**STUDENT FIRST & LAST NAME:**_____

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

# Christina School District Assignment Board

**Grade Level: Kindergarten**

**Week 11 (6.15.20)**

| | Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|---|---|---|---|---|---|
| **ELA** | Read *Water Safety.* Write to tell what you learned. | Read *Water Safety* again to increase fluency. Answer questions 1-4. | Read *Water Safety* again to increase fluency. Answer questions 5-7. | Nouns are words that identify people, places, and things. Circle all of the nouns in *Water Safety.* | Start a Summer Bucket List with all of the fun activities you want to do this summer! |
| **Math** | **The Frog Jumping Contest** *Please complete the attached activity titled The Frog Jumping Contest* | **Frog Addition** *Please complete the attached activity titled Frog Addition* | **Frog Line-up** *Please complete the attached activity titled Frog Line-up* | **Frog Subtraction** *Please complete the attached activity titled Frog Subtraction* | **Patterns & Numbers Pages 1 & 2** *Please complete the attached activity titled Patterns 7 Numbers Pages 1 & 2.* |
| **Science** | **Inventions and Engineering:** Think about, draw and label your best answer to the following:<br><br>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":<br>Activity: Get your supplies. You will need bobby pins or paper clips, scissors, and paper, plus the attached handout.<br>Slide bobby pin (or paper | **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.<br>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).<br>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 may want a helper to be | **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 with new Bobby Dropper. | **The Flying Toy:** Read the article. Try to 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

| | | | | | |
|---|---|---|---|---|---|
| | | 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] | 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] | 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 *Going to the Beach.* Write a summary of what happened. | Read *Going to the Beach* again to increase fluency. Answer questions 1-4. | Read *Going to the Beach* again to increase fluency. Answer questions 5-7. | Nouns are words that identify people, places, and things. Circle all of the nouns in *Going to the Beach.* | Finish your Summer Bucket List. Have a safe and happy summer!! |
| **Math** | **Play! Ten & More Bingo!** *Please complete the attached activity titled Ten & More Bingo* | **Race You to 30¢** *Please complete the attached activity titled Race You to 30¢.* | **Play! Ten & More Bingo!** *Please complete the attached activity titled Ten & More Bingo* | **Race You to 30¢** *Please complete the attached activity titled Race You to 30¢.* | **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! |

# Water Safety

by Rachelle Kreisman

Summer can be hot. How do you stay cool? Many kids go to the beach. Some swim in pools. Other children paddle canoes in lakes.

Playing in water can be fun. Just make sure to stay safe. Always swim with a buddy. Make sure an adult is watching you.

What if you do not know how to swim? Take lessons. Many places teach children how to swim. If you go on a boat, always wear a life jacket. Wear a life jacket even if you can swim. It will help keep you safe.

**Name:** _____ **Date:** _____

**1.** Based on the text, what is a fun way to stay cool on hot summer days?

*play in water*

*eat potato chips*

**2.** Who should you always swim with?

*a buddy*

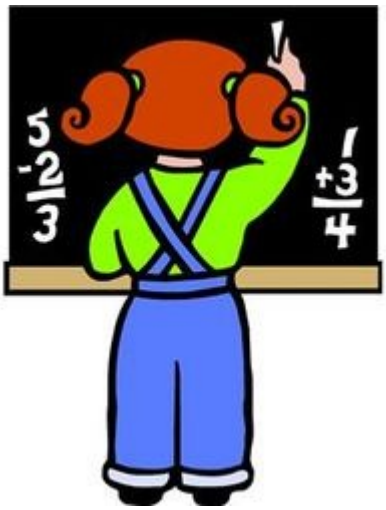
*our pet*

**3.** Who should watch you while you swim?

*a friend*

*an adult*

**4.** What can you do if you do not know how to swim?



*go to school*

*take swimming lessons*

**5.** What should you always wear if you are on a boat?

If you are on a boat, you should always wear

**6.** What did you learn from "Water Safety"?

**7.** Draw a picture of a child who is being safe on a boat.

# Going to the Beach!

by ReadWorks

Going to the beach is lots of fun. You can swim in the ocean. You can play in the sand. You can run around or you can lie down.

The beach is made of sand. It feels funny between your toes. You can dig in the sand. You can even build a sandcastle!

The beach has sea shells. You can find shells in the sand. Some are small and gray. Others are big and colorful. It's fun to search for pretty shells.

At the beach, the ocean water moves in waves. The water comes to the beach. Then the water moves away.

**Name:** _____ **Date:** _____

## **1.** Where can you swim at the beach?

*in the ocean*

*in a river*

## **2.** What can you build at the beach?

*a birdhouse*

*a sandcastle*

**3.** How does the water move at the beach?

*in waves*

*in a waterfall*

**4.** What can you find in the sand?

*flowers*

*sea shells*

**5.** What is the beach made out of?

The beach is made out of _____.

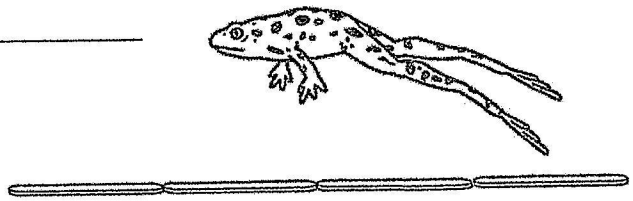
**6.** What did you learn from "Going to the Beach!"?

**7.** Draw a picture of something you could do at the beach.

# Summer Bucket List

| | |
|---|---|
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |
| ○ _____ | ○ _____ |

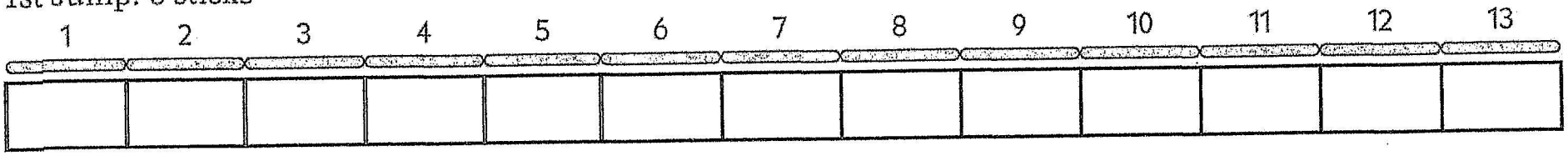
NAME _____ DATE _____



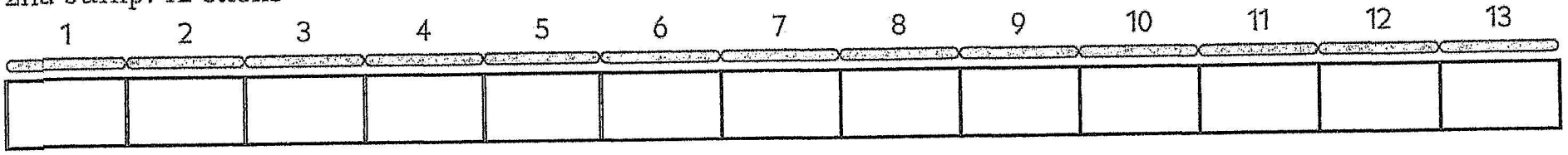
# The Frog Jumping Contest

**1** Freddy Frog is practicing for the big frog jump contest. Color in the boxes to show how far he jumped each time.

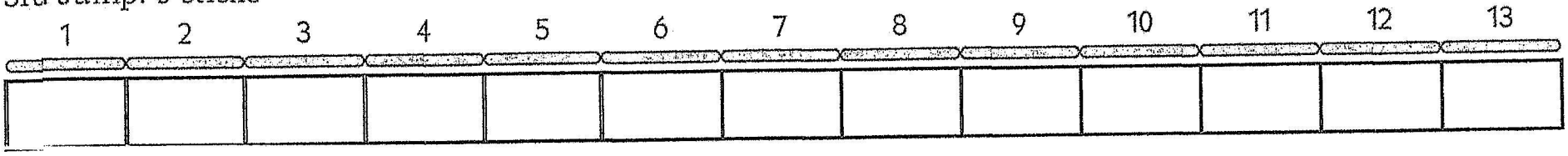
1st Jump: 8 sticks




2nd Jump: 12 sticks




3rd Jump: 9 sticks




**2** Which one was his longest jump? (Circle one.) 1st 2nd 3rd

**3** Which one was his shortest jump? (Circle one.) 1st 2nd 3rd

NAME _____ DATE _____

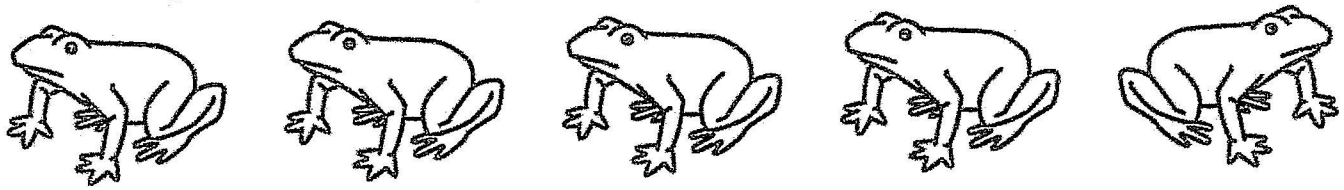
# Frog Addition

**1** Color the frogs. Trace the numbers or symbols. Write an addition sentence to match the picture.

Color 2 frogs green. Color 3 frogs brown.

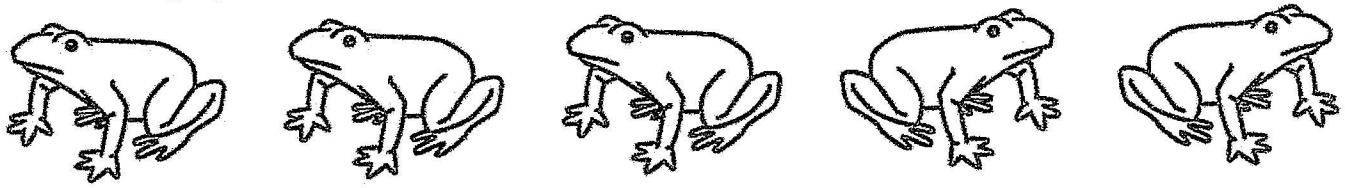
2 + 3 = _____

Color 4 frogs red. Color 1 frog blue.



_____ + _____ = _____

Color 3 frogs yellow. Color 2 frogs black.



_____ + _____ = _____

**2** Add.

| | | | | | |
|---|---|---|---|---|---|
| 1 | 3 | 4 | 2 | 3 | 4 |
| + 2 | + 1 | + 1 | + 2 | + 2 | + 2 |
| ___ | ___ | ___ | ___ | ___ | ___ |

NAME _____ DATE _____

# Frog Line-Up


**1** The frogs are lined up for the big race! Color the frogs so it's easy to tell them apart.

- Color the 1st frog green.
- Color the 4th frog brown.
- Color the 2nd frog yellow.
- Color the 5th frog red.
- Color the 3rd frog blue.
- Color the 6th frog black.

**2** Here is the race track. Fill in the missing numbers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 3 | | 5 | | 7 | | 9 | |

**3** Color in the boxes on the track.

- Color the 1st box red.
- Color the 6th box blue.
- Color the 2nd box green.
- Color the 7th box red.
- Color the 3rd box blue.
- Color the 8th box green.
- Color the 4th box red.
- Color the 9th box blue.
- Color the 5th box green.

**4** What color should the 10th box be? _____ Color it in!

**5** Add.

| | | | | | | |
|---|---|---|---|---|---|---|
| 0 | 0 | 1 | 2 | 2 | 2 | 3 |
| + 0 | + 1 | + 1 | + 1 | + 2 | + 3 | + 3 |
| ___ | ___ | ___ | ___ | ___ | ___ | ___ |

NAME _____ DATE _____

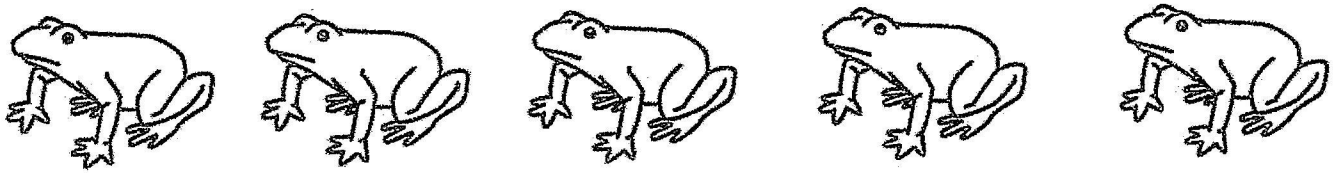
# Frog Subtraction

**1** Color the frogs. Trace the numbers or symbols. Write a subtraction sentence to match the picture.

Color 4 frogs green. Cross out 2 of them.

4 ..... 2 ::::: _____

Color 5 frogs red. Cross out 1 of them.



5 ..... 1 ::::: _____

Color 6 frogs brown. Cross out 3 of them.

_____ ..... _____ ::::: _____

**2** Subtract.

| | | | | | | |
|---|---|---|---|---|---|---|
| 2 | 3 | 4 | 5 | 5 | 6 | 6 |
| − 1 | − 2 | − 2 | − 3 | − 4 | − 1 | − 2 |
| ___ | ___ | ___ | ___ | ___ | ___ | ___ |

NAME | DATE

# Patterns & Numbers page 1 of 2

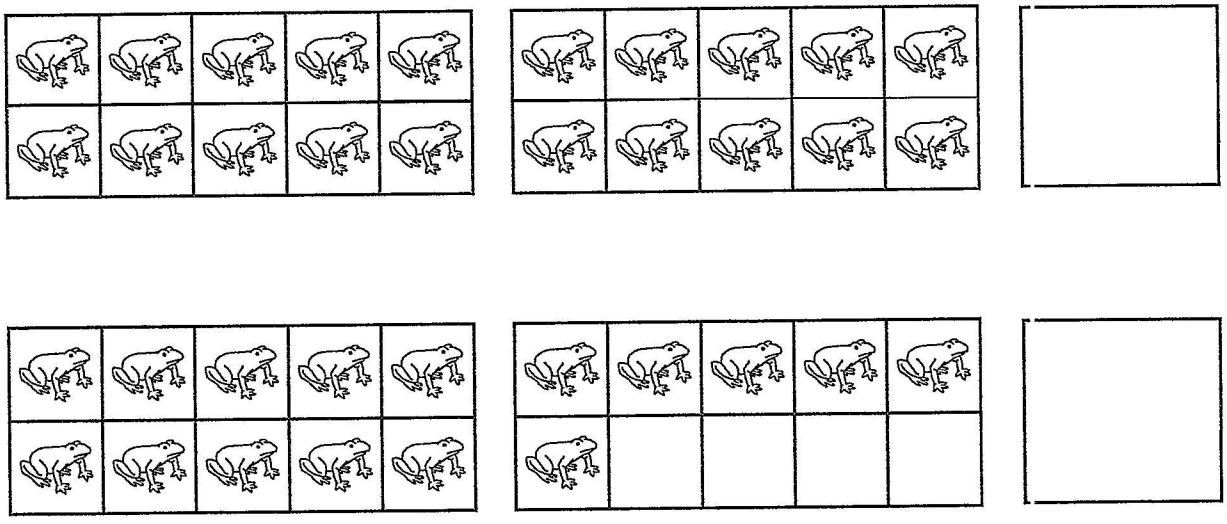
**1** Trace the numbers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |

**2** Write in the missing numbers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | | 3 | | 5 | | 7 | | 9 | |
| 11 | | 13 | | 15 | | 17 | | 19 | |

**3** How many frogs? Write the total in the box.



*(continued on next page)*

NAME | DATE

## Patterns & Numbers page 2 of 2

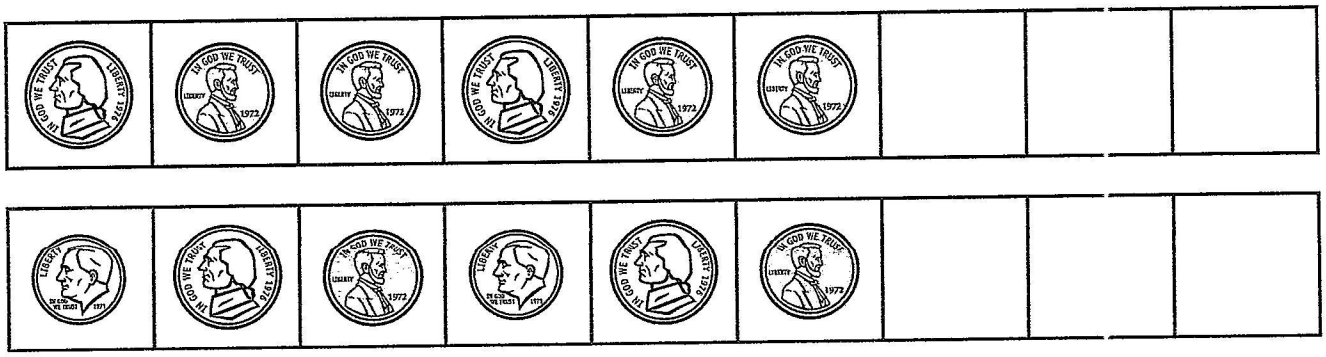
**4** Trace the numbers.

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |

**5** Write in the missing numbers.

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | 5 | 6 | | 8 | 9 | | 11 |
| 13 | 14 | 15 | | 17 | 18 | | 20 |

**6** What comes next? Cut out the coins at the bottom of the page and tape or glue them down to show.



# Home Connection 15 ★ Activity

**NOTE TO FAMILIES**

This Home Connection features a Ten & More Bingo game with calling cards that show groups of Unifix cubes arranged in 10's and 1's. How many cubes are on each card? Is there more than 1 way to figure it out each time? Who will get 4 in a row on their Bingo board first?

## Ten & More Bingo

You'll need the Ten & More Bingo cards, the Ten & More Bingo gameboards, and an envelope, as well as some game markers such as marshmallows, pennies, cereal pieces, or small pieces of paper.

Instructions

**1** Cut apart the Ten & More cards, stack them up and put them into an unsealed envelope.

**2** Cut the 2 Ten & More Bingo gameboards apart. Be sure to cover the free spot on each board with a marker.

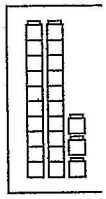
**Ten & More Bingo** gameboards

| | | | |
|---|---|---|---|
| 12 | 19 | 17 | 20 |
| 21 | 15 | 24 | 13 |
| 25 | 11 | 23 | 18 |
| 22 | 14 | 16 | |

**Ten & More Bingo** gameboards

| | | | |
|---|---|---|---|
| 11 | 14 | 23 | 21 |
| 22 | 16 | 19 | 18 |
| 17 | 20 | 24 | 12 |
| 25 | 13 | 15 | |

**3** Take turns reaching into the envelope for a calling card. How many cubes are on the card? How did you count them? Is there another way to count them? (The illustration below shows three possible responses to the task of counting 23 cubes that have been arranged in 10's and 1's. The first method is most typical of kindergartners; the other two are more typical of children who are a little older.)



***Child*** *I can count that but let me touch the cubes. 1, 2, 3, 4, 5, 6, 7, 8 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20--21, 22, 23.*

***Sister*** *I think there are 10 in that stack. I'll check. 1, 2, 3, 4, 5, 6, 7, 8. 9, 10. It's 10—so, 10 and 10 is 20 and then 3. 23!*

***Dad*** *10, 20, 21, 22, 23. It's 23!*

## Home Connection 15 (cont.)

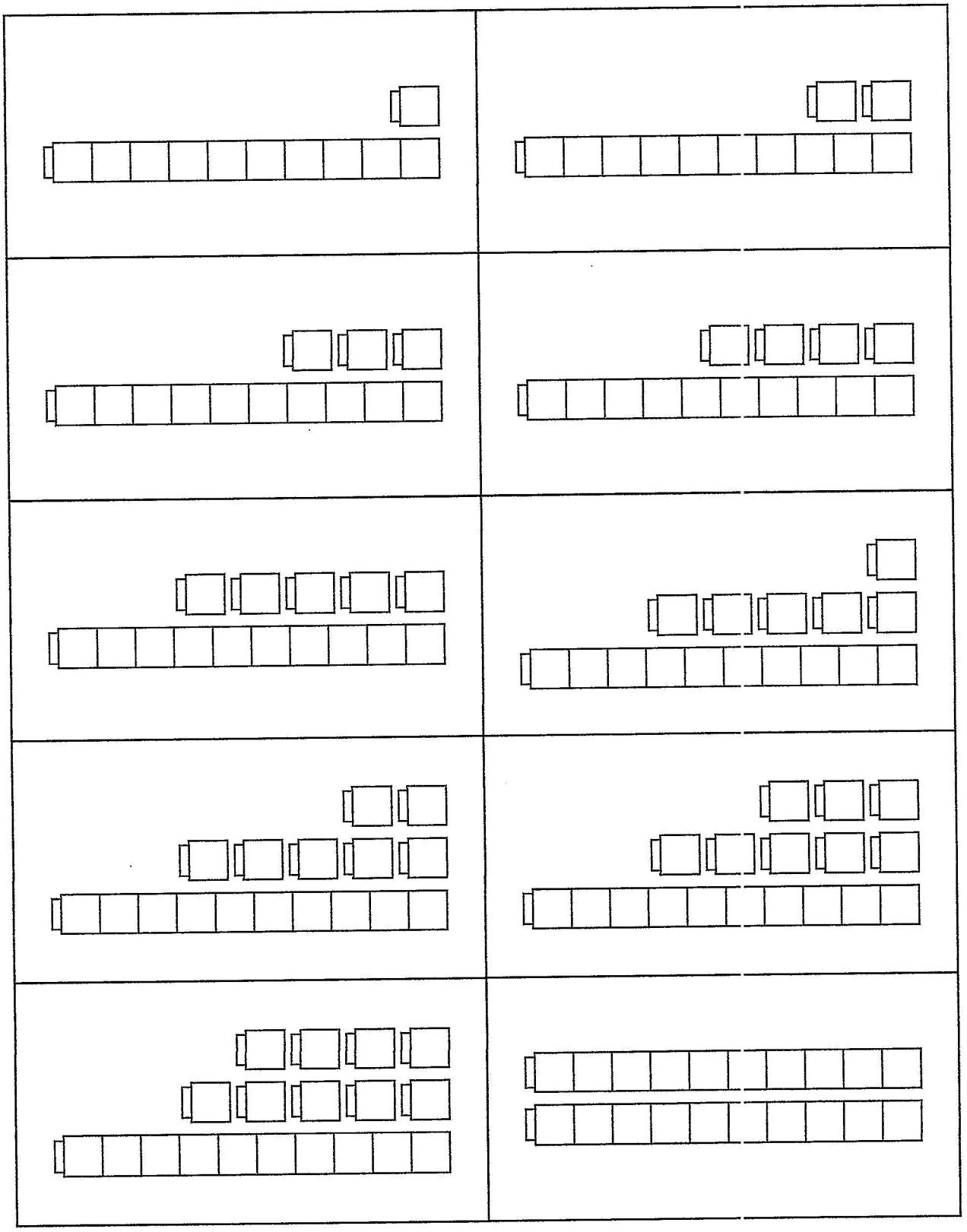
**Note** Many 5- and 6-year-olds need to count the stacks of 10 by 1's time after time before they fully trust that there are always 10. It's in this repeated counting that they begin to develop trust. Keep the game lots of fun and enjoy the growth that will happen with time (perhaps months) as your youngster finds more efficient ways to count.

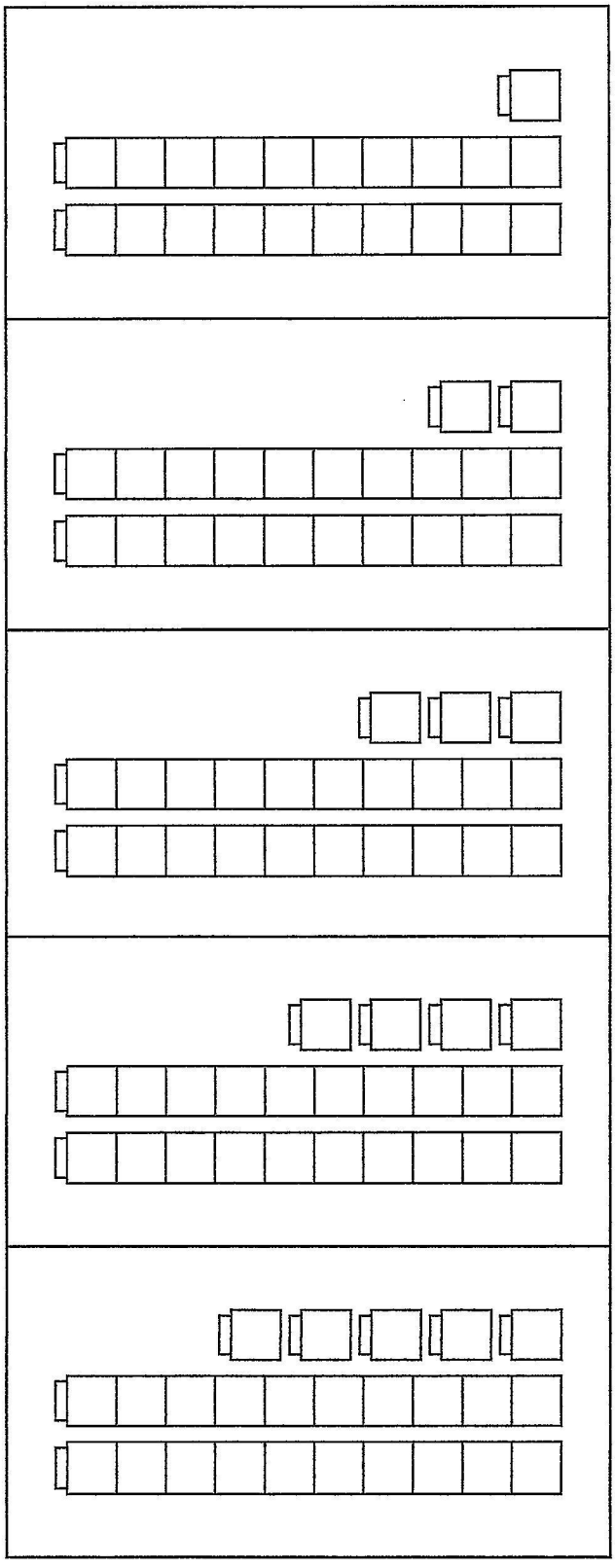
Your youngster may mix up the numerals 12 and 21. A true sense of left and right often doesn't develop until first or second grade. Help as needed and provide lots of encouragement.

4 Once the quantity of cubes on the calling card has been determined, both players cover the appropriate number on their Bingo boards. The first player to get 4 in a row, horizontally, vertically, or diagonally wins the game.

*Play the game several times this week.*

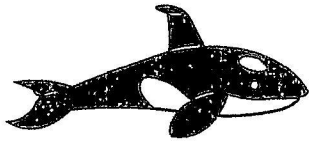
# Ten & More Bingo cards





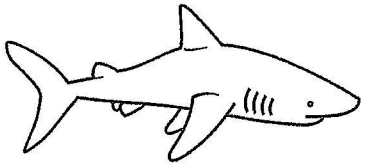
Ten & More Bingo cards

## Ten & More Bingo gameboard



| | | | |
|---|---|---|---|
| 12 | 19 | 17 | 20 |
| 21 | 15 | 24 | 13 |
| 25 | 11 | 23 | 18 |
| 22 | 14 | 16 | FREE |

## Ten & More Bingo gameboard

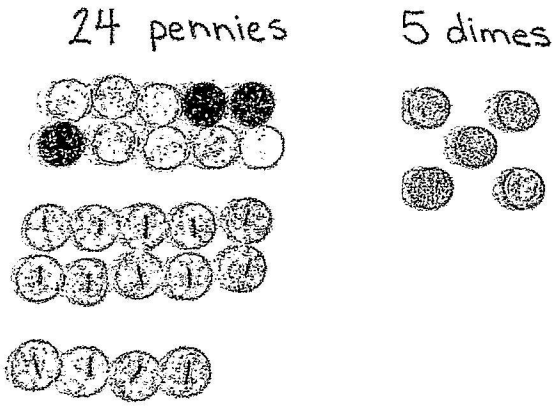


| | | | |
|---|---|---|---|
| 11 | 14 | 23 | 21 |
| 22 | 16 | 19 | 18 |
| 17 | 20 | 24 | 12 |
| 25 | 13 | 15 | FREE |

# Race You to 30¢

## Object of the Game

Players take turns collecting pennies and trading 10 pennies for 1 dime. The winner is the first player to collect exactly 3 dimes.



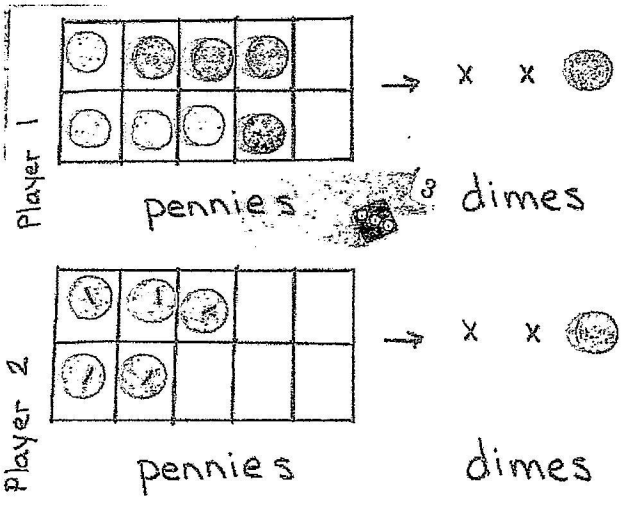

## Materials

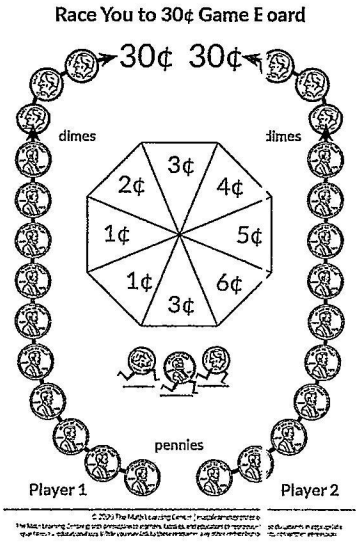
- 24 real or pretend pennies
- 5 real or pretend dimes
- 1 Race You to 30¢ Game Board
- Pencil and paper clip or safety pin for the spinner

*You can make pretend pennies and dimes by cutting circles out of cereal or cracker boxes or any kind of paper.*

*If you don't have a copy of the game board or can't print a copy right now, you can still play the game. Try drawing your own 10-frames. When a 10-frame fills with 10 pennies, trade the pennies for 1 dime. You will need a 10-frame for each player.*

*You can share a dotted or numbered dice instead of using the spinner.*



## Skills

This game helps us practice

- Identifying pennies and dimes
- Counting by 10s and 1s
- Trading 10 ones to make 1 ten

## How to Play

1. Play with a partner. Decide who will go first.
2. Take turns spinning the spinner or rolling the dice. Take that number of pennies and set them on the game board or in your 10-frame.
3. When you get 10 or more pennies, you get to trade 10 pennies for 1 dime. If you have extra pennies, keep them on the game board or in your 10-frame.
4. If a player is getting close to 30¢ and spins a number that is more than the number of pennies needed to win, the player loses that turn.
5. The first player to get 3 dimes (30¢ exactly) wins the game.
6. Have fun!

## Tips for Families

Before you play:

- Talk about the coins. *Can you name the coins? How much are they worth? Have you heard these rhymes before?*

**PENNY**

Penny, penny,
Easily spent.
Copper brown and
worth one cent.


**1¢**

**DIME**

Dime, dime,
Little and thin.
I remember,
you're worth ten.


**10¢**

During the game:

- Ask questions:
  - » *How many more pennies do you need before you can trade for a dime?*
  - » *I see that you have 2 dimes and 1 penny right now. How much money is that? Let's count it together, ready? Ten, twenty, twenty-one—you have twenty-one cents. Let's count how much money I have.*
  - » *Who has more money right now?*
  - » *How much would one of us need to catch up with the other?*
  - » *How many more pennies do you need before you'll have 30¢ exactly?*
  - » *How many more pennies do I need?*

After the game:

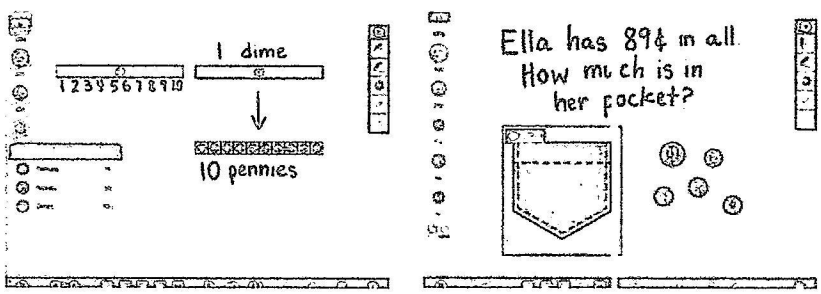
- Ask questions:
  - » *How much money did you collect?*
  - » *How much money did I collect?*
  - » *How much do we have in all?*

## Change It Up

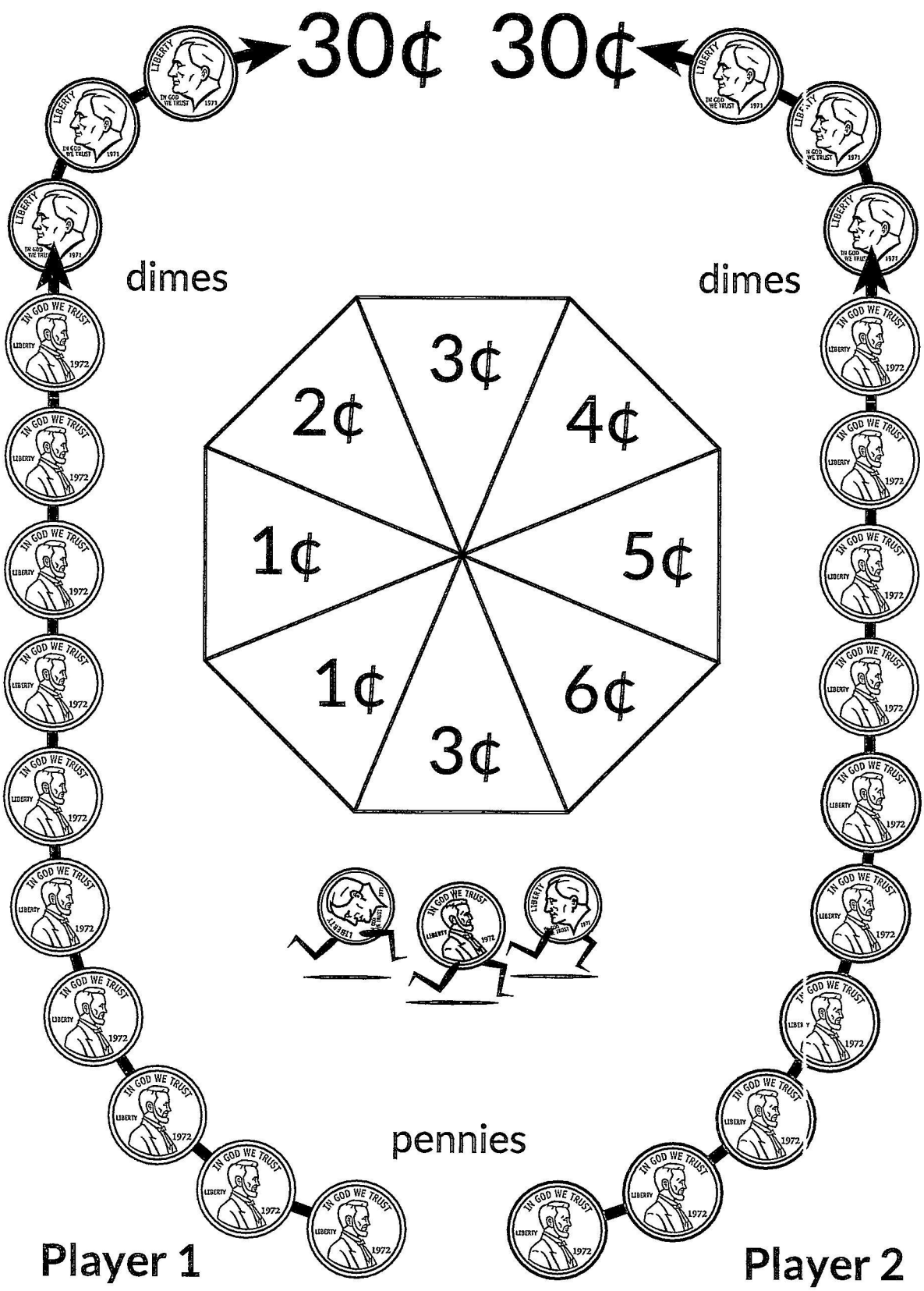
Making even small changes to a game can invite new ways of thinking about the math. Try making one of the changes below.

- Try adding nickels to your game. When you get 5 pennies, you can trade for 1 nickel. When you get 2 nickels, you can trade for 1 dime.
- Play to 50¢ or even $1.00. You'll need to add more dimes to play for larger amounts.

- Want to learn more about money? Try the free Money Pieces app, available at www.mathlearningcenter.org/resources/apps/money-pieces.
  - » Try playing the game using the app.
  - » Write your own money story problems.
  - » Learn about other coins and dollars.



# Race You to 30¢ Game Board



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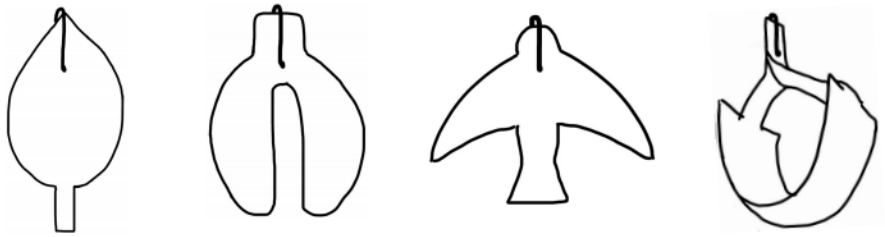

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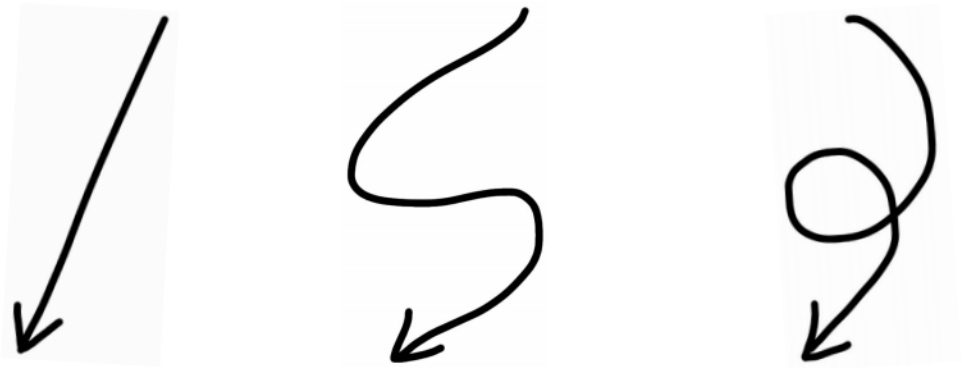

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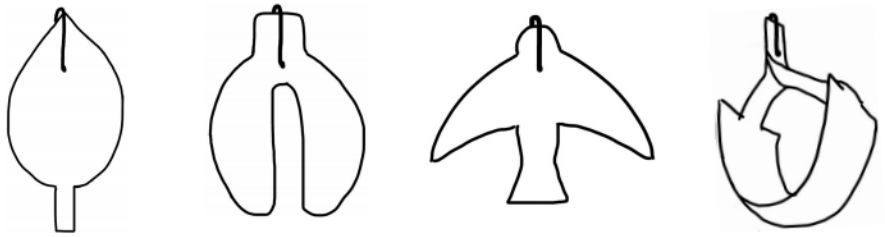

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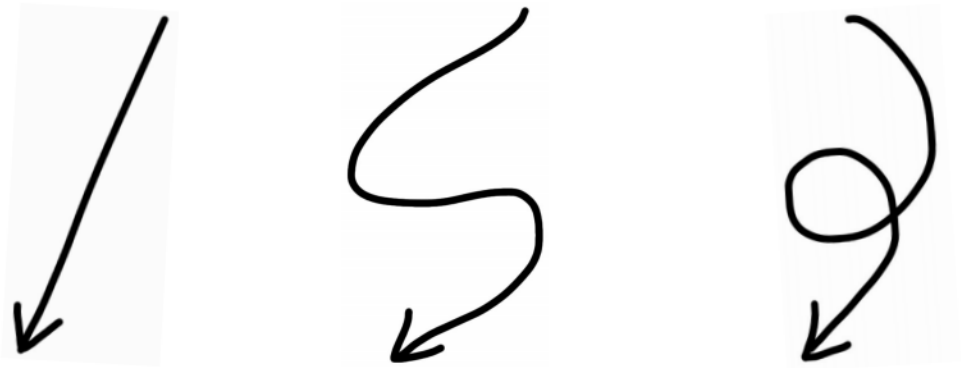

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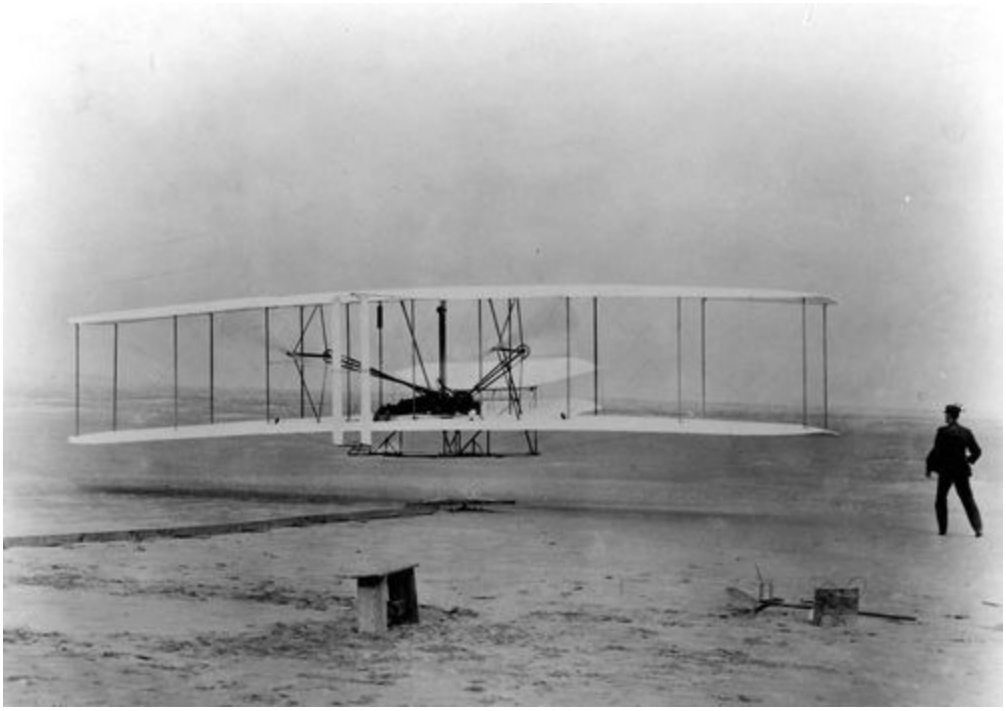
# The Flying Toy

by Kate Paixão



Wilbur and Orville Wright were brothers. They lived a long time ago. One day, their father brought home a helicopter toy.

The helicopter toy was made with rubber bands, cork, and other things. When Wilbur and Orville wound the toy up, it flew in the air. However, the toy was not very strong. Soon, it broke.

Wilbur and Orville studied their broken toy. Then the boys built a new one. It worked! Years later, the brothers built another flying machine. It was big enough for people to ride in. Their machine was one of the first airplanes.

## 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.<br><br>SERVICE: an action performed by a person such as a dog walker. |

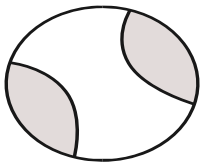
### Activity 1

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?