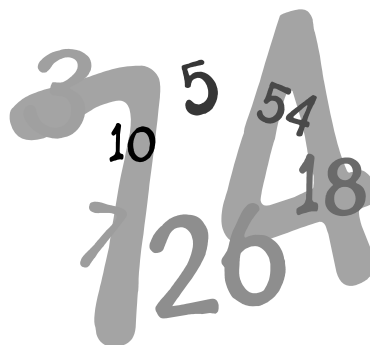


*What You Need
to Know Going
into 2nd Grade*

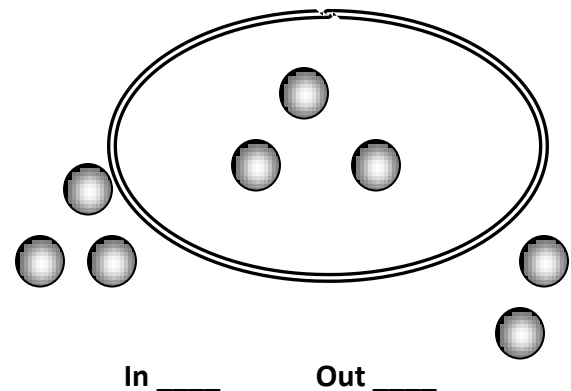
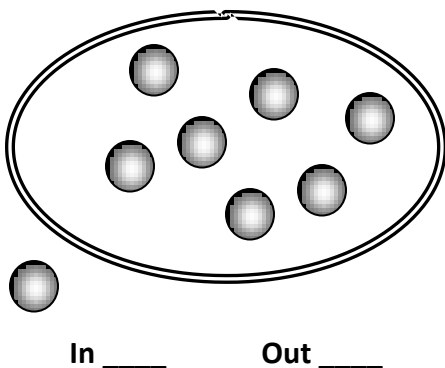
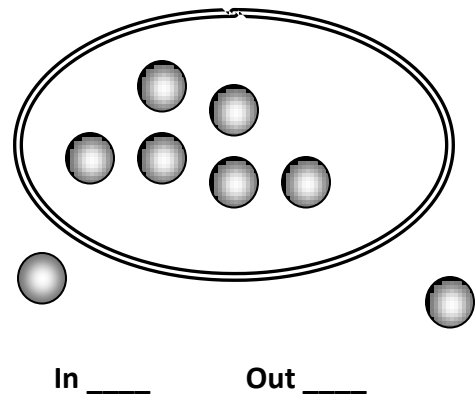
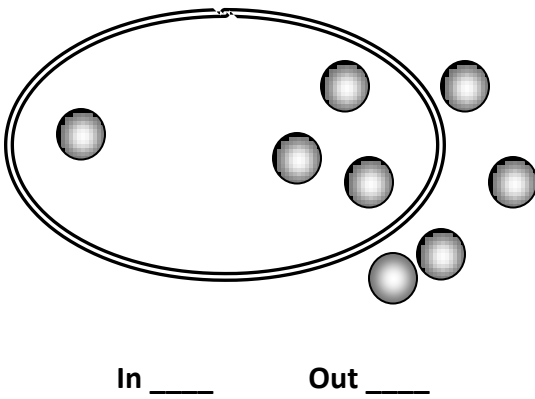
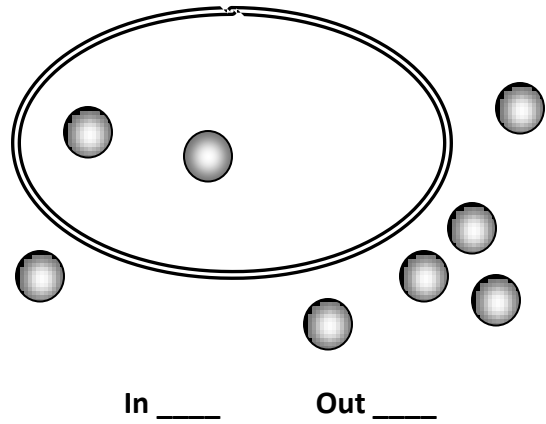
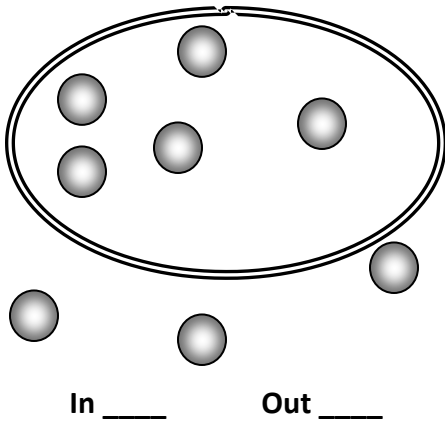


Summer Math Booklet

PLAYING MARBLES

Practice counting and breaking a number into 2 parts.

There were 8 marbles in each oval. Some were knocked out. Write how many marbles are still in the oval and how many fell off.



STORY TIME

Combine 2 numbers to solve a story problem.

Solve the problem. Draw a picture that shows your work.

Sophia planted 12 flowers.

Her younger brother, Noah, planted 6 flowers.

How many flowers were planted?



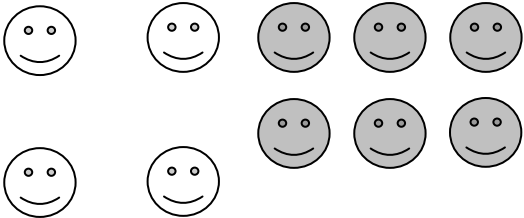
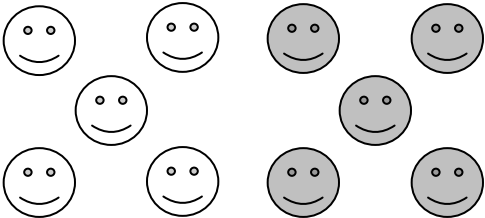
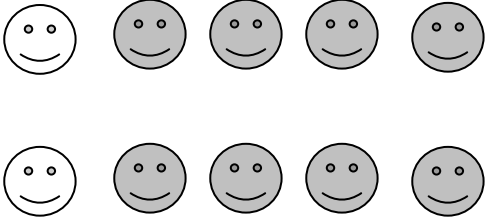
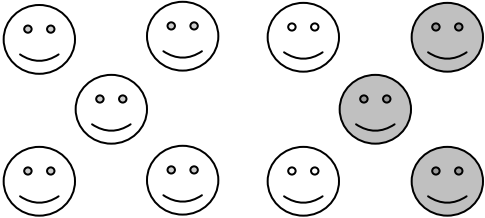
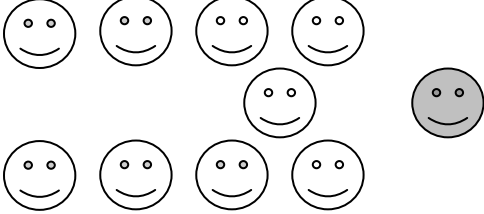
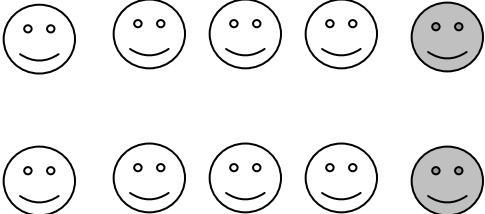
ADDING TO 10

Practice counting and finding combinations of 10.

Look at each group of smiley faces.

Write how many white smiley faces. Write how many gray smiley faces.

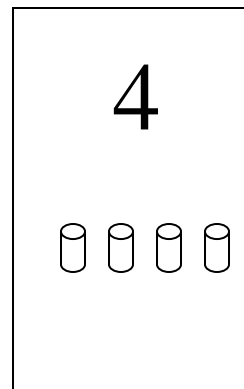
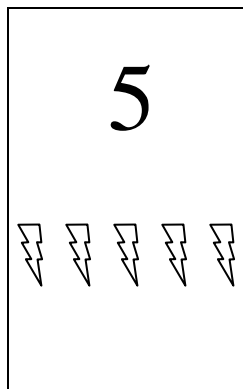
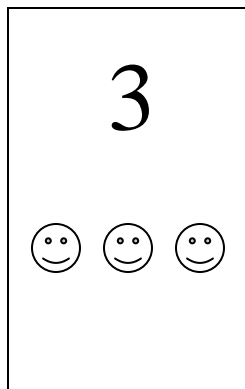
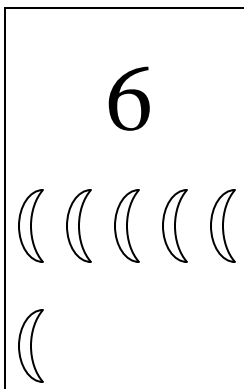
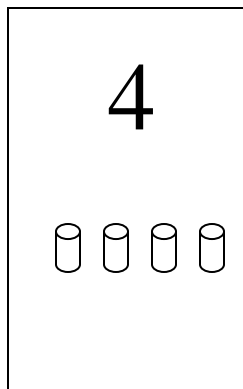
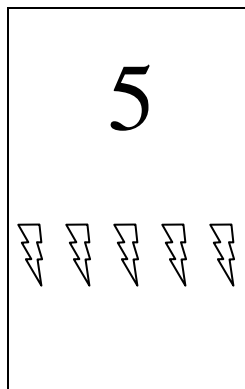
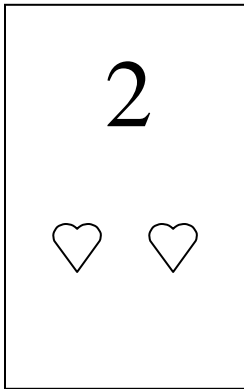
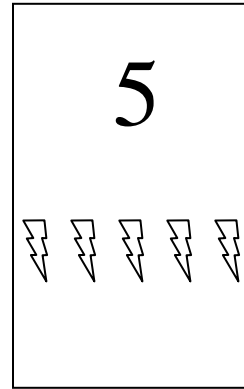
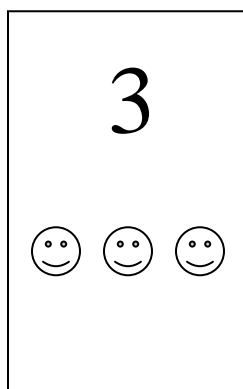
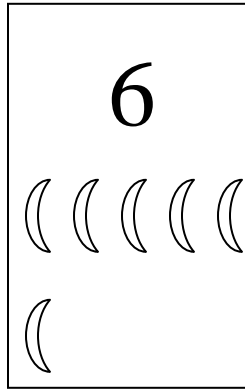
Use the numbers to make an equation that equals 10.

 _____ white _____ gray ____ + ____ = 10	 _____ white _____ gray ____ + ____ = 10
 _____ white _____ gray ____ + ____ = 10	 _____ white _____ gray ____ + ____ = 10
 _____ white _____ gray ____ + ____ = 10	 _____ white _____ gray ____ + ____ = 10

COMPARE

Compare two numbers and figure out which is greater.

Circle the card that has more.

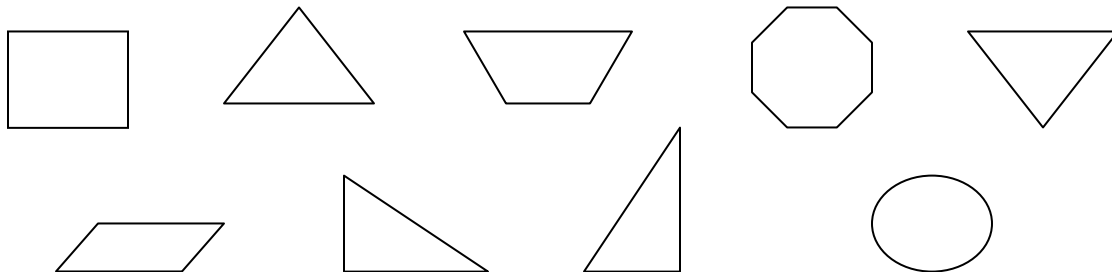


SHAPE SEARCH

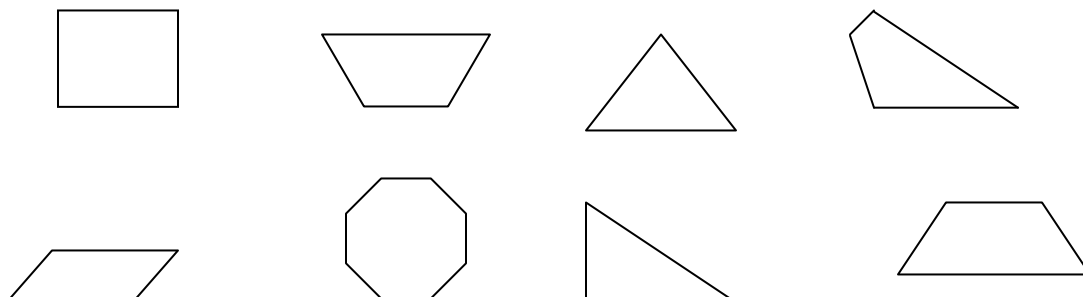
Use rules to compare and sort shapes.

Color in the shapes that fit the rule.

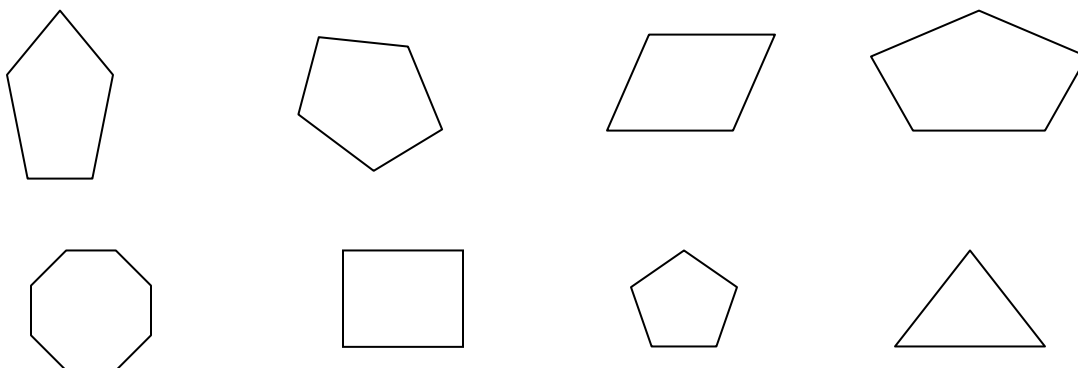
1. RULE 1: Has 3 corners (vertices)



2. RULE 2: Has 4 sides



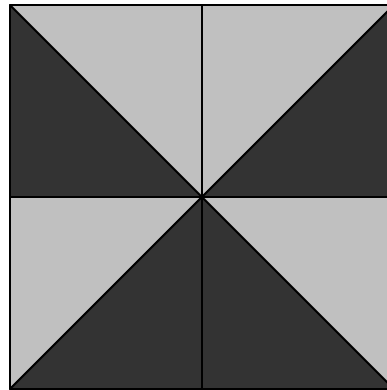
3. RULE 3: Has 5 sides



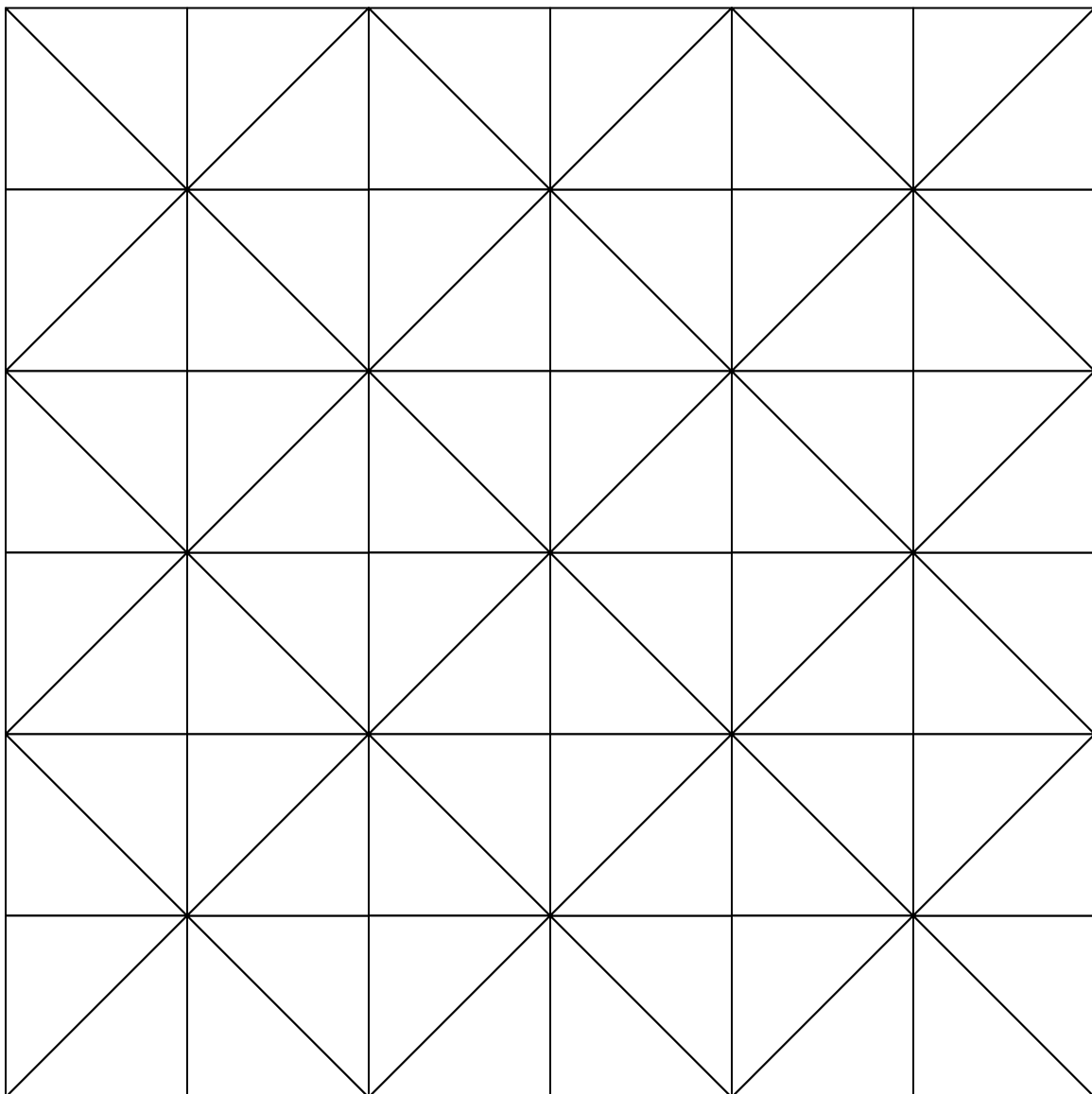
MAKE A QUILT

Create a pattern by repeating a unit.

Use this quilt square to make a quilt pattern.



Choose one color to be the *dark* color and another color to be the *light* color.



TWELVE SHOES: HOW MANY OF EACH?

Find a combination that adds up to 12.

Solve the problem. Show your work.

I have 12 shoes in my closet. Some are **boots**. Some are **sneakers**.

How many of each could I have? How many boots? How many sneakers?

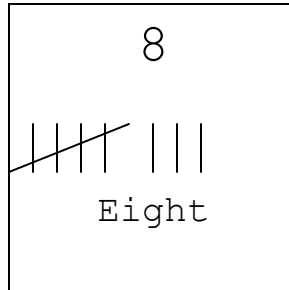
Find at least 3 combinations. Draw them.



TODAY'S NUMBER: 8

Show a number in different ways.

Today's Number is 8.



How many ways can you make Today's Number?

Show the ways.

--







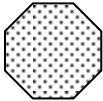

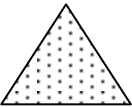



MISSING NUMBERS*Practice writing numbers in order from 1 to 100.***Fill in the missing numbers.**

1	2	3	4			7	8		10
11		13		15	16		18		20
	22	23			26	27		29	
		33	34	35			38		40
41			44	45	46			49	
	52	53		55		57			60
			64		66		68		
	72			75	76		78	79	
81	82	83					88		
91			94			97			

FOLLOW A RULE

Figure out a rule and sort according to that rule.

Look at the two groups pictured below.

Fits the Rule	Does not Fit the Rule
  	  
  	  

What rule was used to sort the shapes? _____

Add your own shapes that fit the rule.

BRIAN'S BUBBLEGUM

Practice subtracting one quantity from another.



Solve the problem. Show your work.

- 1. Brian bought 15 pieces of grape bubblegum. He chewed 8 of them in one day! How many pieces of bubblegum does he have left?**

--

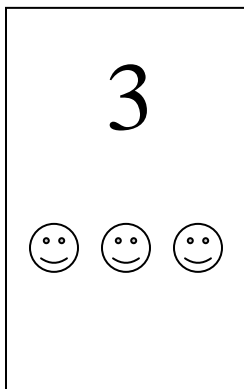
- 2. Brian also had 14 pieces of cherry bubblegum. He gave 7 of them to you. How many pieces of cherry gum does he have left?**

--

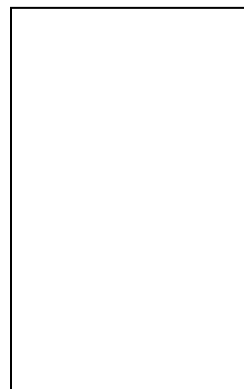
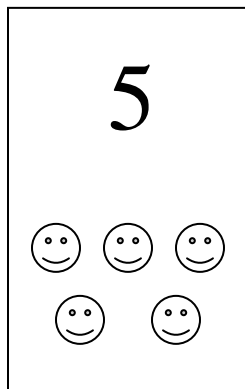
GIVE ME 10*Make combinations of 10.*

Write the number on the second card in each pair to make 10 in all. Draw smiley faces to match the number you write.

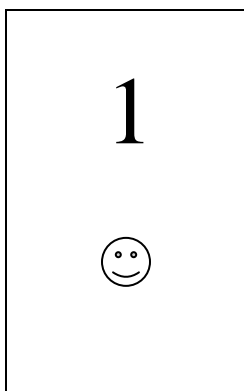
1.



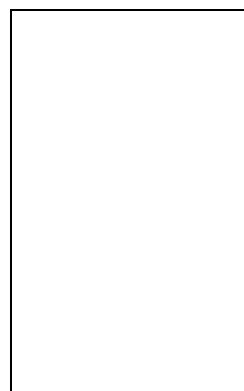
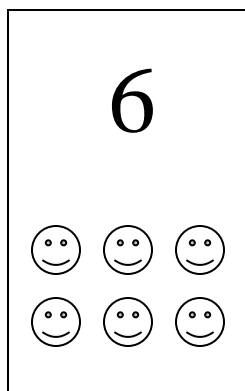
2.



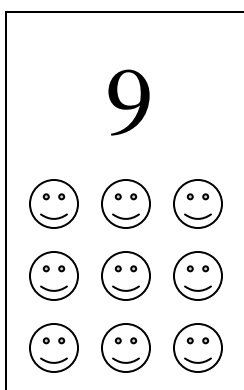
3.



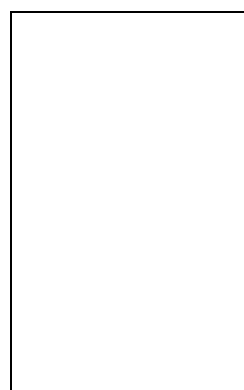
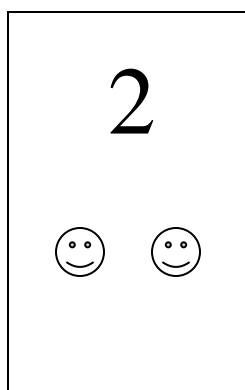
4.



5.



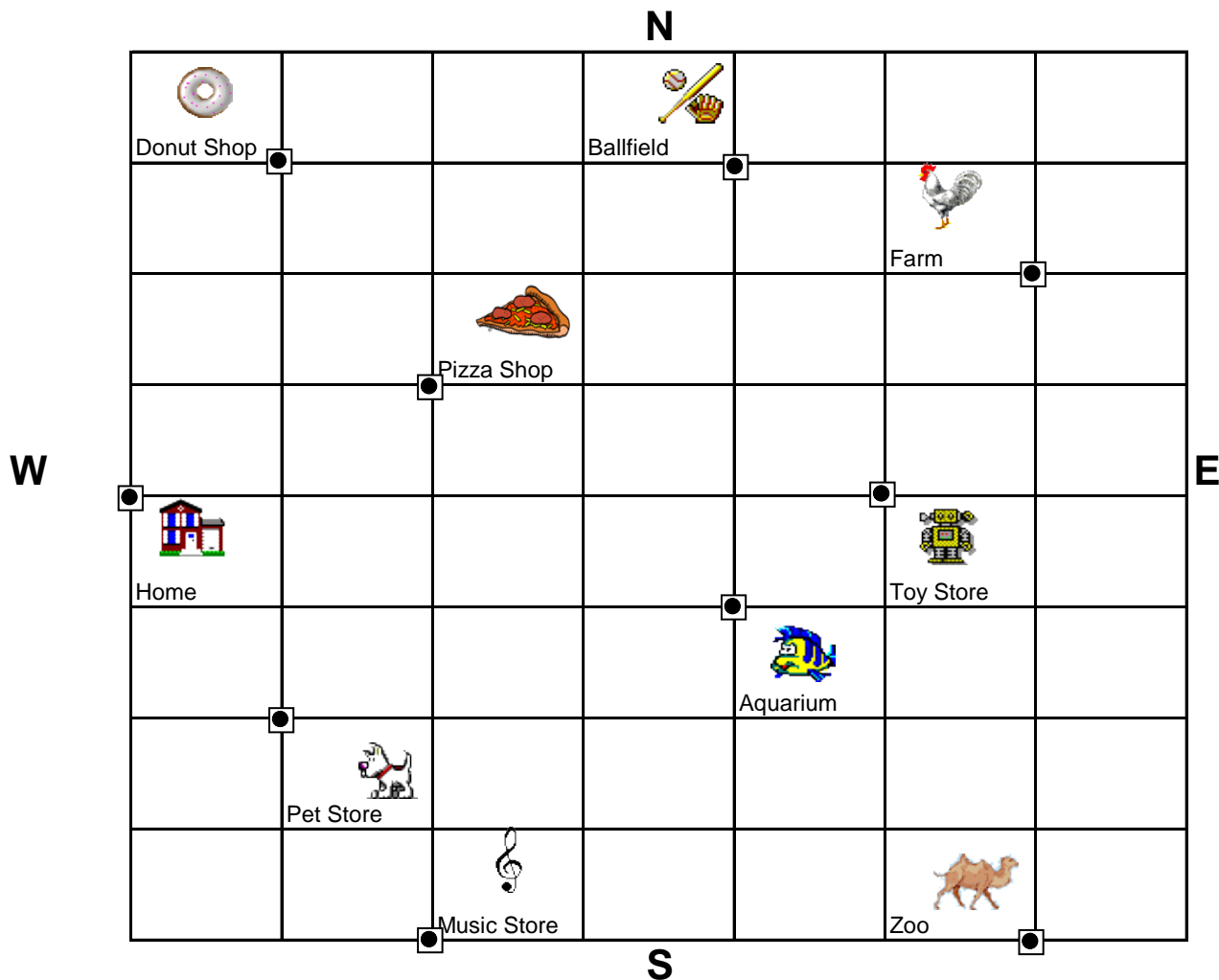
6.



FROM HERE TO THERE

Figure out how to get from one location on a map to another.

Pick 2 places on the map. Write the directions to get from one place to another.



Example: *To get from the Toy Store to the Zoo: Start at Toy Store. Go South 4 blocks. Turn and go East 1 block.*

Your turn: _____

WHAT'S MISSING?*Practice counting, writing, and sequencing numbers.***Write the missing numbers.**

7	8	9					
----------	----------	----------	--	--	--	--	--

15	16	17					
-----------	-----------	-----------	--	--	--	--	--

33	34	35					
-----------	-----------	-----------	--	--	--	--	--

46	47	48					
-----------	-----------	-----------	--	--	--	--	--

64	65	66					
-----------	-----------	-----------	--	--	--	--	--

93	94	95					
-----------	-----------	-----------	--	--	--	--	--

PATTERNS

Practice creating and working with repeating patterns.

<i>A</i>	<i>B</i>	<i>C</i>	<i>A</i>	<i>B</i>	<i>C</i>				
1	2	3	4	5	6	7	8	9	10

If this pattern continues in the same way, what letter will be in the 15th box?

How do you know?

<i>K</i>	<i>R</i>	<i>R</i>	<i>R</i>	<i>K</i>	<i>R</i>	<i>R</i>	<i>R</i>		
1	2	3	4	5	6	7	8	9	10

If this pattern continues in the same way, what letter will be in the 21st box?

How do you know?

Make up your own pattern, using your initials.

1	2	3	4	5	6	7	8	9	10

What letter will be in the 20th box?

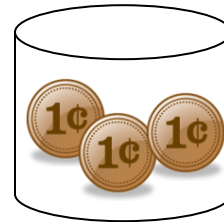
1ST PENNY JAR PROBLEM

Practice repeated addition.

Draw the “start” number of pennies in the jar.



Write how many pennies are in the jar each day.

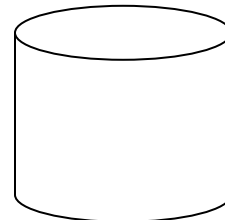


1. Number to add each day: 2

3 _____ _____ _____ _____ _____ _____ _____ _____

“Start” Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9

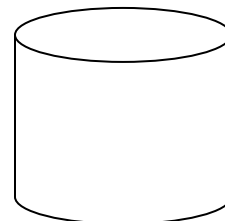
2. Number to add each day: 2



6 _____ _____ _____ _____ _____ _____ _____ _____

“Start” Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9

3. Number to add each day: _____ (your choice)



5 _____ _____ _____ _____ _____ _____ _____ _____

“Start” Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9

2nd PENNY JAR PROBLEM

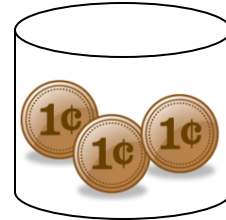
Practice repeated addition.

Draw the “start” number of pennies in the jar.



Write how many pennies are in the jar each day.

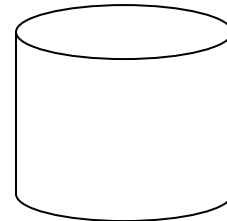
4. Number to add each day: 3



3 _____

“Start” Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9

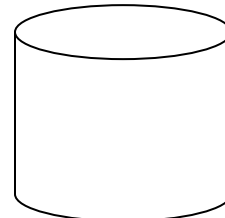
5. Number to add each day: _____ (your choice)



4 _____

“Start” Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9

6. Number to add each day: _____ (your choice)



“Start” Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9

(your choice)


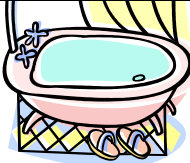
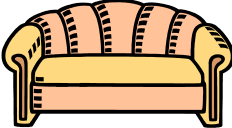

HOW MANY HANDS?

Practice measuring lengths with nonstandard units.

Measure the length of different items with your hands.

One “hand” is the distance from your wrist to the tips of your fingers.

Write the number of hand lengths for each item.

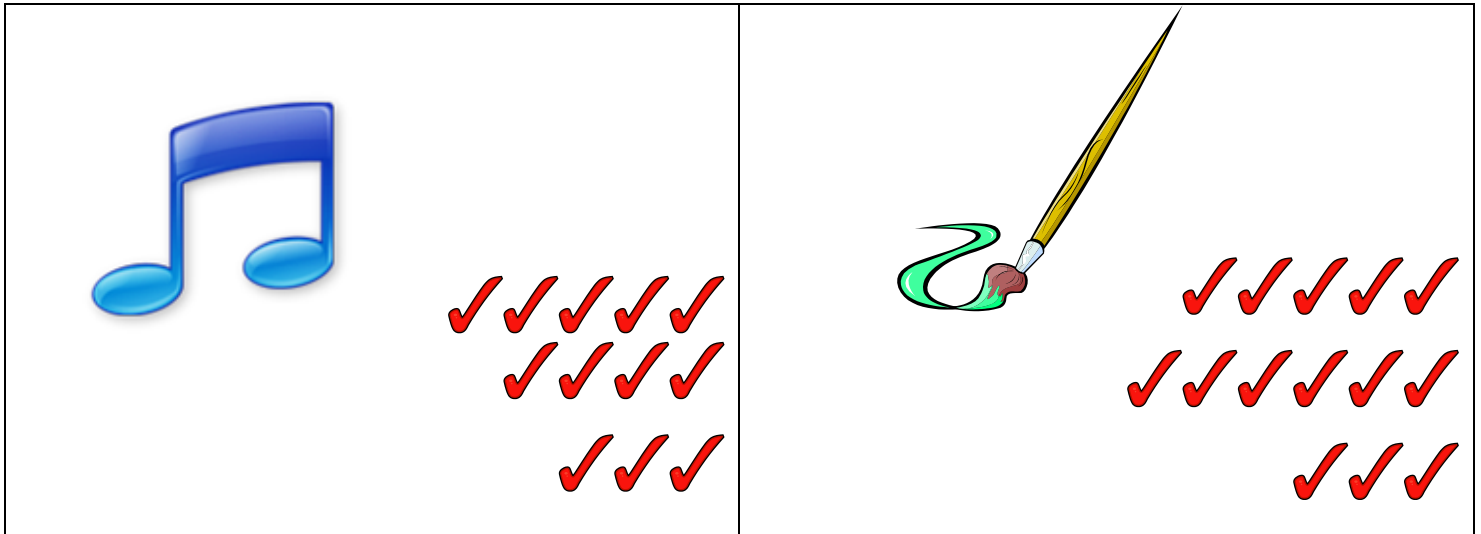
Item	Length in Hands
Any table in your home 	
Length of bath tub 	
Length of a couch or chair 	
Your bed 	
Your choice #1: _____	
Your choice #2: _____	

WHICH DO YOU LIKE BETTER?

Describe data from a survey question.

“Which do you like better, Music class or Art class?”

Students answered the question by putting a check beside either the music notes or the paint brush.



1. How many students like Music class better? _____
2. How many students like Art class better? _____
3. How many students answered the question? _____

Add a check to the class you like better. Ask other people to pick the class they like better. Now answer the questions again with your new data.

4. How many people like Music class better? _____
5. How many people like Art class better? _____
6. How many people answered the question? _____

MAKING A CALENDAR

Create, read, and use a calendar to track time.

Fill in the month, the days of the week, and the dates. Hang the calendar in a place where you can use it.

Month of						
Sunday						

Add a picture at the top of your calendar that tells something about the month.



Mark any special days with pictures, too.

FAMILY CONNECTION

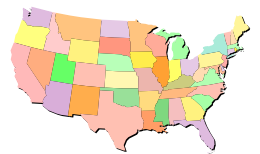
Building Your Child's Math Skills Together



Please sign each activity that you and your child complete.

Map Reading

Use the map on page 13 of this booklet. Together, select a starting point. Pick a destination, but don't tell your child what you chose. Give a set of directions that will lead your child to that destination and see if he or she can follow the directions correctly. Switch roles and repeat, with your child now selecting the final destination and providing the direction clues.



We completed this family activity.

Adult signature _____

Stepping it Off

Measure distances in your home in “steps.”

- First, measure the distance in “kid steps” – using your child’s own feet, walking heel to toe.
- Next, measure the same distance in “adult steps.”
- Compare.

Do this for at least 5 distances in and around your home.



We completed this family activity.

Adult signature _____

What’s My Number?



Materials: an envelope, 12 counters (beans, pennies, or any small object).

Show your child that you are using 12 counters in all. Without your child looking, put some of the counters in the envelope. Then ask your child to count the remaining counters and use that number to figure out how many are in the envelope. Remind your child that there are 12 counters in all. Switch roles, having your child hide some of the counters in the envelope. Repeat a number of times.

We completed this family activity.

Adult signature _____



Matching Mystery Objects

Materials: a paper bag, 2 of each of 5 different small objects

Put one of each object in the bag. Put one of each object out on the table.

Player 1 points to one of the objects on the table. Player 2 reaches into the bag and tries to find the matching object *without looking*. Before pulling the object out, Player 2 describes the feel of the object (size, shape, texture, etc.).

Take turns.

** To make the game easier, choose objects that are very different, such as a crayon, a penny, a toy car, etc. For a harder game, choose objects that are alike, such as a penny, a dime, a checker, etc.*

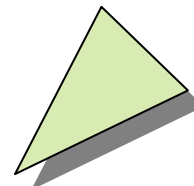


We completed this family activity.

Adult signature _____

Looking for Triangles

Together with your child, look for triangles around your home. Ask your child to draw what you find and to write the name of each object.



We completed this family activity.

Adult signature _____

Fact Match

Materials: 36 index cards

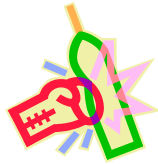
Write the numbers 1 through 18 on cards. Then on 18 more cards, write an addition or subtraction fact whose answer is one of the numbers. Mix each set of cards and place them fact down into two groups. Have your child turn over one card from each group. If the fact matches the answer, the child keeps both cards. If not, have him or her turn the cards back over and try again.

$$3 + 12$$

15

We completed this family activity.

Adult signature _____



Number Knockout

Materials: hundred chart

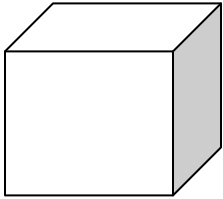
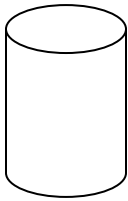
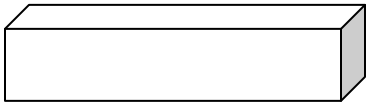
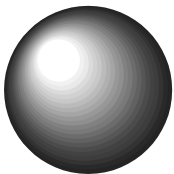
A hundred chart is a 10-by-10 grid showing the numbers from 1 to 100. (See page 9 in this booklet for a sample.) Think of a number between 1 and 100. Ask your child to guess your number by asking yes-or-no questions. For example, your child might ask if the number is less than 40. After you answer, have your child cross out all the numbers that do not match based on your answer. Have your child keep asking questions until she or he can guess the number. Then switch roles.

We completed this family activity.

Adult signature _____

Find the Shape

Find objects around your home or around your neighborhood that have the same shape as the solids pictured below. Beside each solid, draw a picture of what you found, or write the name of what you found.

**Cube****Cylinder****Rectangular Prism****Sphere**

We completed this family activity.

Adult signature _____



Show Me the Money

Materials: a variety of coins, with as many different coins as possible

Give your child the coins. Name an amount of money and ask your child to show you a group of coins that equals that amount. You might also ask your child to show you as many different combinations as possible of the given amount, or to make the amount with the fewest possible coins.

We completed this family activity.

Adult signature _____



How Many Heads?

Materials: a penny per person

Give each person a penny. Each person will flip his or her penny 10 times, but before starting, ask everyone to predict how many times “heads” will come up. Write the predictions down. Now, have all flip their pennies 10 times. Mark a tally for every “heads” flipped. Compare predictions to results.

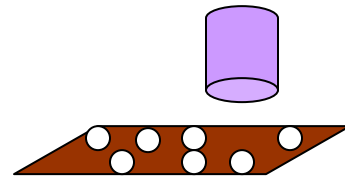
Extension: *Have everyone flip his or her penny 20 times, then 30 times, and then 40 times. Discuss any trends you might see.*

We completed this family activity.

Adult signature _____

Counters in a Cup

Materials: small cup (opaque), 10 counters

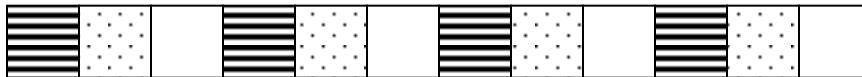


Work with a total of 10 counters. Hide some of the counters under the cup. Ask your child to tell you how many you hid. Your child should use the number of visible counters to determine the number of hidden counters. This encourages your child to practice counting and breaking a number into two parts ($10 = 6 + 4$). Repeat several times.

We completed this family activity.

Adult signature _____

Repeating Patterns



Ask your child to decide on a body movement pattern that matches the pattern in the boxes above. (For ex., clap for stripes, jump for dots, nod head for white.)

Write the pattern he or she does here.

Have your child use crayons to make his or her own color pattern in these boxes. Use different body movements to match the new pattern.

--	--	--	--	--	--	--	--	--	--	--	--

We completed this family activity.

Adult signature _____