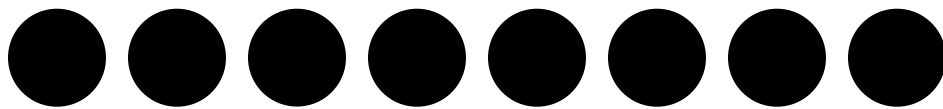
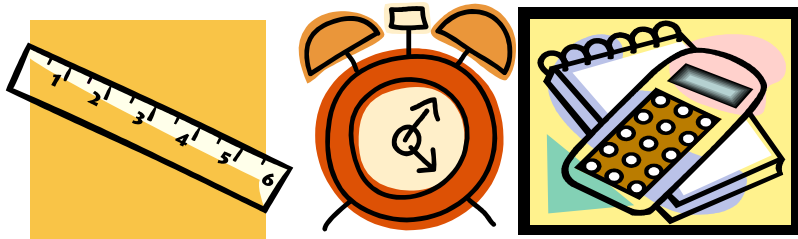
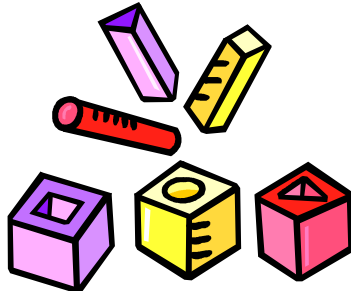
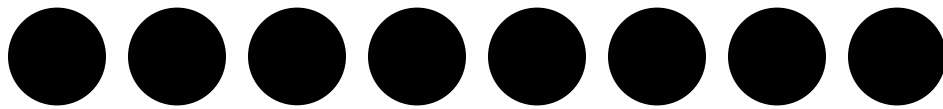


Math Mania

In the primary
grades



Ginny A. Dowd

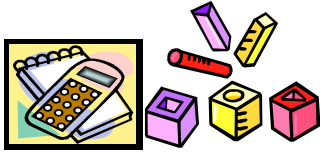
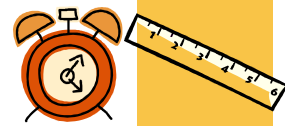


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Morning Math Mania and Calendar Fun



The booklet on pages 22 and 23 keeps the students in your class involved and thinking as you go through your morning routine. You can ask simple to complex questions and the kids can show you what they know!



Questions: The possibilities are endless.

These will get you started.

1. Can you write the date?
2. Can you write the name of today?
3. Can you write the abbreviation for the day?
The month?
4. What will it be in three days? Four days?
One day?
5. What day was it two days ago? Three days ago?
6. How many days have we been in school?
7. Is that an odd or even number?
8. Can you round that number to the closest ten? Hundred?
9. What is the third month? Eighth month?
Sixth month?
10. If we are in the month of September, what will it be in three months?
11. Write the abbreviation to a month in that is in spring, summer, winter, or fall.

12. Let's learn how to tell time! Look at the hands on the clock. What time is it?
13. List time of events throughout your day on the board. Ask what time is in the a.m.? The p.m.? What time is closest to the time we go home from school?
14. Look at the specific time written on the board. Ask: What will the time be in three hours? What was the time one hour ago? Make it harder. Ask: What will the time be in five minutes?
15. Keep track of the number of days you are in school using a variety of patterns. Ask the kids to identify the shape the number should be written on for today.
16. Have the class write the odd even pattern for a specific set.
17. Have the class write the color pattern for the set.
18. Have the class write the direction or height pattern for the set.
19. Ask the class to identify how many times the pattern has been repeated.
20. Ask the kids to show how many more shapes are needed to complete a pattern.
21. Ask addition questions. Example: If today is the fourth day of school, what will it be



Morning Math Mania



and Calendar Fun

Name _____

0, 2, 4, 6, 8! Even numbers are GREAT!

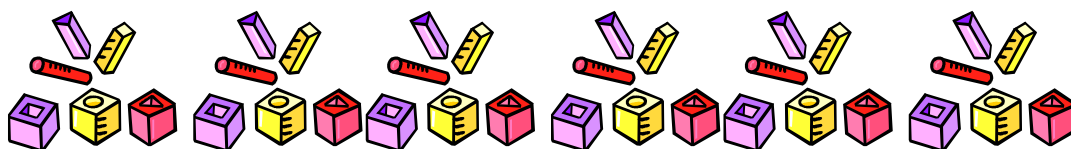


January, February, March, April, May,
June, July, August, September, October,
November, December and stop!

1, 3, 5, 7, 9! Odd numbers are lonely!

There are seven days in a week!

Sunday, Monday, Tuesday, Wednesday,
Thursday, Friday, Saturday and stop!



Wednesday comes in the middle of the
week!

Date _____

1.	2.
3.	4.
5.	6.
7.	8.





Date _____

1.	2.
3.	4.
5.	6.
7.	8.

Name _____

The Amazing Pull a Cube Game

 0, 2, 4, 6, 8 ~ Even Numbers are Great! YEAH!
 1, 3, 5, 7, 9 ~ Odd Numbers are LONLEY!
WAHHHH!

1. Read the number in each box. Show me that number using your cubes.
2. Next divide the cubes into groups of two.
3. Ask yourself, "Do I have any left over?" If you do, the number is odd. If you don't the number is even.
4. Circle the word odd or even next to your number.
5. Let's do it again!

 Is it odd or even? 

2 odd even	3 odd even	6 odd even
5 odd even	9 odd even	4 odd even
0 odd even	12 odd even	10 odd even
11 odd even	8 odd even	13 odd even
20 odd even	14 odd even	17 odd even
7 odd even	16 odd even	1 odd even



Kitty Cat Addition! It's Purr-fect!

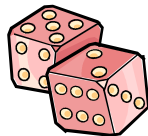


Here's how you play:

1. Roll two number cubes.
2. Add them up to find the sum.
3. Write the sum in the correct kitty house.



$$6 + 3 = 9$$



$$5 + 2 = 7$$



6



7

$$5 + 2 = 7$$



8



9

$$6 + 3 = 9$$

Name _____



Roll it! Add it!



Directions.

1. Let's finish the addition problem. The first addend is written. Roll a number cube. Record your number on the second line.
2. Now add to find the sum!

$1 + \underline{\quad} = \underline{\quad}$	$4 + \underline{\quad} = \underline{\quad}$	$2 + \underline{\quad} = \underline{\quad}$
$2 + \underline{\quad} = \underline{\quad}$	$5 + \underline{\quad} = \underline{\quad}$	$3 + \underline{\quad} = \underline{\quad}$
$3 + \underline{\quad} = \underline{\quad}$	$1 + \underline{\quad} = \underline{\quad}$	$4 + \underline{\quad} = \underline{\quad}$
$4 + \underline{\quad} = \underline{\quad}$	$2 + \underline{\quad} = \underline{\quad}$	$5 + \underline{\quad} = \underline{\quad}$
$5 + \underline{\quad} = \underline{\quad}$	$3 + \underline{\quad} = \underline{\quad}$	$1 + \underline{\quad} = \underline{\quad}$
$1 + \underline{\quad} = \underline{\quad}$	$4 + \underline{\quad} = \underline{\quad}$	$2 + \underline{\quad} = \underline{\quad}$
$2 + \underline{\quad} = \underline{\quad}$	$5 + \underline{\quad} = \underline{\quad}$	$3 + \underline{\quad} = \underline{\quad}$
$3 + \underline{\quad} = \underline{\quad}$	$1 + \underline{\quad} = \underline{\quad}$	$4 + \underline{\quad} = \underline{\quad}$

Extension:

Can you color all of your even sums red?

Can you color all of your odd sums blue?

Name _____

Fact Families

Meet the dad! He's the highest number!

Meet the mom! She's the middle number!

Meet the baby! She's the smallest number!

*Let's see what they add up to! Remember: The dad says, "After you mom and after you baby. I have to come last."

*Let's see what they can do with subtraction! Remember: The dad says, "Write me first...OR ELSE!!!!"



Hello Fact Family			9	3	6
_____ is the baby.	_____ is the mommy.	_____ is the daddy!			

$$\begin{array}{r} \underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad} \\ \text{baby} \quad \text{mom} \quad \text{dad} \end{array}$$

$$\begin{array}{r} \underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad} \\ \text{mom} \quad \text{baby} \quad \text{dad} \end{array}$$

$$\begin{array}{r} \underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad} \\ \text{dad} \quad \text{baby} \quad \text{mom} \end{array}$$

$$\begin{array}{r} \underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad} \\ \text{dad} \quad \text{mom} \quad \text{baby} \end{array}$$

Hello Fact Family			7	3	10
_____ is the baby.	_____ is the mommy.	_____ is the daddy!			

$$\begin{array}{r} \underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad} \\ \text{baby} \quad \text{mom} \quad \text{dad} \end{array}$$

$$\begin{array}{r} \underline{\quad\quad} + \underline{\quad\quad} = \underline{\quad\quad} \\ \text{mom} \quad \text{baby} \quad \text{dad} \end{array}$$

$$\begin{array}{r} \underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad} \\ \text{dad} \quad \text{baby} \quad \text{mom} \end{array}$$

$$\begin{array}{r} \underline{\quad\quad} - \underline{\quad\quad} = \underline{\quad\quad} \\ \text{dad} \quad \text{mom} \quad \text{baby} \end{array}$$

Name _____



An estimate is a good guess!



It's Goldfish Estimation!



Put your hand in the bag. Pull out a handful of goldfish. Make a good guess!

My estimate _____	The Actual # _____
-------------------	--------------------

Write a greater than, less than or equal to equation for your estimate and the actual number.

_____ ○ _____



Put your hand in the bag. Pull out a handful of goldfish. Make a good guess!

My estimate _____	The Actual # _____
-------------------	--------------------

Write a greater than, less than or equal to equation for your estimate and the actual number.

_____ ○ _____



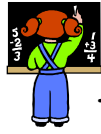
Put your hand in the bag. Pull out a handful of goldfish. Make a good guess!

My estimate _____	The Actual # _____
-------------------	--------------------

Write a greater than, less than or equal to equation for your estimate and the actual number.

_____ ○ _____

Name _____



Roll it! Subtract It!

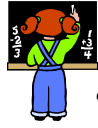


1. Roll two number cubes.
2. Write the highest number first and the lowest number last.
3. Put a subtraction sign in the middle of the two numbers and don't forget your equal sign at the end. Now subtract!

___ - ___ =	___ - ___ =	___ - ___ =
___ - ___ =	___ - ___ =	___ - ___ =
___ - ___ =	___ - ___ =	___ - ___ =
___ - ___ =	___ - ___ =	___ - ___ =
___ - ___ =	___ - ___ =	___ - ___ =
___ - ___ =	___ - ___ =	___ - ___ =

Can you color all of your even answers red?
Can you color all of your odd answers blue?

Name _____



This is tricky stuff!



Subtraction with regrouping! You can do it! I know you can! Can you subtract these numbers? Write yes or no under each problem.

$$\begin{array}{r} 8 \\ - 6 \\ \hline \end{array}$$

$$\begin{array}{r} 4 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 6 \\ - 8 \\ \hline \end{array}$$

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

$$\begin{array}{r} 7 \\ - 9 \\ \hline \end{array}$$

$$\begin{array}{r} 3 \\ - 7 \\ \hline \end{array}$$

$$\begin{array}{r} 9 \\ - 3 \\ \hline \end{array}$$

$$\begin{array}{r} 2 \\ - 7 \\ \hline \end{array}$$

Do you need to knock at the ten's door?

Write yes or no.

$$\begin{array}{r} \square \\ \square \end{array}$$

7 8

$$\begin{array}{r} - 6 \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ \square \end{array}$$

3 4

$$\begin{array}{r} - 7 \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ \square \end{array}$$

5 6

$$\begin{array}{r} - 8 \\ \hline \end{array}$$

$$\begin{array}{r} \square \\ \square \end{array}$$

8 2

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

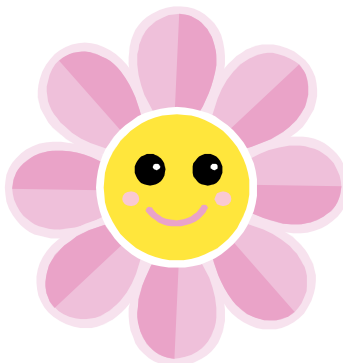
Congruent Shapes

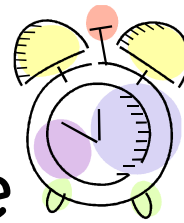
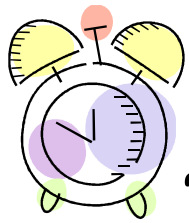
Congruent, congruent what does it mean? Two shapes are exactly the same. Same size! (Clap, clap.) Same shape! (Clap, clap.) Same size! (Clap, clap.) Same shape! (Clap, clap.)



Symmetry

Symmetry, symmetry, that's our game. Two sides of a shape are exactly the same. Same size! (Clap, clap.) Same shape! (Clap, clap.) Same size! (Clap, clap.) Same shape! (Clap, clap.)





Telling Time

The Hour Hand

What does the hour hand say?

“Me first! Me first! What ever you do say me first!”

The hour hand says, “Don’t forget my favorite song!”

If it’s in between go back! (Clap, Clap.) If it’s in between go back! (Clap, Clap.) If it’s in between, if it’s in between, if it’s in between go back!
(Clap, Clap.)

The Minute Hand

What does the minute hand say?

“I’m cool! I’m cool! I’m very, very cool! I’m talking

Clock talk and I’m counting by fives!”



Day by Day Lessons



Day One

1. Introduce the hour hand. Tell the class it's such a little baby it always has to talk first and come first.
2. Pass out the clocks and have the class fill in the numbers. Give each student an hour hand.
3. Have the kids point to various numbers on the clock and tell you what the hour hand would say.
4. Next have them place the hour hand in between numbers and teach the hour hand's special song. Ask the kids to tell you what the hour hand would say if it were in between two numbers.



Day Two

(Before you teach the minute hand, be sure your class knows how to count by fives!)

1. Do a quick review of the hour hand and what it says as it goes around the clock.
2. Explain that each minute has 60 seconds and watch the second hand spin around the clock for one minute. Point out that there are 60 minutes

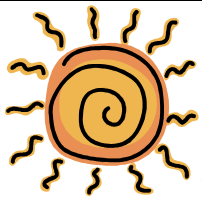
Certain or Impossible

More Likely vs. Less Likely

Use these sentences to get your students thinking about the concepts of certain and impossible. Each child has an index card with *certain* written on one side and *impossible* written on the other. After you have read each sentence have the class hold up the word they think describes it.



Day One



Certain



Impossible

The sun is hot.
Winter is cold.
_____ is my teacher.
There are 18 kids in
my class.
School ends at 3:30.
First graders have been
to kindergarten.
Antarctica is cold.

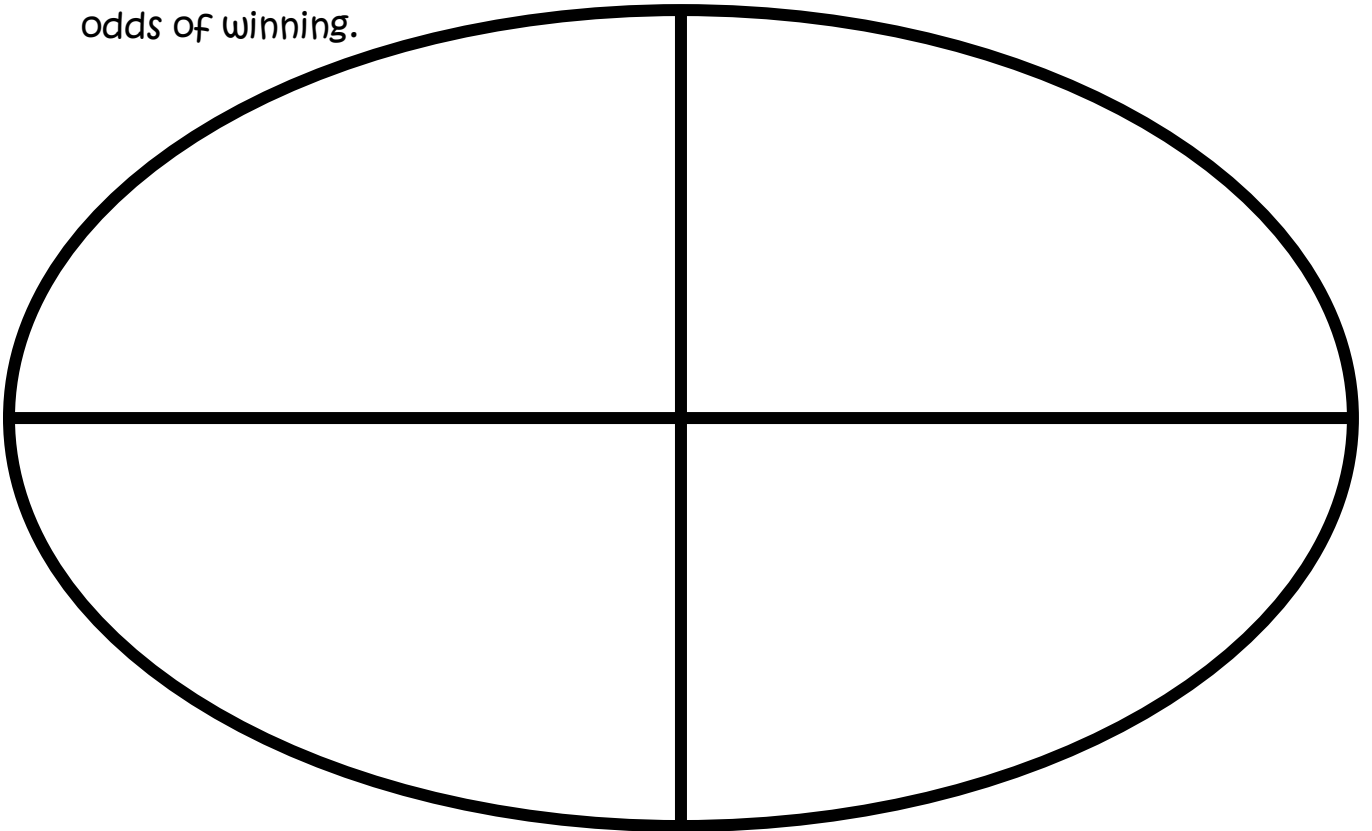
Nighttime is sunny.
There are 8 days in a
week.
Santa is my sister.
It snows on July 4th.
Cherries are
vegetables.
School starts at
midnight.

The Certain – Impossible Game

1. Have the class sit in a circle on the floor. Give each student a number line numbered 0 to 14.

Name _____

Let's make a spin game that shows more likely, less likely or even odds of winning.



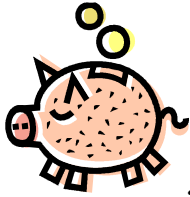
1. How many sections is the game board divided into? _____
2. Color three of the sections blue. Color one section red.
3. What are the chances of landing on blue? ___ out of ___
4. What are the chances of landing on red? ___ out of ___
5. Make a prediction. What color will you land on the most? _____
6. Use a pencil and a paper clip to make a spinner. Spin up to 20 times and tally your results.

Red	
Blue	

Was it easy to predict? Yes No Why?

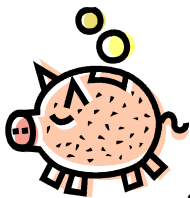
Money, Money, Money

Money can be tricky! To remember what each coin's value is think of these rhymes!

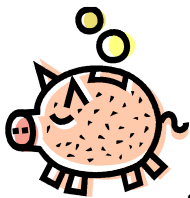


A dime says, "You'd better count by tens (Clap, Clap). Count by tens (Clap, Clap). I may be little but you count by tens!"

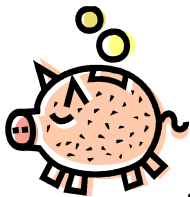
Remember: I'm a teeny tiny ten.



A nickel says, "Fives, fives you count by fives. It ain't no jive! You count by fives 'cause I am the nickel. I am the medium sized!"



A quarter says, "Twenty-five, fifty, seventy-five, a dollar. I am the big coin so let's all holler!"



A penny says, "I am brown and I'm fun cause you count by one!"

Name _____

Let's count dimes and pennies!

 Show me 4 dimes and 2 pennies. _____

 Show me 3 dimes and 1 penny. _____

 Show me 5 dimes and 4 pennies. _____

 Show me 8 dimes and 3 pennies. _____

 Show me 6 dimes and 5 pennies. _____

 Show me 1 dime and 1 penny. _____

 Show me 9 dimes and 3 pennies. _____

 Show me 2 dimes and 2 pennies. _____

 Show me 10 dimes and 6 pennies. _____

 Show me 3 dimes and 3 pennies. _____

 Show me 7 dimes and 0 pennies. _____

 Show me 0 dimes and 10 pennies. _____

Name _____



Hello FDR! Hello Tom! Hello Abe!












Let's count dimes, nickels and pennies!

1. Do you want to buy a Skittle? It will cost you two dimes and one nickel. Cost: _____
2. Do you want to buy a drink of water? It will cost you three dimes and two nickels. Cost: _____
3. Do you want to buy a sticker? It will cost you four dimes, three nickels and six pennies. Cost: _____
4. Do you want to buy a skip around the room? It will cost you six dimes, nine nickels and one penny. Cost: _____
5. Do you want to buy a hug? It will cost you two dimes, two nickels and seven pennies. Cost: _____
6. Do you want to buy a pretzel? It will cost you five dimes, six nickels, and three pennies. Cost: _____
7. Do you want to buy another drink? It will cost you two dimes, seven nickels and eight pennies. Cost: _____
8. Do you want to write your name on the chalkboard? It will cost you three dimes, three nickels and five pennies. Cost:

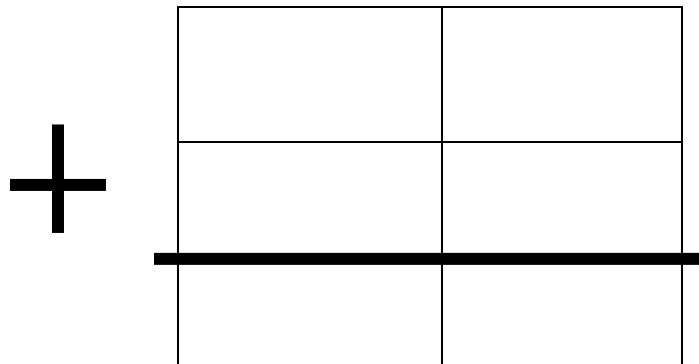
9. Do you want to draw a star on your paper? It will cost you four dimes, three nickels and four pennies. Cost: _____
10. What is your favorite coin to count?
Penny Nickel Dime Quarter
Why?

Name _____

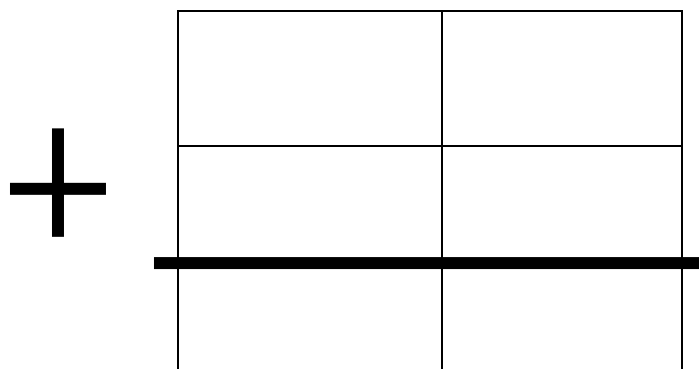
Let's buy mittens and gloves! What design will we choose? (Without Regrouping)

 <p>flowers 21¢</p>	 <p>snowflakes 52¢</p>	 <p>circles & swirls 63¢</p>
 <p>no pattern 30¢</p>	 <p>bears 36¢</p>	 <p>clouds 23¢</p>
 <p>furry 15¢</p>	 <p>Christmas trees 74¢</p>	 <p>Striped 39¢</p>

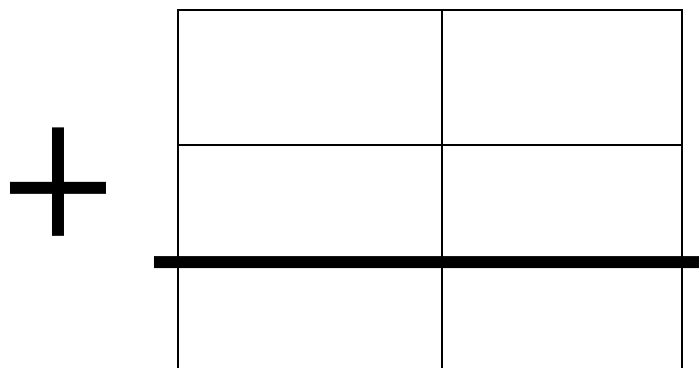
1. Let's buy flower mittens and snowflake mittens!



2. Let's buy circle and swirl mittens and no pattern mittens!












3. Let's buy bear gloves and cloud mittens!

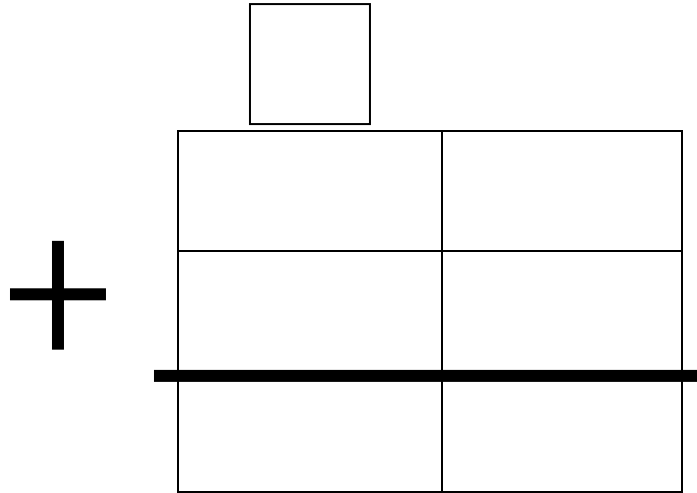


Name _____

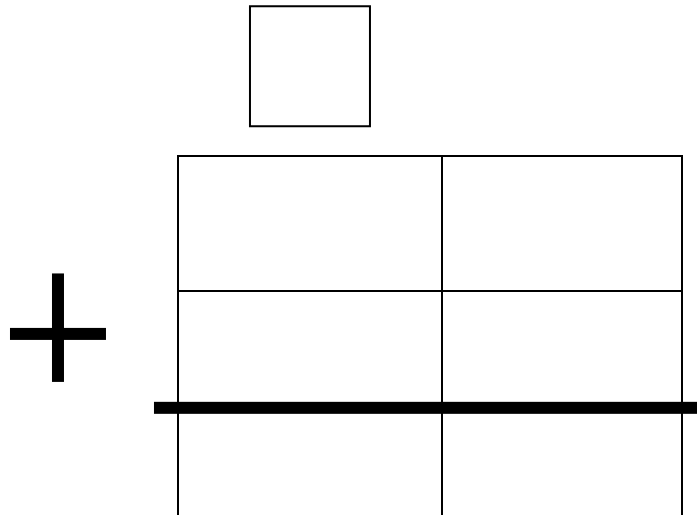
Let's buy mittens and gloves! What design will we choose? (With Regrouping)

 <p>flowers 28¢</p>	 <p>snowflakes 53¢</p>	 <p>circles & swirls 59¢</p>
 <p>no pattern 40¢</p>	 <p>bears 36¢</p>	 <p>clouds 18¢</p>
 <p>furry 65¢</p>	 <p>Christmas trees 15¢</p>	 <p>Striped 21¢</p>

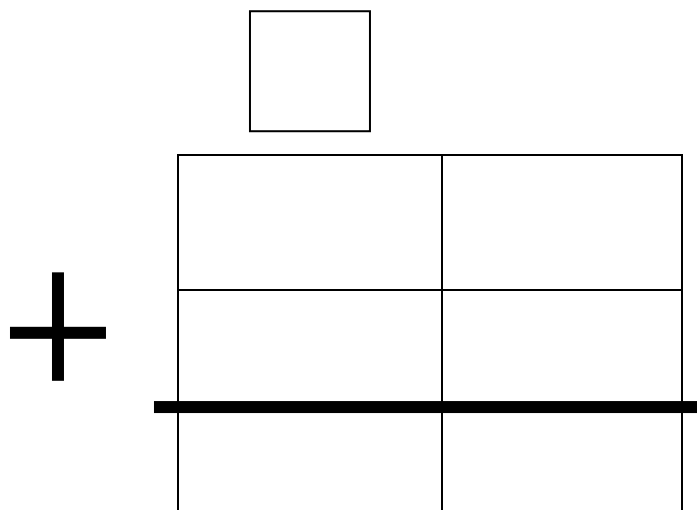
1. Let's buy flower mittens and snowflake mittens!



2. Let's buy circle and swirl mittens and no pattern mittens!



3. Let's buy bear gloves and cloud mittens!




Fun with Pattern Blocks


When introducing pattern blocks, the goal is to have the class become familiar with their names, shapes, number of sides, and vertices.

Rhymes that help us remember!


To remember the shapes and names of pattern blocks think of this:




Rhombus! Rhombus! Looks like a diamond. Rhombus! Rhombus, I love you!



A parallelogram has four sides. Opposite lines are both the same! That's the name of the parallelogram game!



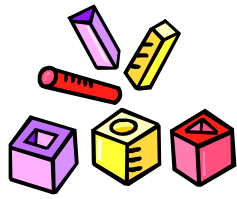
A trapezoid looks like a trap! What will you catch in your trapezoid trap?



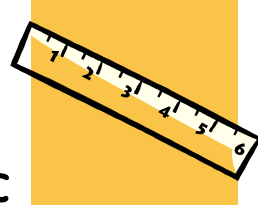
Who lives in a hexagon house? Is it a Cat or is it a mouse!


Fun Activities


1. Make a large hexagon pattern for every two to three children in your classroom. Have them trace the hexagon on a colored sheet of construction paper, cut it out and design a hexagon house! Have them glue only the top of the shape on to a piece of paper, lift it up and hide something in the hexagon house. Next





Measurement




 I'm an inchworm. Oh, me. Oh, my! I only count to twelve! 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12! And then I say bye - bye!

 As a centimeter, I'm very small. I couldn't measure things that are very tall. Thirty, thirty, oh, whoopee! When you see thirty on the ruler you know it's me!

 When you are measuring with a ruler and it's not an exact measurement remember: If it's in the middle go up, up, up. If it's in the middle go up (Clap, Clap) to the next (Clap, Clap) number (Clap, Clap)!

 Measuring is so much fun for kids as long as they do it right! We say, Line up the end of the ruler to the first point on the line. If you do that, your measurement will be divine!!!!

 Does your class know the difference between a line, a path and a closed, straight shape? What is the perimeter? The perimeter, the perimeter, it's the distance around a shape that's closed!

Name _____

A fraction is a part of something. Fill in the blank with the total number.

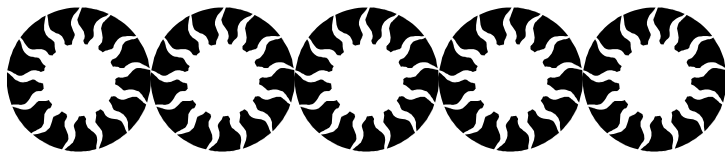
1. Color 6 out of _____ red.



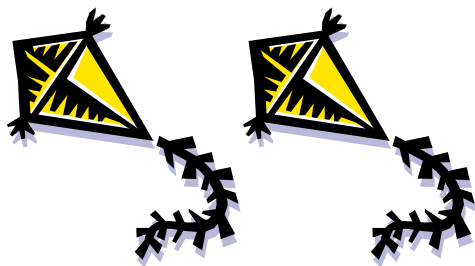
2. Color 5 out of _____ purple.



3. Color 4 out of _____ yellow.



4. Color 1 out of _____ pink.



5. Color 6 out of _____ green



Name _____



Hop to it and solve these word problems!

The frog and the toad played hop scotch for nine hours. Then they played hide and go leap for three hours. Next they played rib-it tag for one hour.

What game did they play the most?

hop scotch hide and go leap rib-it tag

What game did they play for the shortest amount of time?

hop scotch hide and go leap rib-it tag

Show your work. How many hours did they play hide and go leap and rib-it tag?

Show your work. How many more hours did they play hop scotch than hide and go leap?

Show your work. How many hours did they play altogether?

Infer! If you Were a frog or a toad were would you hide when you played hide and go leap?