the ice. Now there are 12 penguins on the ice. How many penguins were on the ice to start? Use numbers, pictures, or words to show how you got the answer.

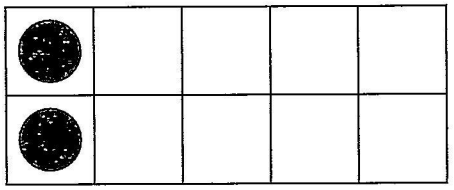
NAME _____ DATE _____

Adding Doubles & Neighbors

1 Solve the problems below.

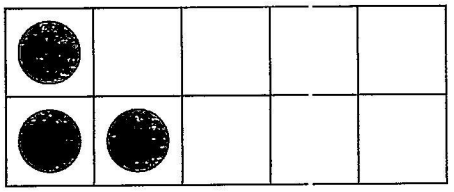
a

$$\begin{array}{r} 1 \\ +\ 1 \\ \hline \end{array}$$



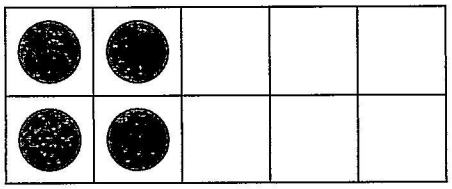
b

$$\begin{array}{r} 1 \\ +\ 2 \\ \hline \end{array}$$



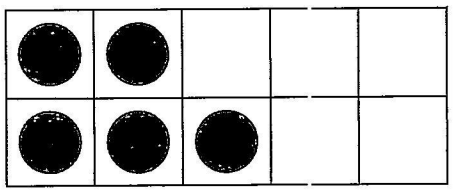
c

$$\begin{array}{r} 2 \\ +\ 2 \\ \hline \end{array}$$



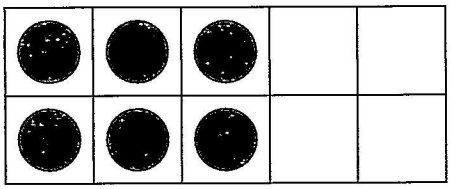
d

$$\begin{array}{r} 2 \\ +\ 3 \\ \hline \end{array}$$



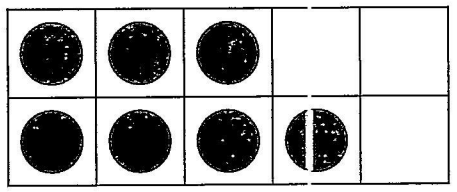
e

$$\begin{array}{r} 3 \\ +\ 3 \\ \hline \end{array}$$



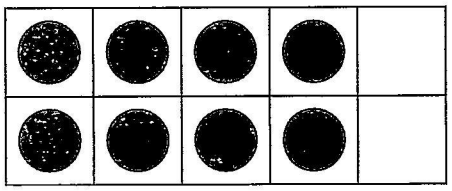
f

$$\begin{array}{r} 3 \\ +\ 4 \\ \hline \end{array}$$



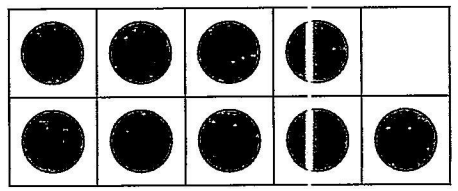
g

$$\begin{array}{r} 4 \\ +\ 4 \\ \hline \end{array}$$



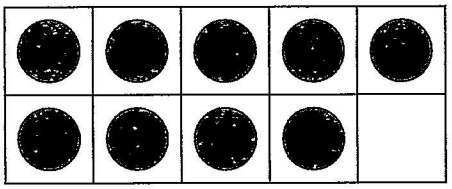
h

$$\begin{array}{r} 4 \\ +\ 5 \\ \hline \end{array}$$



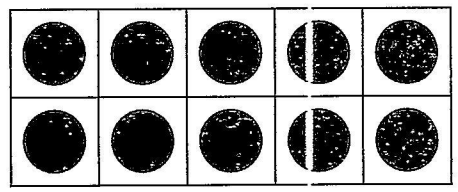
i

$$\begin{array}{r} 5 \\ +\ 4 \\ \hline \end{array}$$



j

$$\begin{array}{r} 5 \\ +\ 5 \\ \hline \end{array}$$



2 Fill in the blank.

3 + 3 = _____ 3 + 4 = _____ 4 + 4 = _____

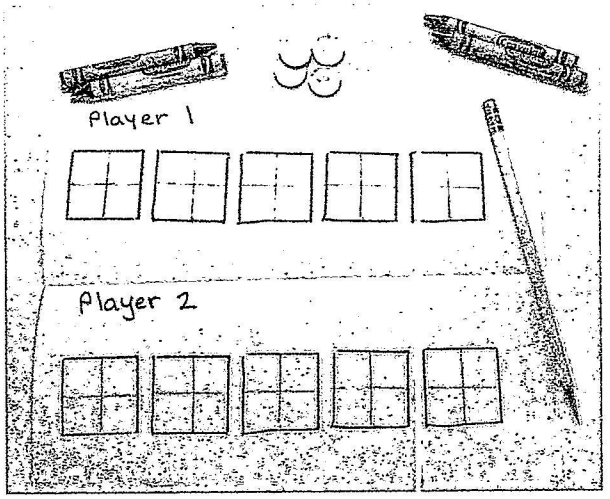
5 + 4 = _____ 5 + 5 = _____ 2 + 3 = _____

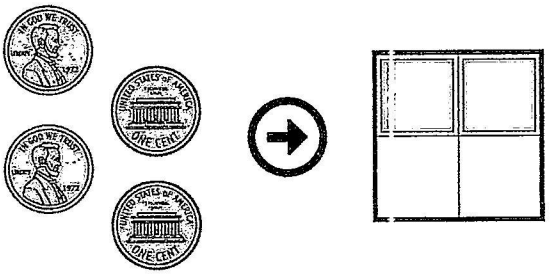
4 + 3 = _____ 3 + 2 = _____ 5 + 6 = _____

Color 5 Fraction Game

Object of the Game

Players take turns spinning a spinner or tossing coins to determine the number of fourths to color for each turn. The player who comes the closest to coloring in 5 whole squares after 6 turns wins!





Materials

- A 1–4 spinner (or 4 coins)
  Print the spinner, use a digital spinner, or make your own. You could instead use 4 coins. On a turn, toss 4 coins, count the number of coins that show heads, and color that many fourths. For example, if 2 coins show heads, color two-fourths of a square.
- 1 Color 5 Record Sheet
  Print the record sheet or use pencil and paper to draw your own. You could also play on the ***free*** *Number Frames app. The Color 5 Fraction Game is ready to play at* apps.mathlearningcenter.org/number-frames/?4ny52h37.
- Crayons, markers, or colored pencils in 2 different colors for each player
- Pencil or pen and a paper clip or safety pin, if using a spinner

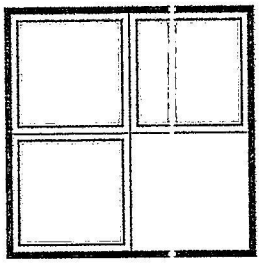
Skills

This game helps us practice

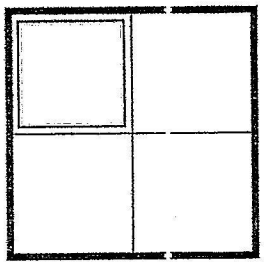
- using the terms *quarter*, *fourth*, and *halves* to talk about the 4 equal parts of a shape
- identifying fractions as the number of equal parts in a whole

How to Play

1. Get ready to play:
   - » Choose either a spinner or 4 coins.
   - » Players share a record sheet. Print a record sheet a make your own by drawing 5 squares for each player on a sheet of paper. Draw lines to divide each square into 4 equal parts.
   - » Decide who will go first.
2. Player 1 spins the spinner or tosses the coins. The numbers on the spinner (or the number of coins that are heads) tell how many fourths of a square to color. It takes four fourths to make a whole square.
3. Player 1 colors in the number of fourths from the spin (or toss) using 1 color of marker or crayon.
4. Player 2 takes a turn spinning and coloring in fourths on their row of squares on the shared record sheet.
5. Players continue spinning the spinner or tossing coins and coloring in fourths on their row of squares until each player has 6 turns.
   - » Players should alternate colors each turn. For example, coloring their first spin in red, their second in blue, their third in red, and so on.
   - » Consider using tally marks to keep track of turns.

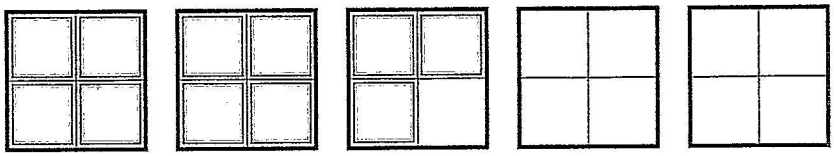


Rio: I got 3, so I'll color in three-fourths of this square.

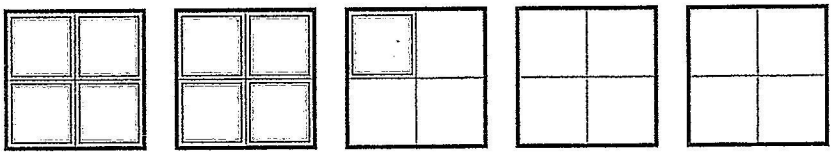


Dad: I got 1, so I'll color one-fourth of my square.

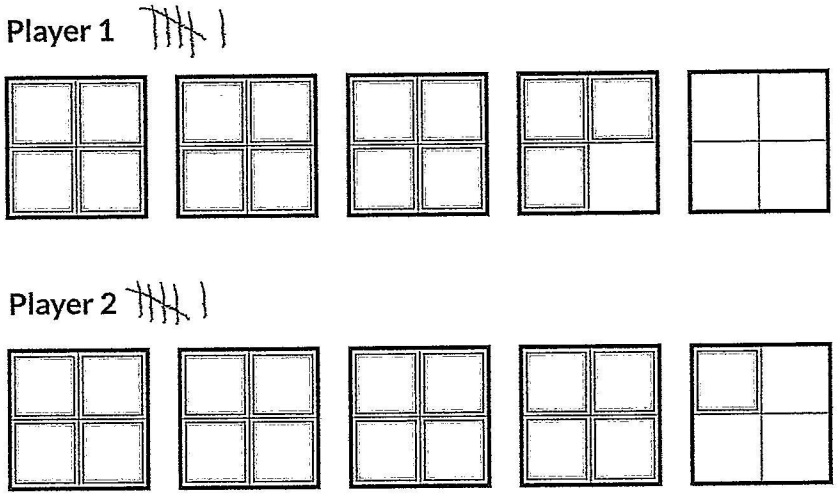
Player 1 𝍸



Player 2 𝍸



6. After each player has taken 6 turns, compare the results. The player who gets closest to 5 whole squares after six turns, either under or over, wins.

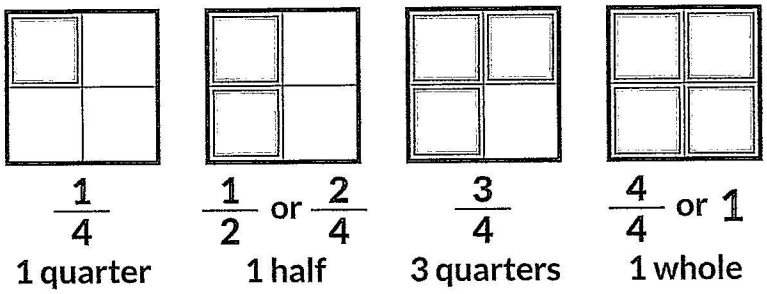


Rio: I got 3 and ¾ squares. You win, Dad! You got 4 and ¼ squares. You're closer to 5.
Dad: Good game, Rio. Let's play another round.

Tips for Families

Before the game:

- Talk about the fractions. Here are some of the ways you might refer to the shaded parts of the larger square.



During the game:

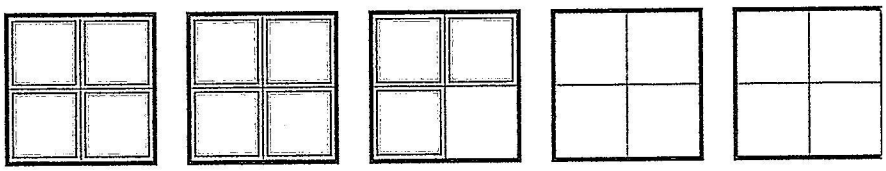
- Talk about the fractions that are made as the larger squares are shaded. Ask: *How much of the square is shaded? How much is left unshaded? How many wholes have you made? How many fourths do you need to make a whole square?*
- Count the fourths as you color them in: one fourth, two fourths, three fourths.
- Be sure to alternate colors each turn. It makes it easier to keep count and see the turns.
- Consider making tally marks to keep track of the number of turns. A game ends after each player has taken 6 turns.

Change It Up

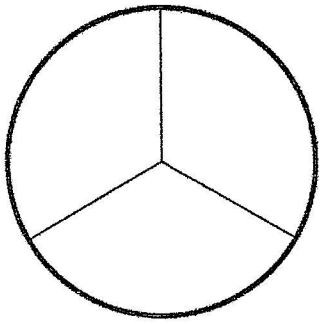
Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below.

- Keep track of each turn by writing the fraction. If you spin 1, write ¼. You could also write the fraction to show how many whole squares and fourths you've colored so far. Player 1 has colored 2 squares and ¾ of another square, so Player 1 would write 2 ¾.

Player 1



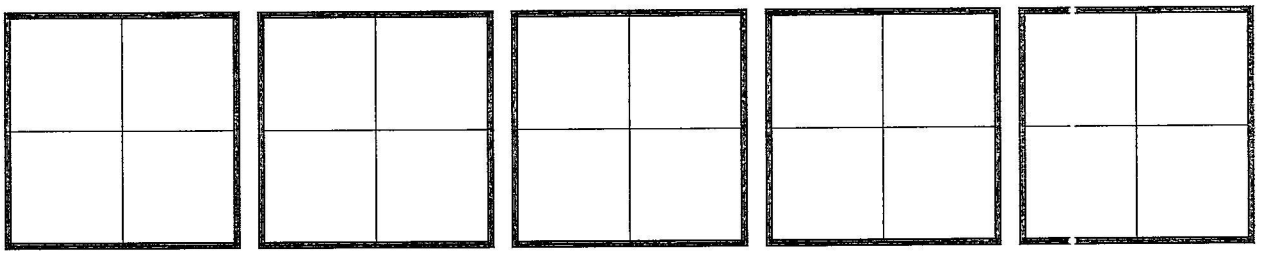
- Make a new record sheet. Draw 5 circles with 3 equal parts for each player. Use 3 coins instead of 4. How do you think playing with thirds will change the game?



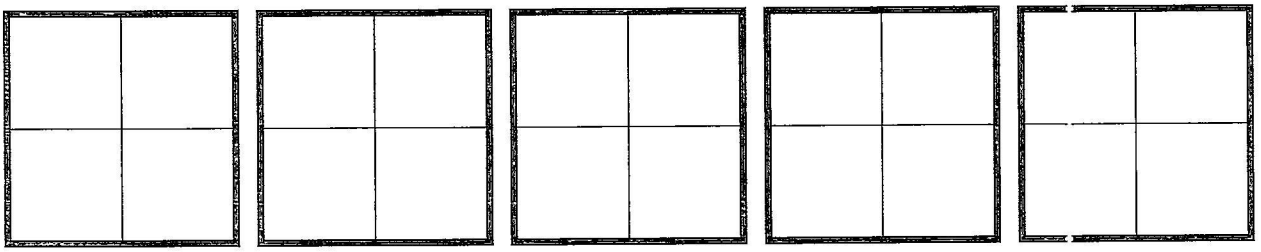
- Play with 3 or more players. You'll need to print another record sheet or draw a row of 5 squares for each additional player.

COLOR 5 RECORD SHEET

Game 1

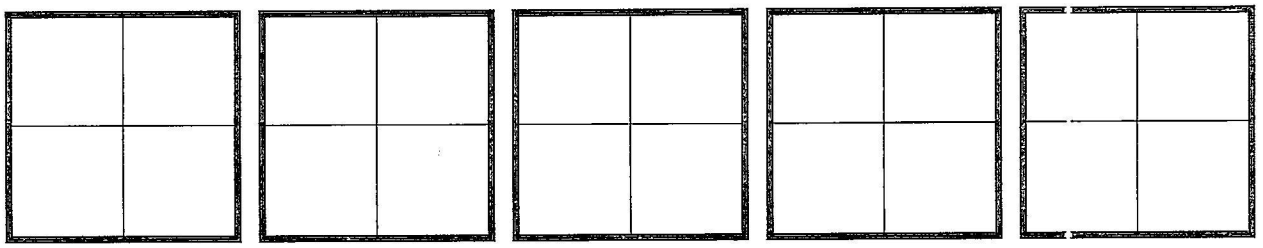


Player 1

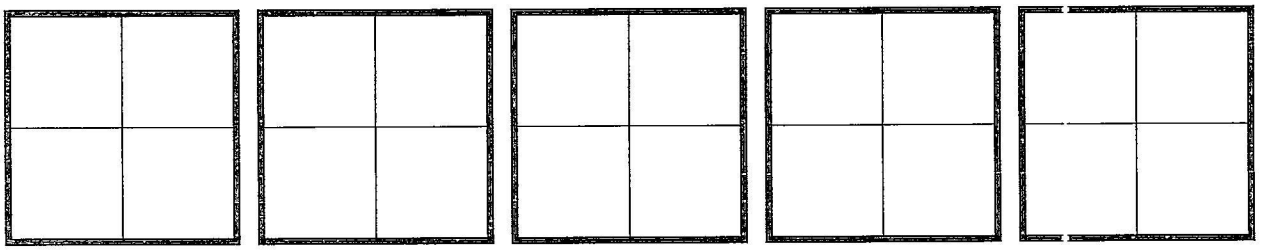


Player 2

Game 2



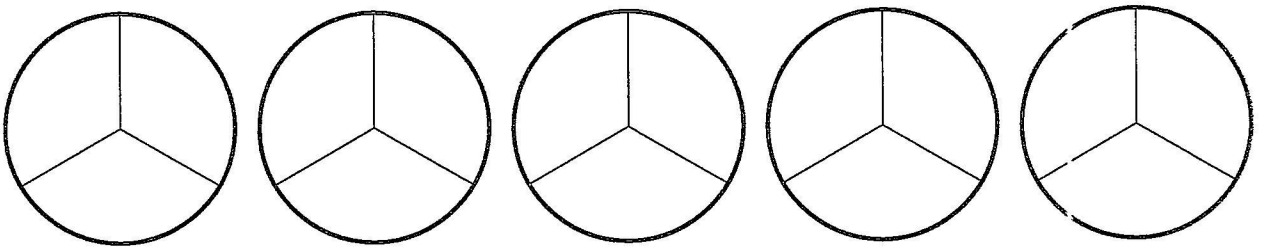
Player 1



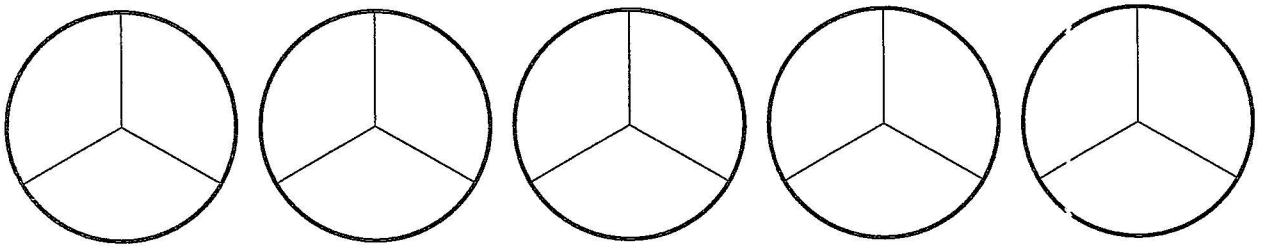
Player 2

COLOR 5 RECORD SHEET

Game 1

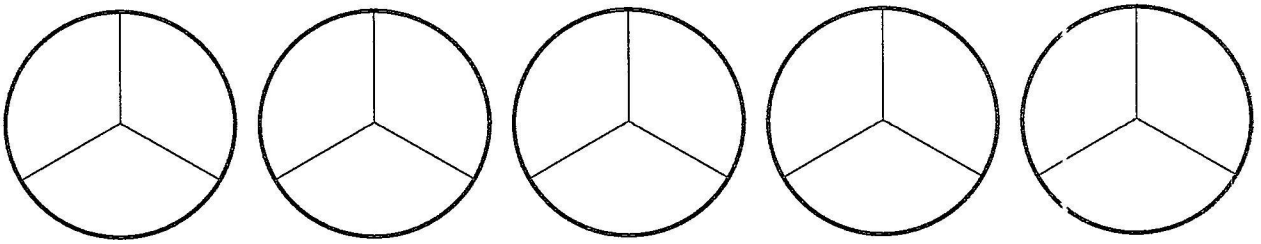


Player 1

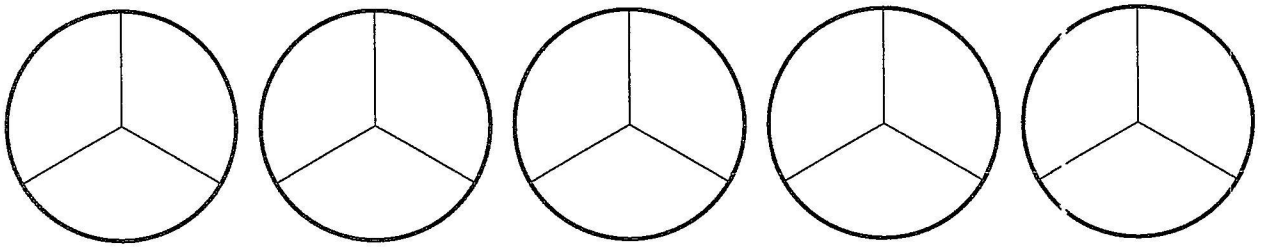


Player 2

Game 2

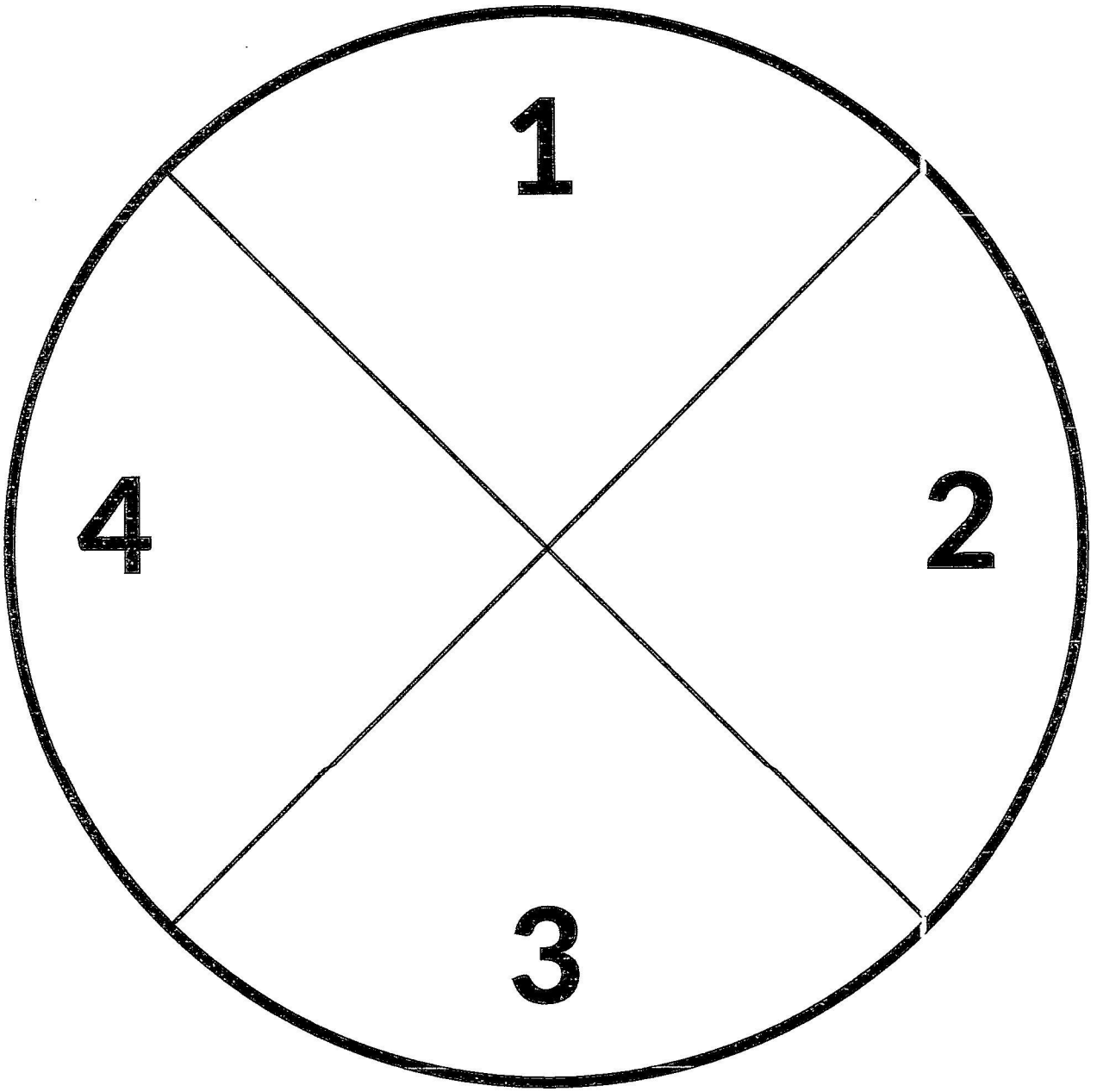


Player 1



Player 2

1–4 SPINNER



Number Line Race to 20 (or 10)

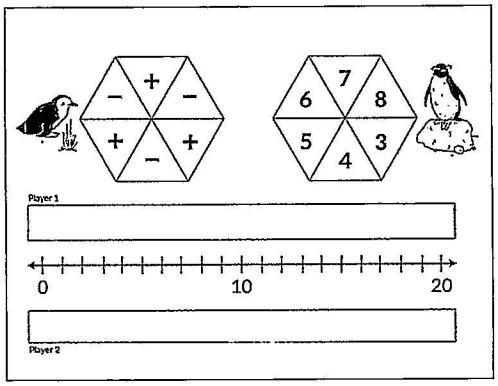
Object of the Game

For each round, players spin 2 spinners and move their game marker forward or backward that many spaces on the number line. The first player to land exactly on 0 or exactly on 20 wins!

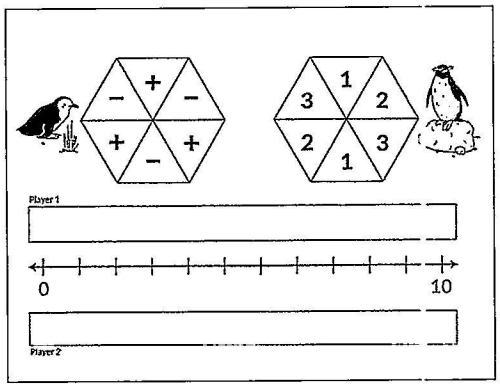
Materials

- 2 game markers
  Use coins, buttons, or other small objects.
- 1 pencil and 1 paper clip or safety pin for the spinner
- 1 Number Line Race Game Board A or B
  There are 2 game boards with this game. Game Board A provides practice with facts to 20. Game Board B provides practice with facts to 10.

  If you don't have a copy of a game board or can't print a copy right now, you can make your own record sheet. On a sheet of paper, draw a number line, from 0 to 20 (or from 0 to 10), with ticks for each number in between. Make your own spinners or use digital spinners.



Number Line Race Game Board A



Number Line Race Game Board B

Skills

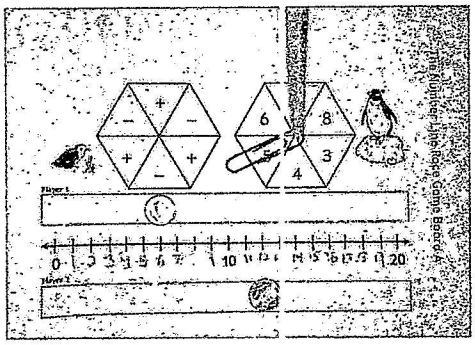
This game helps us practice

- Addition and subtraction facts within 20
- Counting on to add
- Counting back to subtract
- Using a number line to add or subtract

How to Play

Note: The instructions below apply to Game Board A.

1. Work together to label all the marks on the number line.
   - » Start by pointing to the marks for 5 and 15 and asking which numbers be ong there.
   - » Then work together to label the other marks on the number line, so that all numbers from 0 to 20 are labeled.
2. When playing with Game Board A, the game markers for both players start a: 10 on the number line.
   - » Place the game marker for Player 1 above the 10 and the game marker fc r Player 2 below the 10.
3. Players take turns spinning both spinners and moving their game marker according to the results.
4. If players spin a combination that will take them off the number line, they stay where they are and keep spinning until they can make a move. For example:
   - » If a player is at 16 and they spin +6, they stay and spin again.
   - » If a player is at 4 and they spin −6, they stay and spin again.
5. The first player to land exactly on 0 or exactly on 20 wins!
6. Have fun!



Chin's game marker is at 12. He was hoping to spin +8, but he spins a − sign and a 5. He jumps back 2 to 10, then 3 more to 7. Then he says, "12 minus 5 is equal to 7."

Tips for Families

Before you play:

- Choose the game board most appropriate for your child.
  - » By the end of first grade, students are expected to be fluent with additio n/subtraction facts within 10 and to work with addition/subtraction facts to 20.
  - » By the end of second grade, students are expected to be fluent with addition/ subtraction facts within 20. However, if your second grade child could us e more practice with facts to 10, start with Game Board B and work towards Game Board A.

- Remember to work together to complete the missing numbers on the number line.
- Practice counting forward and backward on the number line.
- Place a game marker at 8 on the number line. Talk about how you would move the game marker if you spin +3. What if you spin +6? What if you spin −4?

As you play:

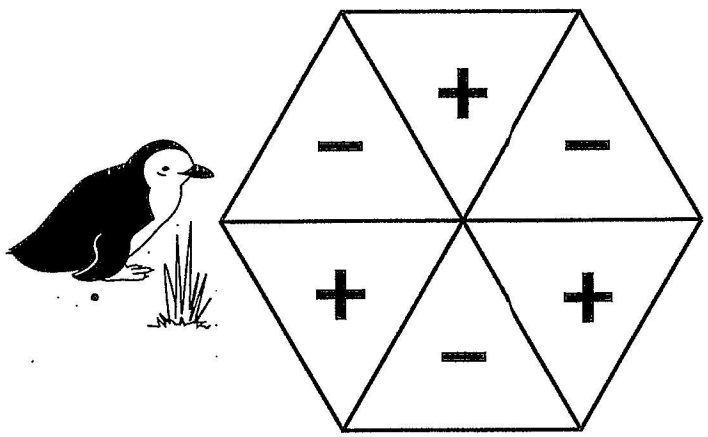
- Ask your child what number they hope to spin. Why?
- Encourage players to move their game markers more than one space at a time. For example, if a player is at 7 and spins +6, they can jump 3 spaces to 10 and then 3 more spaces to 13.
- Encourage players to say the equation that matches each of their moves.

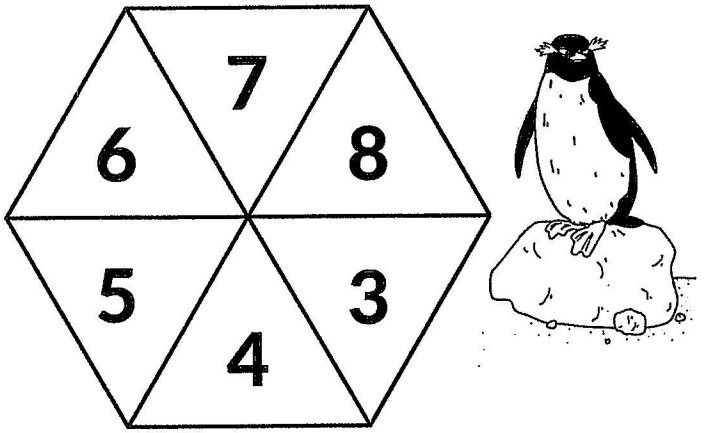
Change It Up

Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below. How did it change your strategy for winning the game?

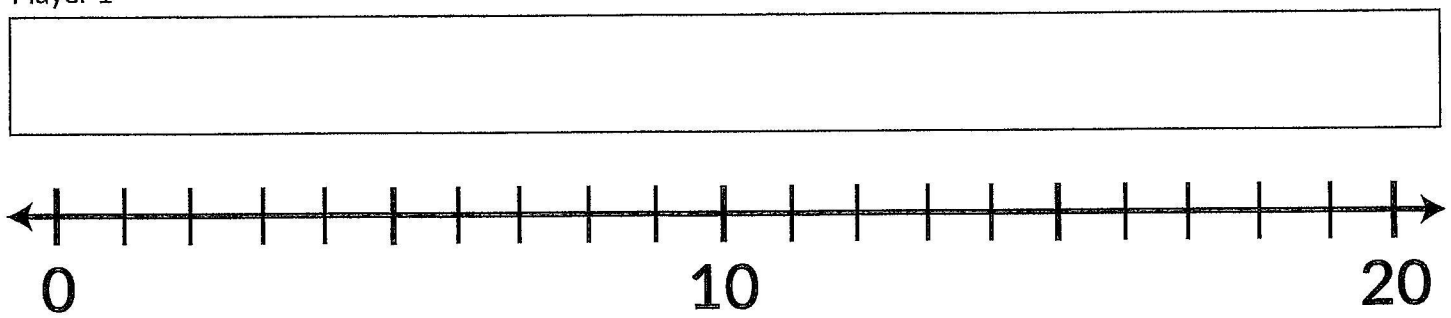
- Use Game Board B (0–10 number line).
  - » Both players start at 5, and the first to land on 0 or 10 wins.
  - » We encourage you to try both game boards for this game. By the end of the school year, first graders are expected to be fluent with addition and subtraction facts within 10 and to work with addition and subtraction facts to 20.
- If a player lands on a number that is already occupied by another game marker, they bump the other player's game marker back to 10.
- Make another number spinner or use a dice with the numbers 1–6 instead of 3–8. Let players choose which number spinner to use for each turn.
- Tell a story problem to match each turn. Use the penguins on the game board for story problem inspiration!
- The regular rules allow the player to spin again if their original spin would move them off the number line. Try either of these alternate rules when a player makes a spin that would take them off the number line:
  - » The player loses their turn.
  - » To make the game more challenging, allow players to move before 0 and after 20. Add numbers to both ends of the number line on the game board as needed and explain that a number line extends infinitely far in both directions. This may involve the use of negative numbers, which often fascinate young learners. (Avoid saying that there are no numbers less than 0, because that's not true.)

Number Line Race Game Board A



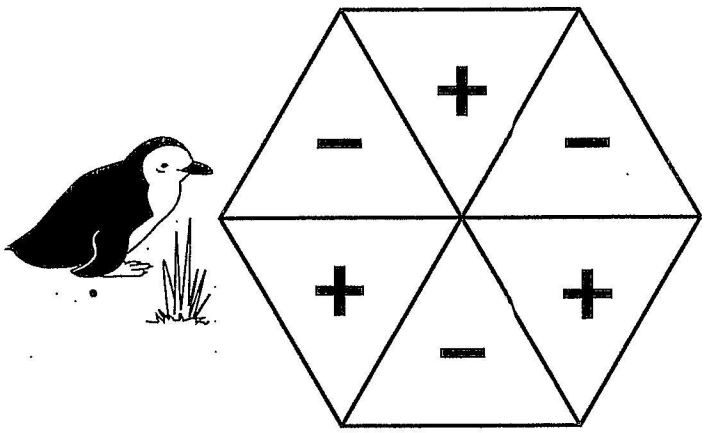


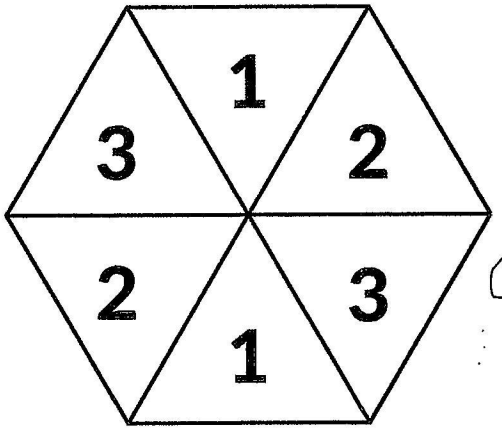
Player 1

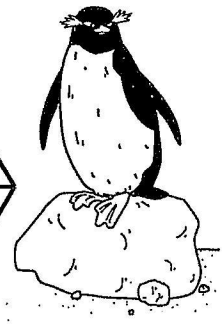


Player 2

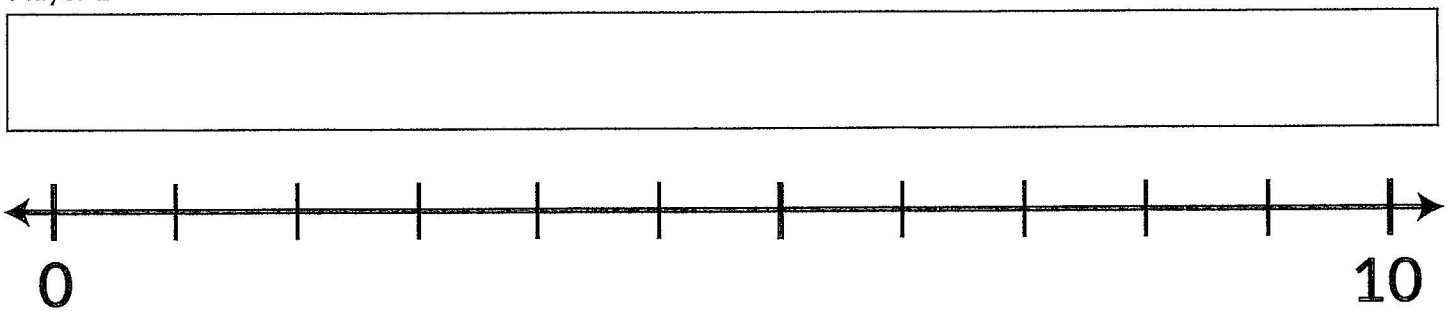
Number Line Race Game Board B







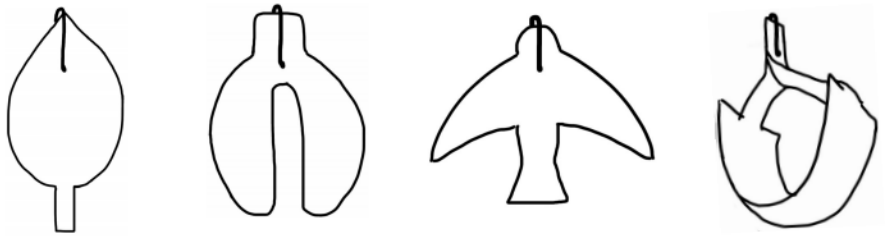
Player 1



Player 2

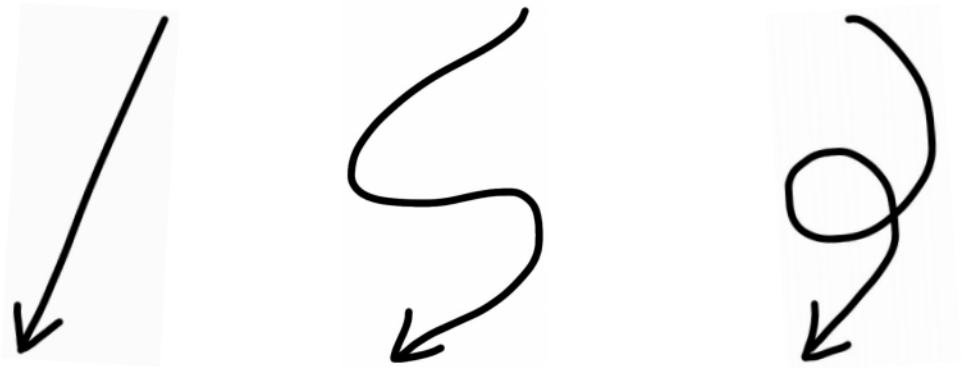
Name:

Ideas



Path

1

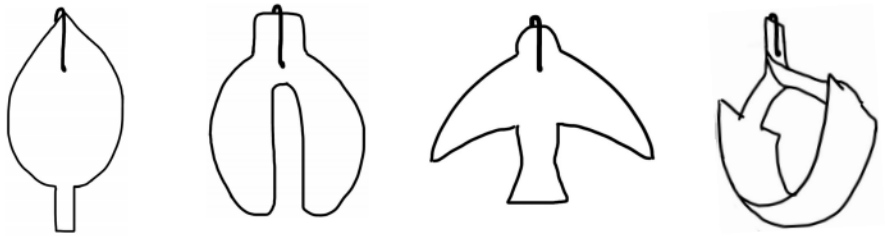


2

3

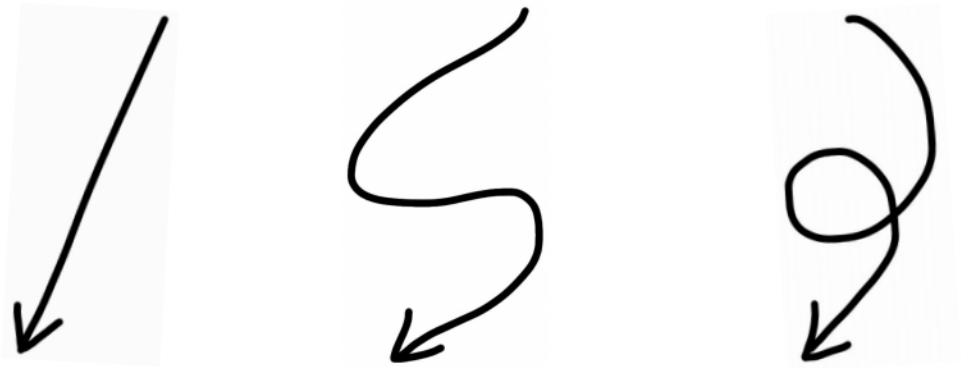
Name:

Ideas



Path

1

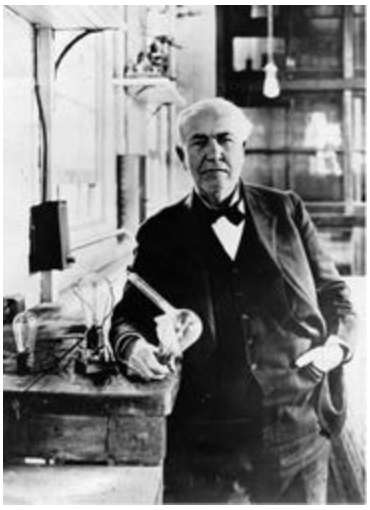


2

3

Edison Tried and Tried Again

by ReadWorks



Thomas Edison was a scientist. He was born in 1847. He invented many things. One was a light bulb that could stay lit for hours.

Edison worked very hard. He tried many times to get the light bulb right. Some people say it took 1,000 tries. Edison was asked how he felt about that. He was happy. He said he knew 999 things that do not work. Edison did not give up.

Making Rock Candy:

This easy rock candy recipe lets kids observe the crystallization process firsthand while making some pretty delicious treats. Sugar, water, and few more items found at home are all you need to turn your kitchen into a rock candy laboratory.

Step 1: How to Make Rock Candy
Gather your ingredients and tools. All you need is water, sugar, a clothespin, a pot for boiling, and a few wooden sticks to grow rock candy crystals in your kitchen! You might pick out a food color dye, too. We chose red. For the "sticks," we picked up a few bamboo skewers from the grocery store.

Step 2: Create your sugar solution
Bring two cups of water to a boil in a large pot on the stove. Next, stir in four cups of sugar. Boil and continue stirring until sugar appears dissolved. This creates a supersaturated sugar solution. This is also the time to add in any flavor enhancements, such as vanilla or peppermint and so on. Allow the solution to cool for 15-20 minutes.

Step 3: Prepare sticks for the candy
While waiting for the solution to cool, prepare your wooden sticks for growing the rock crystals. Wet the wooden sticks and roll them around in granulated sugar. Make sure you allow the sugared sticks to completely dry before continuing to Step 4. You'll need one stick per jar.

Step 4: Add in a food color of your choice
Once the sugar solution is cool, add in food coloring to create rock candy of your preferred color. Leave this step out for clear-colored crystals.

Step 5: Pour the cooled solution into a jar for the final candy-making process
Pour the cooled solution into a glass jar (or jars) and insert the sugar-covered wooden stick into the center of the glass. Make sure that the stick is not touching any part of the jar. If it does, the candy crystals could get stuck to the bottom or to the sides. You can divide the sugar solution across several smaller jars or use one large mason jar, depending on how many sticks of rock candy you'd like to make.

Once in place, secure the stick in place using a clothespin. Cover the top of the glass with a paper towel. You may have to poke a hole in the paper towel for the wooden stick to poke through.

Step 6: Let the candy crystals grow in a quiet, dark place

Place the glass in a cool and quiet place. Loud noises and a lot of movement can disturb the crystal making process. Every day, the candy crystals will grow larger. They will reach their maximum growth potential by two weeks. When you have a good amount of rock candy crystals, remove the stick and place it on a sheet of wax paper to dry...before eating!

Our rock candy took at least two weeks to grow, and fyi, it turned out more pink than red!

The Pepper and Soap Experiment

Read on to learn how to chase the "pepper" germs away!

You will need:

A shallow bowl or dish (a pie plate works well if you have one), water, ordinary black pepper, and some liquid dish soap.

Step 1

Cover the bottom of your shallow dish with water.

Step 2

Sprinkle black pepper across the surface of the water. Note how the surface tension of the water causes the pepper flakes float.

Step 3

Stick your finger in the center of the dish; did anything happen? Not much right? You probably just got some pepper flakes stuck to your finger. Now imagine that the pepper flakes are germs

Step 4

Now dip the tip of your finger into the liquid dish soap—you don’t need much.

Step 5

Now stick that finger into the center of the dish. What happens? Your soapy finger chased those pepper flakes to the edges of the plate! Dish soap is formulated to break the surface tension of water, which is why it is so effective on greasy, dirty dishes. And it wasn’t until you added soap to the bowl that those "germs" were chased away. This is the reason grown-ups are always nagging you to wash your hands with soap!

How to Make Invisible Ink

This low-tech invisible ink science experiment lets kids send secret messages to friends and family. All they'll need is a little lemon juice or milk. We decided to try both versions of this invisible ink experiment to see if the results were any different.

Commonly found household items make up the ingredient list, including juice, milk, honey, and vinegar. At room temperature, these compound liquids are colorless, making them perfect for invisible ink fun. Put them in contact with heat and the oxidization process turns them various shades of brown, aka, the ink appears! Read on for step-by-step instructions on how to make invisible ink with your kids.

We used milk and lemon juice to create our invisible ink.

Step 1

Gather your ingredients and tools. For this experiment, you need a piece of paper, a cotton swab, a heat source (a lamp or electric stove works), and milk or lemon.

Draw or write your secret message.

Step 2

If you are using lemon juice, squeeze your lemon into a glass. You can mix it with a little bit of water. Dip your cotton swab into the milk or lemon juice and start writing your message. Let your message dry completely.

Apply heat to get the secret message to appear.

Step 3

Once dry, an adult should hold the sheet of paper over a heat source. We used an electric stovetop. You can also use a lamplight or blow-dryer.

Your messages will appear like magic!

Step 4

As the milk or lemon “ink” heats up, it will oxidize and turn brown. You can try this experiment with other substances such as vinegar, honey, or orange juice.

Make a Walking Water Rainbow

Nothing brightens up a day like making your own rainbow! For this colorful science experiment, kids get to create their own mini rainbow while learning about capillary action.

You will need:

7 wide mouth jars or drinking glasses, food coloring (the 3 primary colors red, yellow, and blue), water, scissors, and paper towel (the thicker the better--we used thinner paper towels and the experiment took a lot longer). But don't worry: no matter how long it takes, the magic will happen!

Step 1: The Jars
Arrange the 7 jars in a line.

Step 2: The Water
Fill **every other** jar starting with the first about 3/4 of the way up with water. (We used less water and it took longer, so don't be shy with the water and the food coloring.)

Step 3: The Color
Add the food coloring. If you have the 7 jars arranged in a line, add a healthy squirt of red to the first **and** the last jar, yellow to the third jar, and blue to the fifth jar. Only the jars with water get the food coloring. So: red, skip a jar, yellow, skip a jar, blue, skip a jar, then red again.

Step 4: Fold The Paper Towels
Fold 6 paper towels in half and then in half again so you have long, thin paper towels. Really crease those folds! Next, fold one of the long paper towels in half length-wise so it's half the size. Depending on how tall your jars or glasses are, you'll want to cut a good inch or inch and a half off the end with scissors. You don't want the paper towels to stick up in the air too much. Repeat that step 5 more times with each of the remaining paper towels.

Step 5: Place Paper Towels in the Jars
Put one end of a folded paper towel in the first jar and the other end in the second jar. Take another and put one end in the second jar and the other end in the third jar. Repeat until you have a zigzag of paper towels going from the first jar to the last.

Step 6: Watch the Magic Happen!
The colored water is traveling up the narrow paper towel **against gravity**, using a process called capillary action. The water is pulled up through tiny gaps between the fibers in the paper towel, wicking each color up out of one jar and down into the next. The once empty jars are now filling up with the 2 colors from the jars on each side and mixing!

Make a Lava Lamp

A simple science experiment can be the best way to fill an afternoon at home. And as some of us may recall, a lava lamp can be a great way to fill an evening.

For this groovy experiment, kids get to recreate their parents' lava lamp while learning about liquid density.

Read on to learn how to prove that oil and water really don't mix!

You will need:

A wide bottle (or a fancy drinking glass or wide glass vase), food coloring, vegetable oil, water, and an Alka-seltzer tablet (make sure you have parent help as needed)

Step 1: The Oil

Fill the container about 3/4 with vegetable oil. You can choose the size of the container based on how much vegetable oil you have to spare.

Step 2: The Water

Fill the rest of the container with water, leaving 2-3 inches at the top. Watch the water fall through the vegetable oil and settle at the bottom. Can you believe that water is more dense than oil? Water molecules are "polar" and oil molecules are "non-polar", so they are not attracted to each other in the least.

Step 3: The Color

What color would you like the "lava" in your lava lamp to be? After the water has settled for a minute or so, add you food coloring. We added about 10 drops. Watch as each drop falls through the oil and sits on top of the water layer. Wait until all of the water droplets break through the oil/water line and burst into the water.

Step 4: The Bubbles

Drop your Alka-seltzer tablet in and let the games begin! The Alka-seltzer water reaction produces carbon dioxide gas bubbles which stick to the water droplets. The water/gas combo is less dense than the vegetable oil, so they rise to the top. The gas bubbles then break and are released into the air and the water sinks back down to the bottom to start over again!

GOODS & SERVICES
Social Studies Home Learning Activities

Standard Benchmark	Economic Standard 1a: Students will understand that families and individuals with limited resources undertake a wide variety of activities to satisfy their wants.
Grade Band	K-3 for Grades K-1
Vocabulary/Key Concepts	GOOD: an object that can be touched, like a dog collar or catnip. SERVICE: an action performed by a person such as a dog walker.

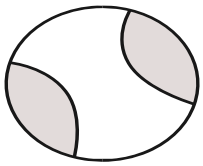
Activity 1

Kevin and his sister have a new puppy. They want to keep the puppy happy and well. To satisfy their want, they must buy goods and services.

A GOOD is an object that can be touched, like a dog collar or catnip.
A SERVICE is an action performed by a person such as a dog walker.

Discuss with a parent, guardian or older sibling how goods and services are used.

Look at each photo. Circle all the goods. Underline all of the services.



Activity 2: Draw a Picture of a Good

Source: EconEdLink (www.econedlink.org), Council for Economic Education, New York,

Activity 3: Draw a Picture of a Service

Activity 4:

1. Can you explain (or tell someone) how you would like to use a GOOD?

   _____

   _____

   _____

2. Can you explain (or tell someone) how you would like to use a SERVICE?

   _____

   _____

   _____

Activity 5 (Extension):

1. Have a conversation with a parent, guardian or older sibling. Think about school and other things that people do during the day. What are some other goods and services that you come across on a daily basis?