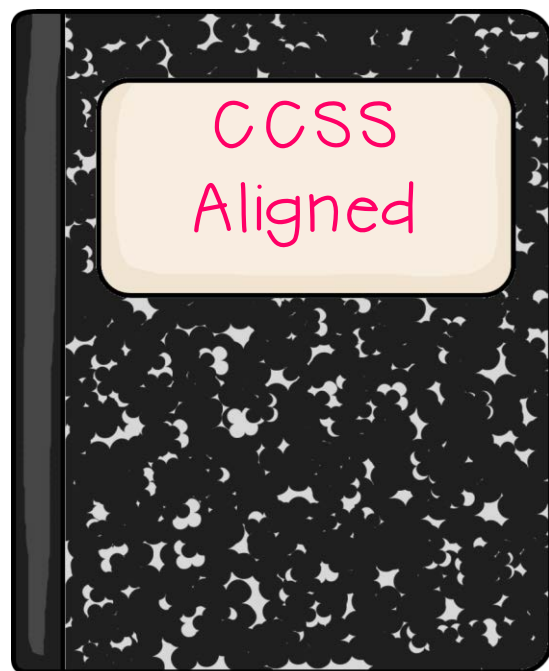
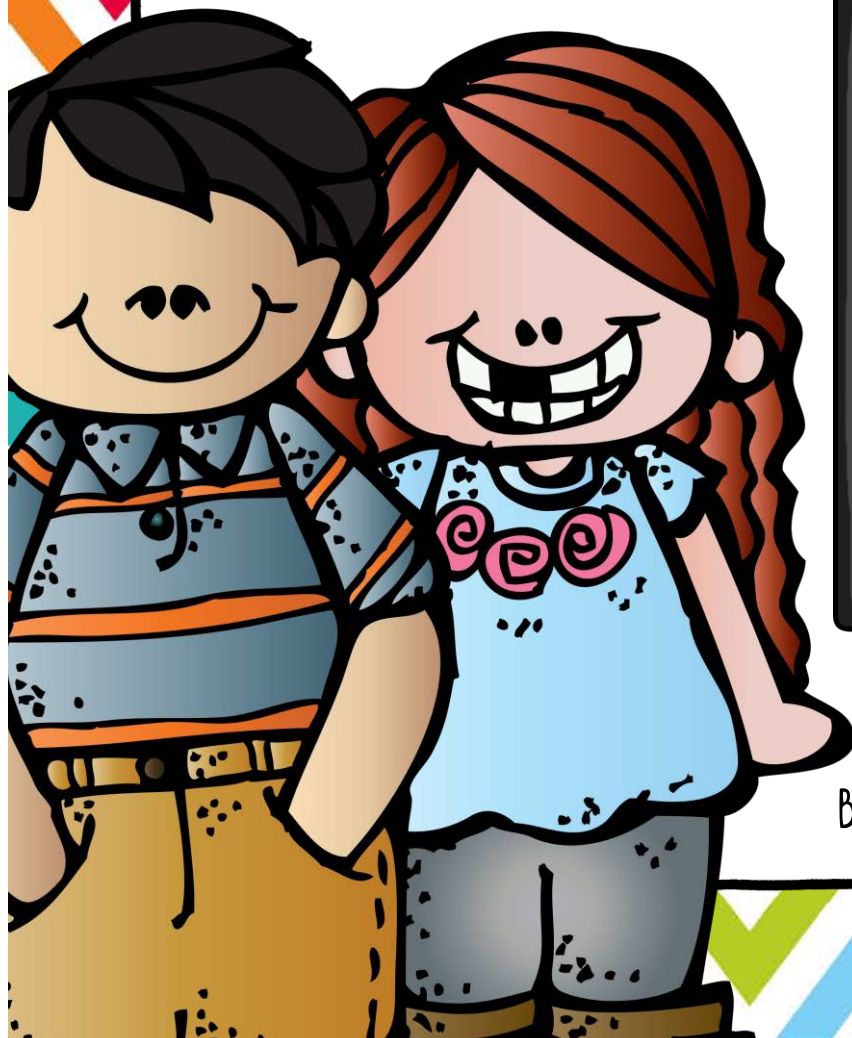


3rd Grade Math

Interactive Notebook



By: Jaime Pink
Bright Concepts 4 Teachers ©2013

Table of Contents

1. Cover
2. Table of Contents
3. Suggested Usage
4. Student Notebook Covers (color & BW)
5. Notebook Tabs
6. Strand Dividers
7. Operations and Algebraic Thinking (OA)

- example pictures of each student page
- Understanding Multiplication with pictures
- Quotients
- Problem Solving Using Multiplication
- Problem Solving with Missing Factors
- Multiplying Using Three or More Numbers
- Problem Solving Using Division
- Problem Solving: Dividing Three Digit Numbers
- Multiplication with an Unknown Number
- Division with an Unknown Number
- Properties of Multiplication
- Fact Families with Multiplication and Division
- Understanding Division
- Multiplication Chart
- Division Charts
- Multi-Step Word Problems
- Using Variable Equations to Solve Word Problems
- Rounding
- Estimation to Solve Word Problems
- Addition Patterns
- Subtraction Patterns
- Multiplication Patterns
- Division Patterns

8. Numbers and Operations in Base 10 (NBT)

- example pictures of each student page
- Place Value with Rounding
- Adding and Subtracting within 1000
- Adding and Subtracting within 1000 Problem Solving
- Multiplying One-Digit Numbers by Multiples of 10

Table of Contents Continued

9. Geometry (G)

- example pictures of each student page
- Solid Figures
- Plane Shapes
- Quadrilaterals
- Equal Parts
- Fractions

10. Measurement and Data (MD)

- example pictures of each student page
- Telling Time
- Metric Measurement and Word Problems
- Elapse Time
- Elapse Time Word Problems
- Time Lines
- Bar Graphs
- Pictographs
- Measuring and Line Plots
- Area and Square Units
- Area of a rectangle
- Area of a rectangle Word Problem
- Perimeter
- Area v. Perimeter Word Problem

11. Number and Operations-Fractions (NF)

- Identifying Fractions
- Identifying Fractions Word Problem
- Fractions on a Number Line
- Equivalent Fractions
- Reducing Fractions
- Ordering Fractions
- Whole Numbers and Fractions
- Mixed Numbers
- Comparing Fractions

12. Thank you and Terms of Use

3rd Grade Math Notebook

Interactive notebooks serve many purposes in the classroom. They provide evidence of learning and act as an anchor for the standards that have been taught throughout the year. They can also be used as a reference to review skills and study needed concepts.

This notebook covers all the 3rd grade MATH standards (including: Operations & Algebraic Thinking, Numbers and Operations in Base 10, Geometry, Measurement and Data, Number and Operations-Fractions)

This product includes the following:

- A cover for the notebook
- Dividers AND tabs for each math strand
- "I can" statements for each standard for students to put in their notebook
- Pictures, directions and information to create each page.
- Sample pictures (Please note: Some of the sample pictures are from the 2nd grade interactive notebook. However, the pictures are included because the same page is included in this packet, just with a different standard number and/or strand).

Student materials needed:

- Composition or spiral notebook
- Crayons, markers and/or colored pencils
- Glue
- Copies of student pages for each standard

I hope you find this product to be a valuable learning tool in your classroom for years to come. Enjoy!

3rd Grade Math Notebook

The standards for this notebook have been placed in order for the sake of simplicity. However, organizing your interactive notebook is a very personal thing. Everyone has different ways of doing it. Below are a few suggestions you may want to consider.

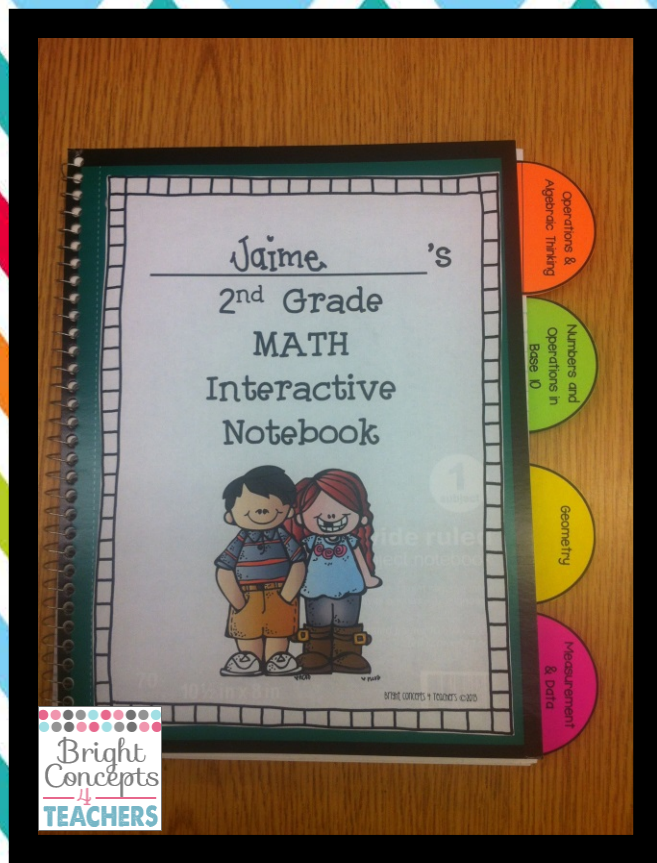
1. Place the dividers and tabs for each domain in the notebook but leave several pages in between each one for the interactive pages to be created at a later time.

OR

2. Don't use the dividers and tabs, at all, and just use the "I can" statements and standards numbers as a point of reference.

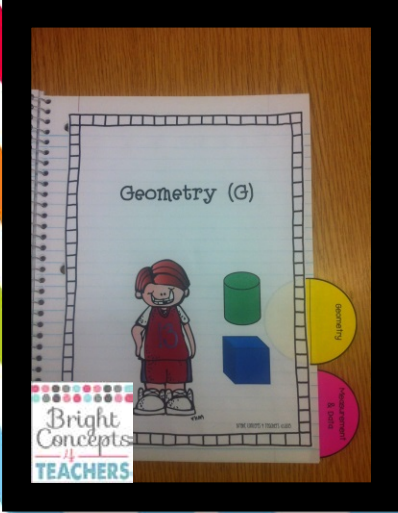
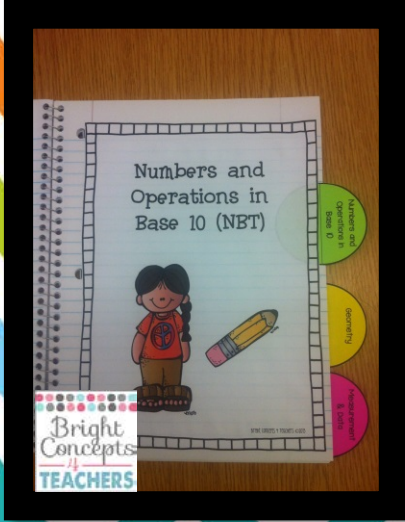
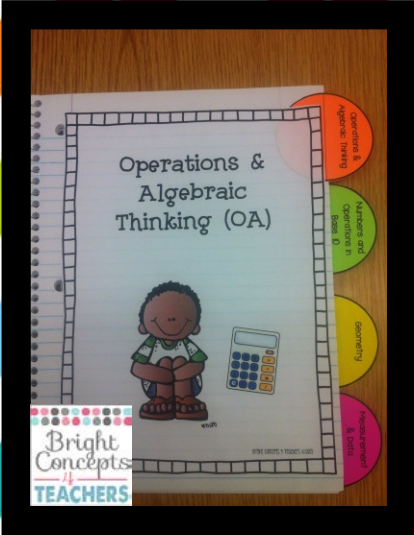
3. These activities can be used to introduce or reinforce the standards you are teaching. Each class differs in ability and strengths. Use it in the best way for your students. I like to introduce a topic and then use these activities to reinforce and review what has been taught. The pages can be completed as a whole group, small group or independently. I like to start the year completing the books as a whole group, so the students know the expectations. As the year progresses, they become more independent with completion of the activities.

4. Each page has a title and "I can" statement that should be glued to the top of the page. There is also a definition of each term to glue to the bottom of each page.



This is the cover included for your students to use. It comes in color and black and white. This packet contains a page that says, "3rd Grade".

These are the dividers and tabs that are included for each math strand. Copy the tabs on different colored paper. First, glue the tabs. Then glue the divider page on top of the tab for reinforcement.



's

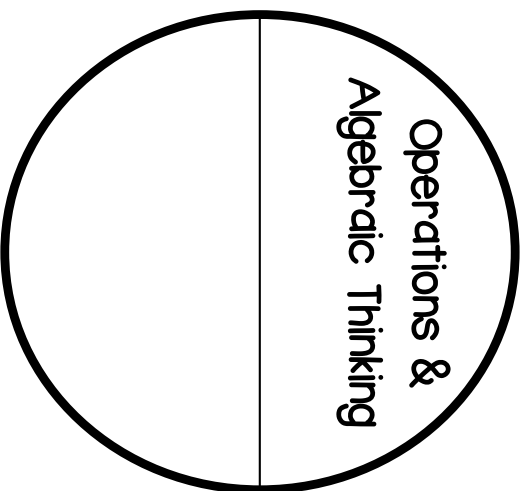
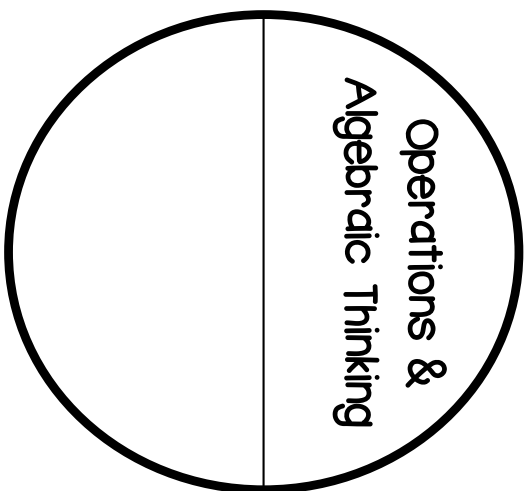
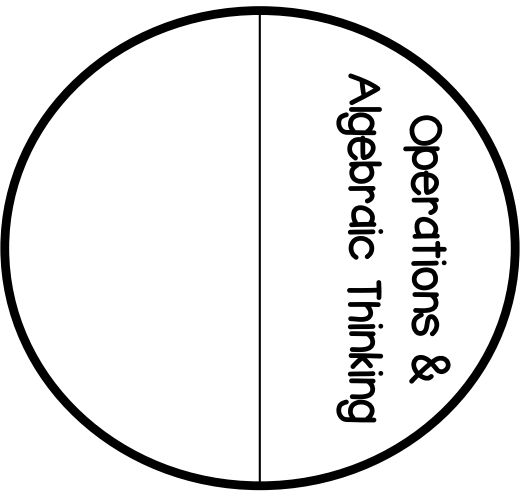
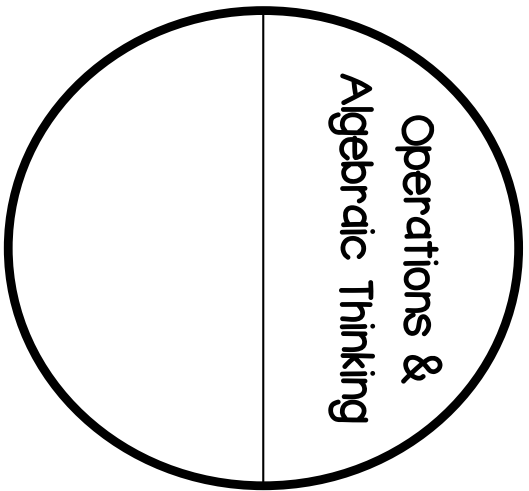
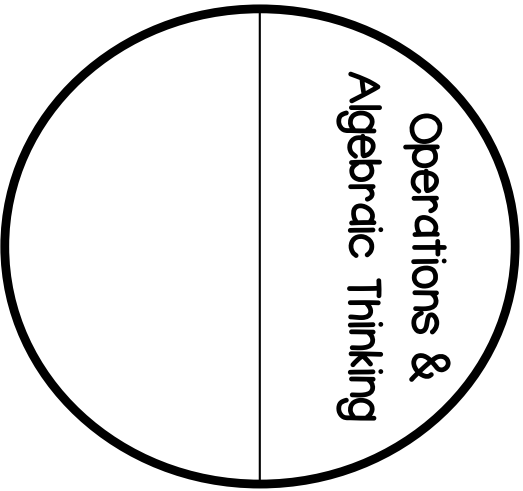
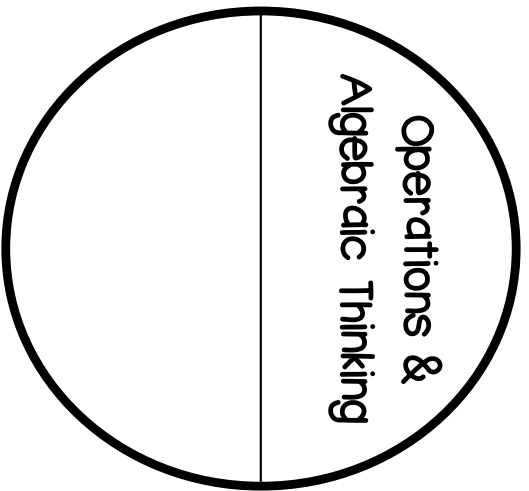
3rd Grade
MATH
Interactive
Notebook

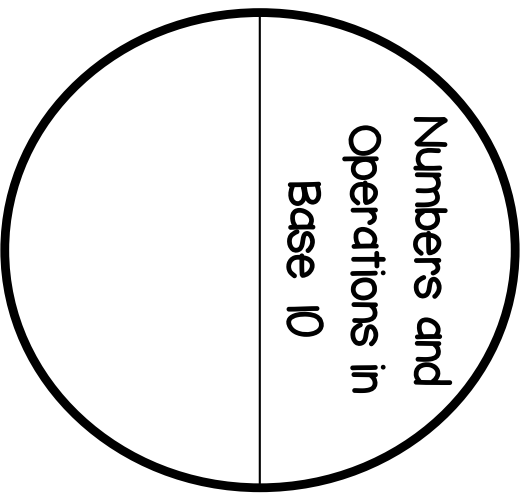
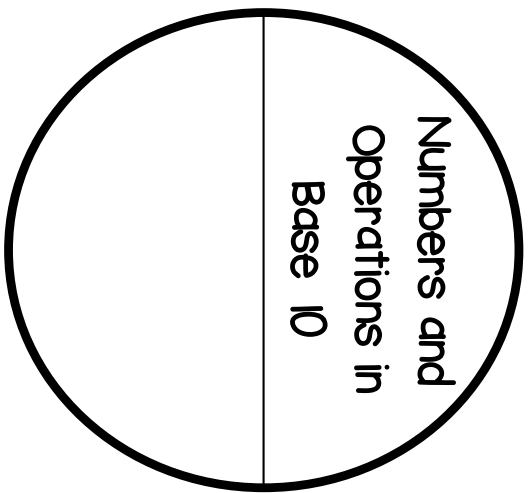
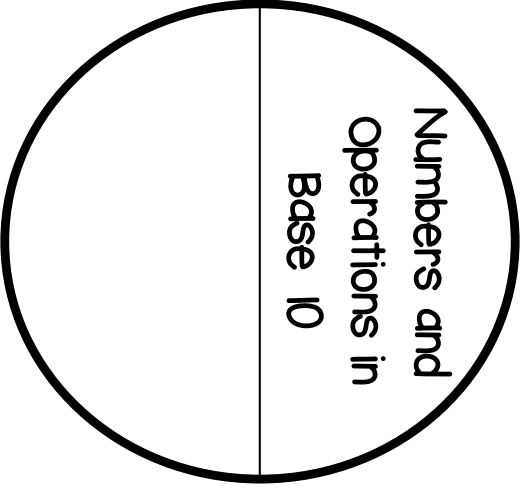
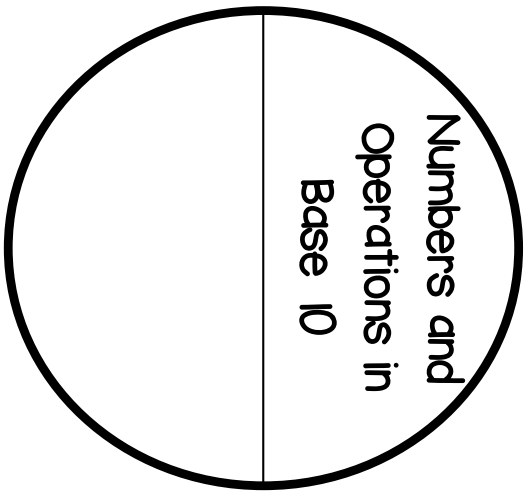
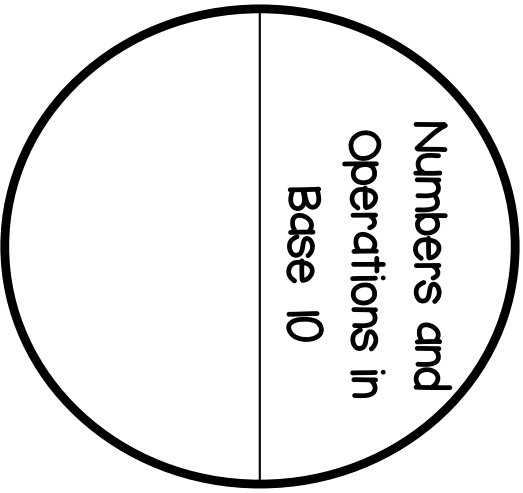
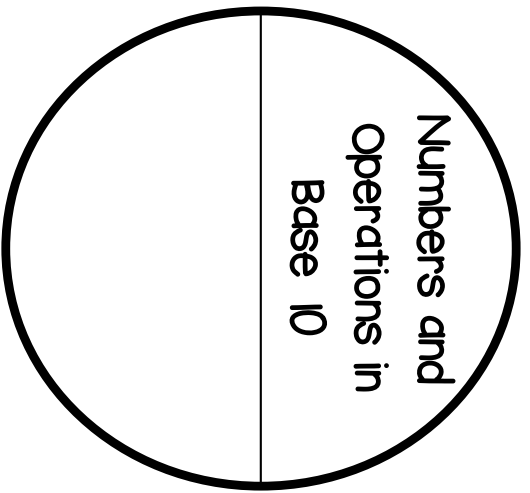


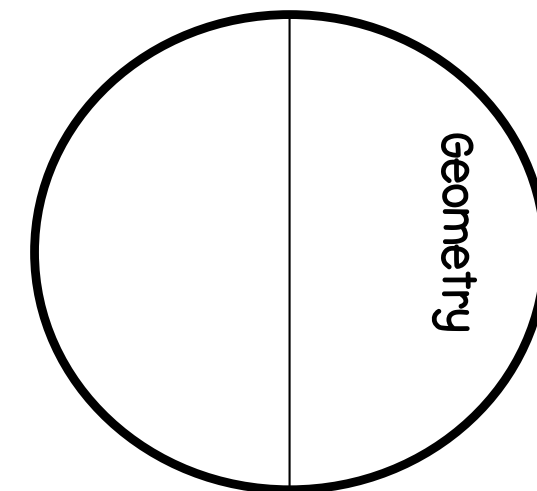
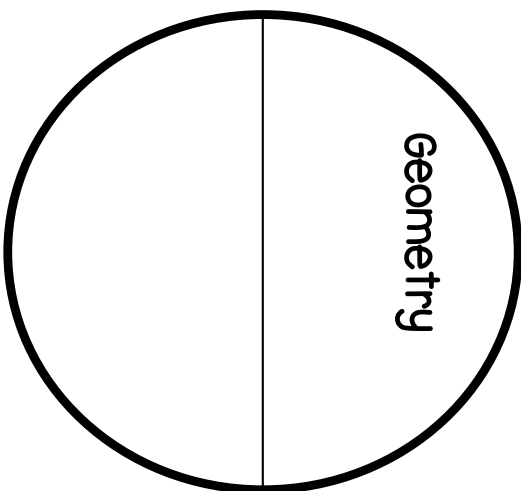
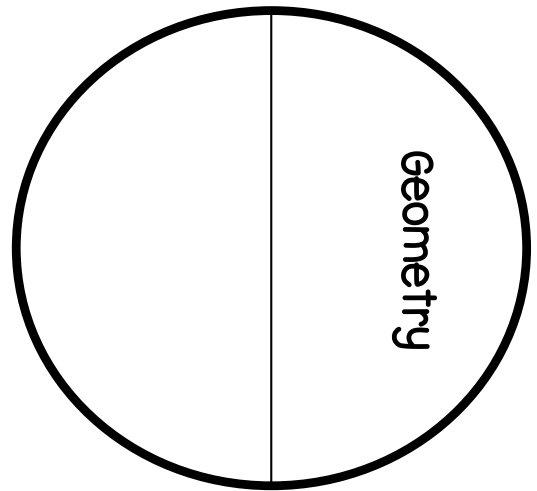
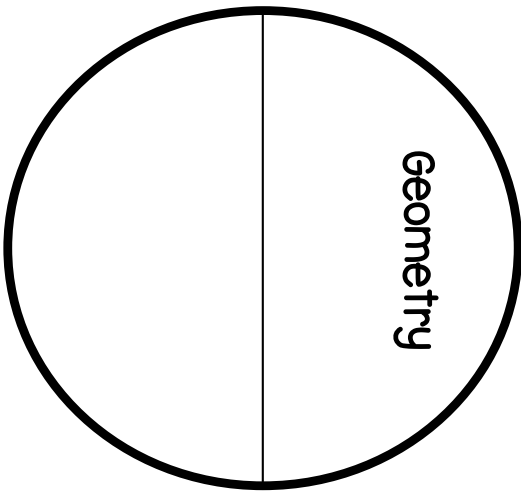
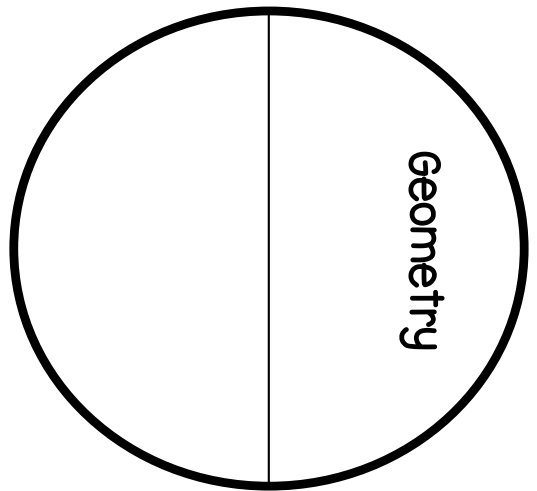
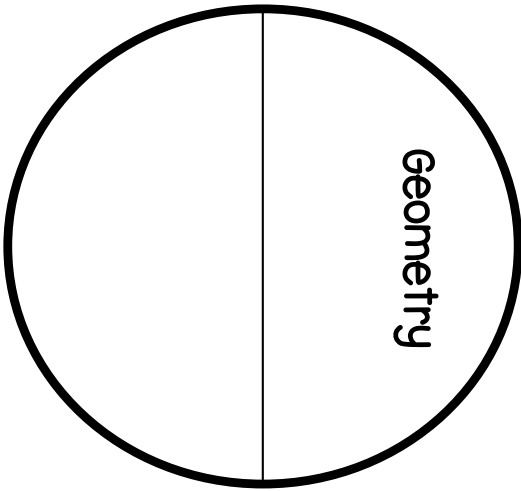
's

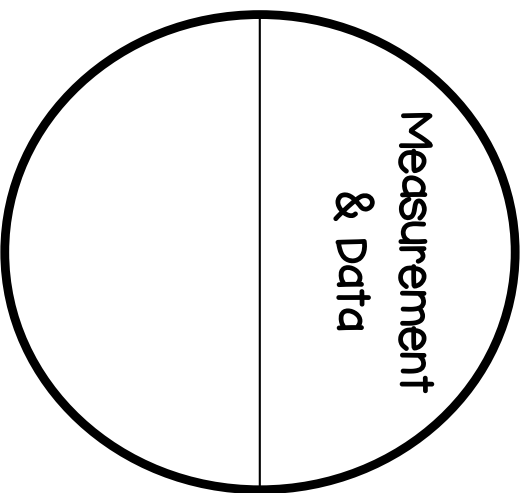
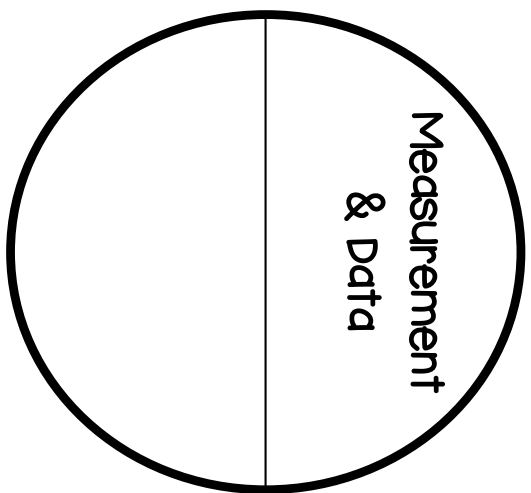
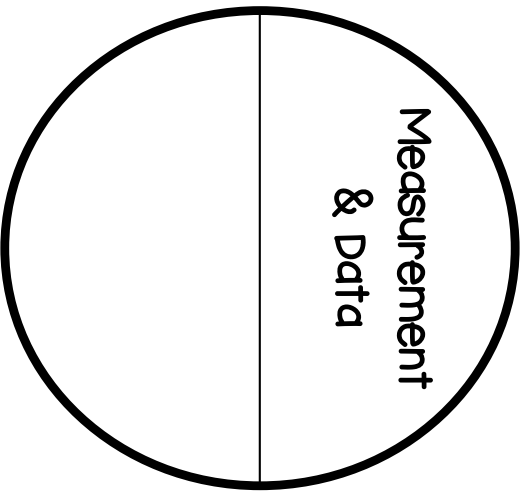
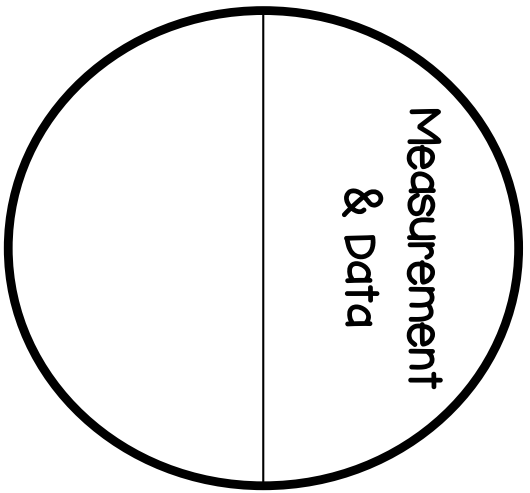
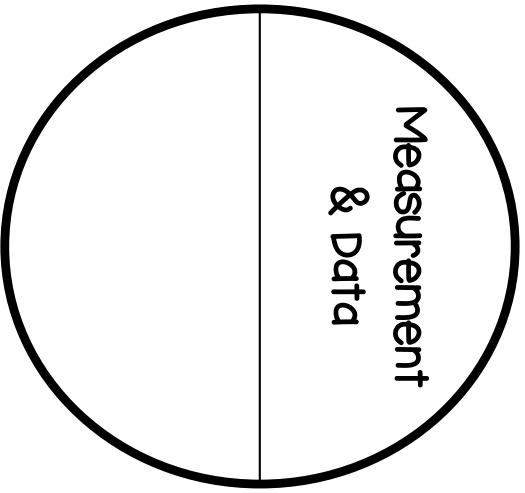
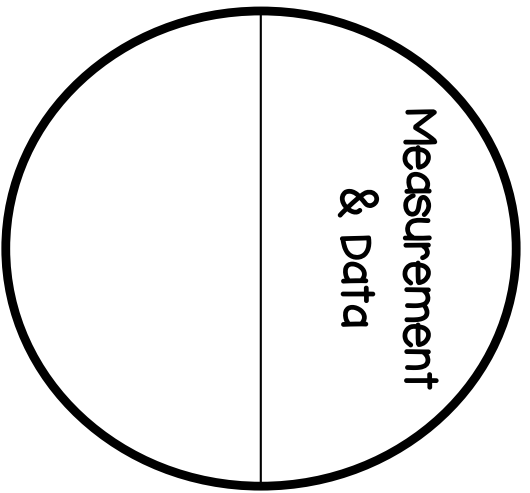
3rd Grade
MATH
Interactive
Notebook

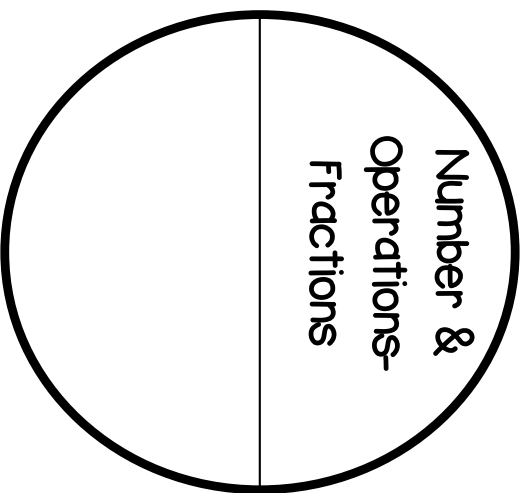
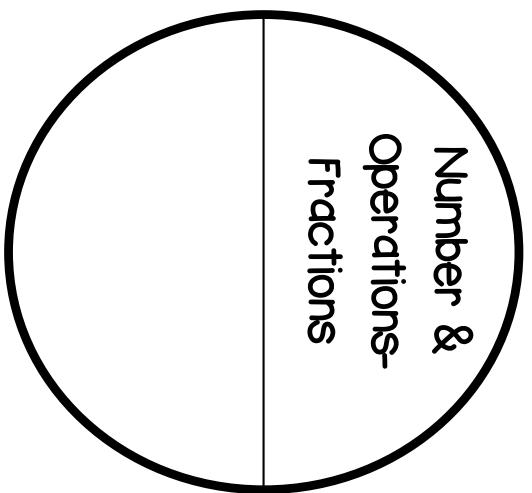
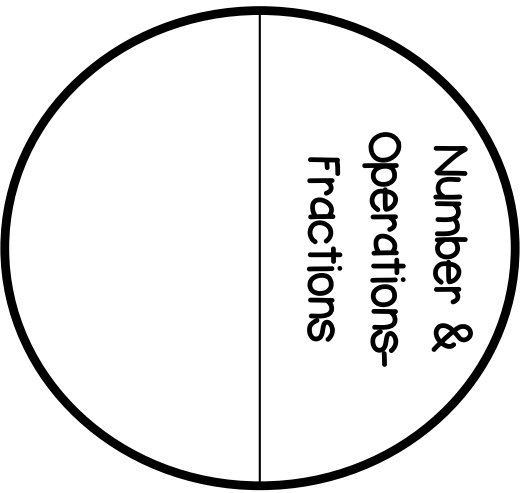
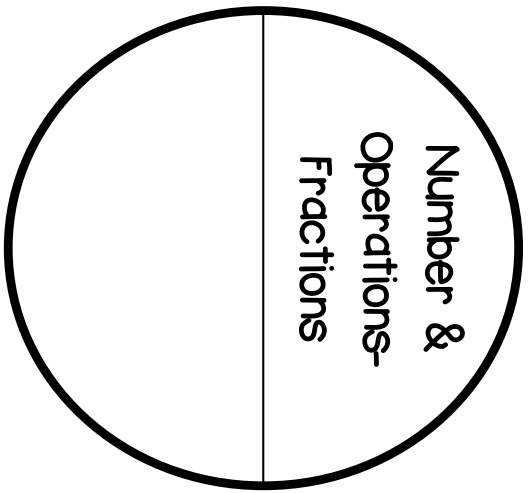
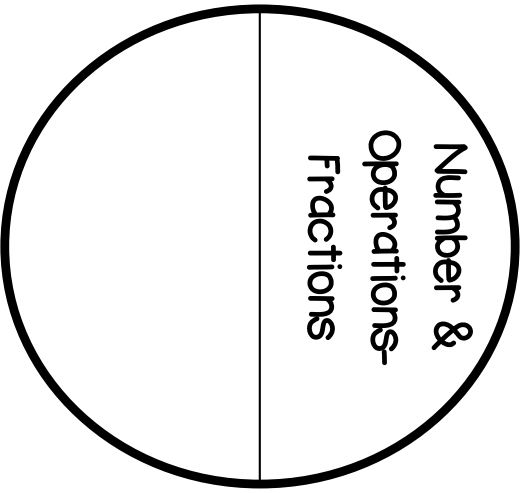
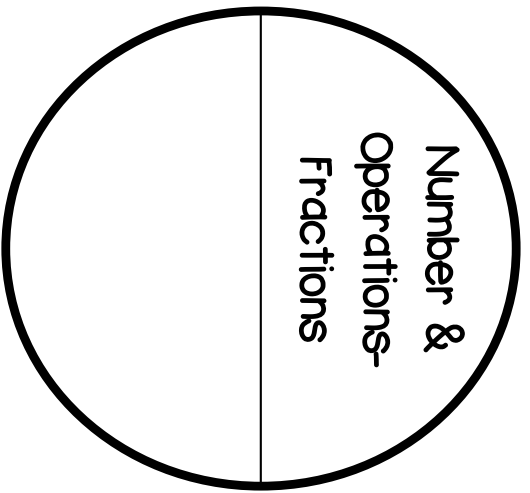












Operations & Algebraic Thinking (OA)



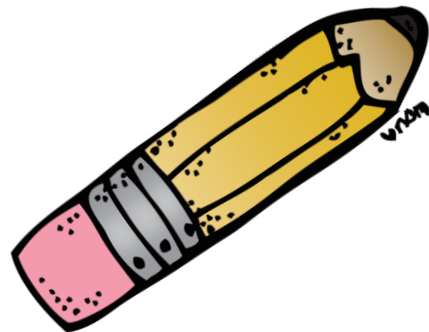
Operations & Algebraic Thinking (OA)



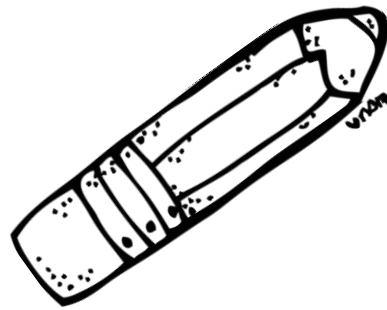
encl



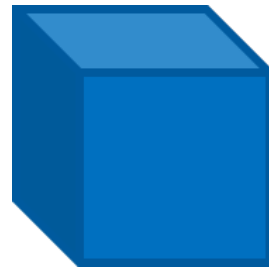
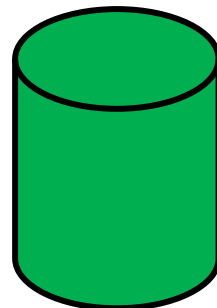
Numbers and Operations in Base 10 (NBT)



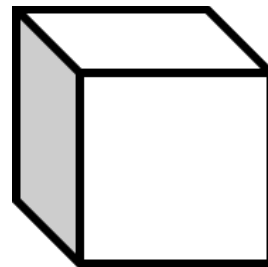
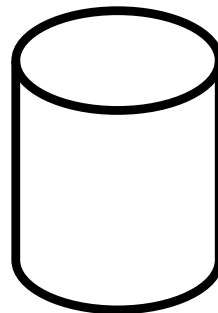
Numbers and Operations in Base 10 (NBT)



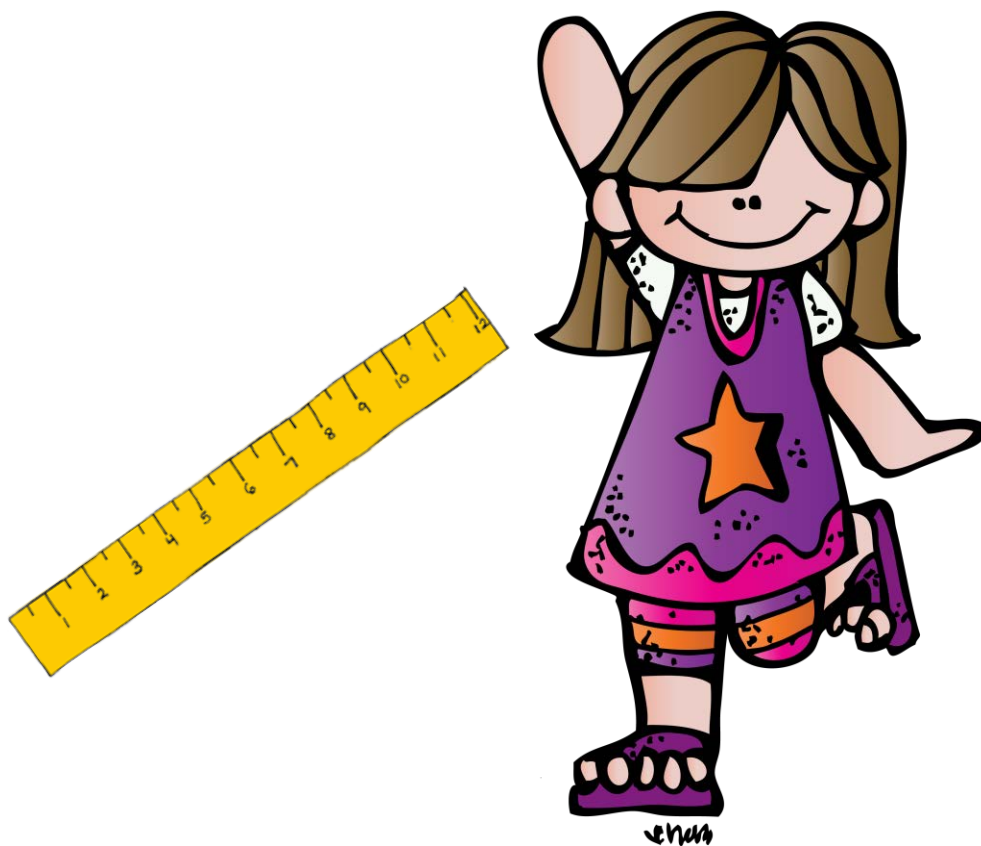
Geometry (G)



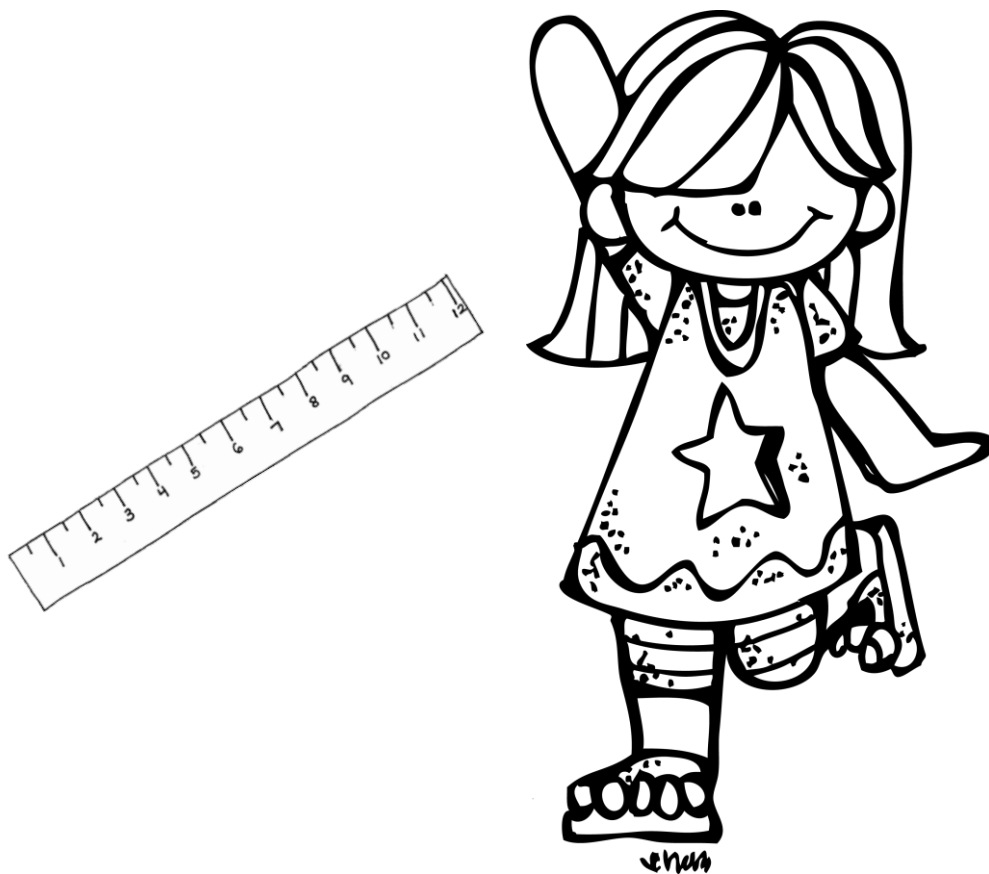
Geometry (G)



Measurement and Data (MD)



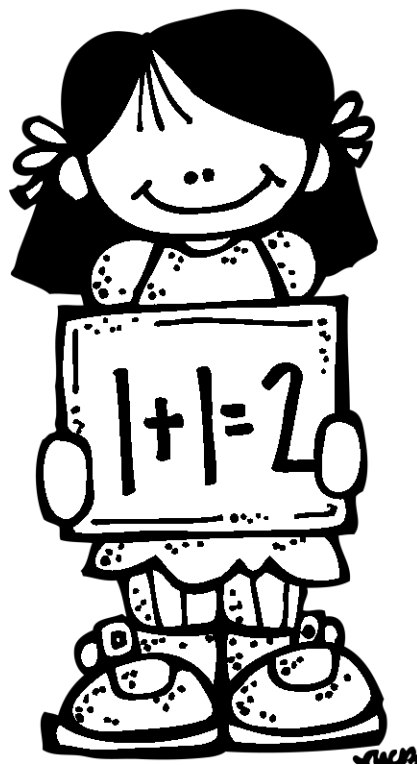
Measurement and Data (MD)



Numbers and Operations: Fractions (NF)



Numbers and Operations: Fractions (NF)



A Note to the Teacher

Thank you for your purchase of the 3rd grade Math Interactive Notebook activities. The sample pictures included in this packet demonstrate ONE way the pages could be used with your students. There are many strategies that you may use in your class, that may not be shown in the example pictures. The pictures are included to give you a clear visual of the intent of each page. You are the teacher and know your students best. Please use this packet to best meet their needs.



Example pictures of Operations & Algebraic Thinking pages

Understanding Multiplication with a picture
 3.OA.1 I can interpret products of whole numbers with pictures and numbers.

$6 \times 2 = 12$

The product is the answer when two or more numbers are multiplied together.
 Example: $8 \times 4 = 32$

Understanding Multiplication with a picture
 3.OA.1 I can interpret products of whole numbers with pictures and numbers.

$8 \times 5 =$

$4 \times 6 =$

$3 \times 7 =$

The product is the answer when two or more numbers are multiplied together.
 Example: $8 \times 4 = 32$

quotients
 3.OA.2 I can find quotients of whole numbers by dividing shares equally.

A quotient is the answer after you divide one number by another number
 Example: $56 \div 8 = 7$

Example pictures of Operations & Algebraic Thinking pages

3.OA.3 Problem Solving using Multiplication

Max has 9 boxes of pencils. Each box has 6 pencils in it. How many pencils does Max have in all?

What is the problem asking? **How many pencils in all?**

Draw a picture

6	6	6	6
6	6	6	6
6			

Write a number sentence


$$9 \times 6 = 54$$

Answer

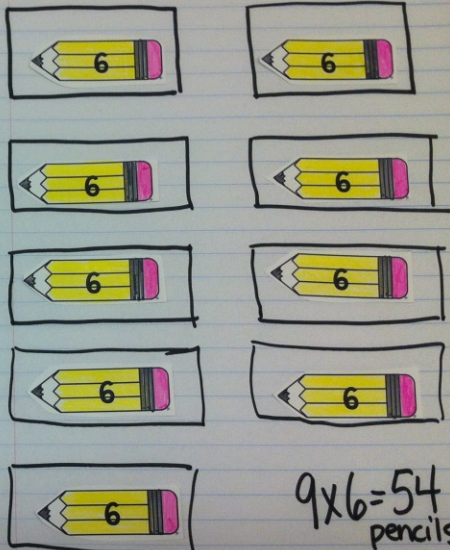
54 pencils

How did you solve the problem?

I drew 9 boxes.
Then I drew a 6 on each box to show 6 pencils.
Next I multiplied $9 \times 6 = 54$.



Max has 9 boxes of pencils. Each box has 6 pencils in it. How many pencils does Max have in all?



$9 \times 6 = 54$ pencils

3.OA.3 Problem Solving with Missing Factors

The teacher put 5 books in a basket for her students. If she has 40 books, how many baskets will she need?

What is the problem asking? **How many baskets does the teacher need?**

Draw a picture

5	10	15
20	25	30
35	40	

Write a number sentence

$$5 \times ? = 40$$


$$5 \times \underline{8} = 40$$

Answer

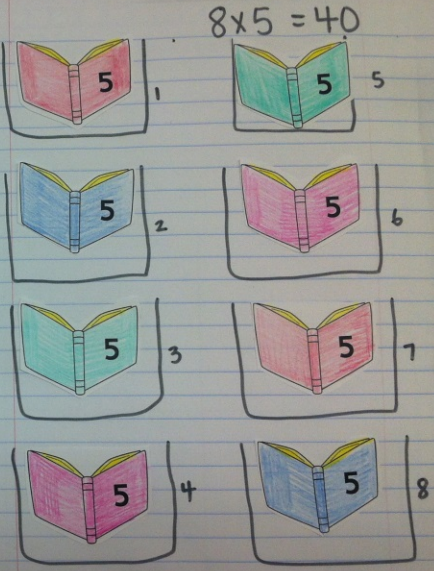
8 baskets

How did you solve the problem?

I drew 8 baskets and put 5 books in each basket.
Then I counted by 5's to check my answer.



The teacher put 5 books in a basket for her students. If she has 40 books, how many baskets will she need?





$8 \times 5 = 40$

Example pictures of Operations & Algebraic Thinking pages


3 OA 3 Multiplying using 3 or more numbers

A crayon company puts 6 crayons in a box. The boxes are arranged 3 across and 4 deep in a shipping crate. How many crayons are in the shipping crate?

What is the problem asking? **How many crayons are there in the shipping crate?**

<p>Draw a picture</p> 	<p>Write a number sentence</p> $6 \times (3 \times 4) = 72$
<p>Answer</p> <p style="font-size: 2em; font-weight: bold;">72</p> <p>crayons</p> 	<p>How did you solve the problem?</p> <p><u>I drew an array showing 3 columns and 4 rows. $4 \times 3 = 12$. Then I knew there were 6 crayons in each box so $6 \times 12 = 72$.</u></p>

3 columns



4 rows

$6 \times (3 \times 4) = 72$

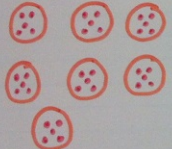

crayons

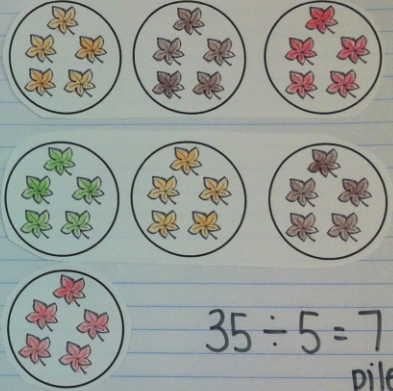
A crayon company puts 6 crayons in a box. The boxes are arranged 3 across and 4 deep in a shipping crate. How many crayons are in the shipping crate?

3 OA 3 Problem solving using division

David found 35 leaves for his school art project. He puts them in piles of 5 leaves. How many piles does he have?

What is the problem asking? **How many piles of leaves are there?**

<p>Draw a picture</p> 	<p>Write a number sentence</p> $35 \div 5 = 7$
<p>Answer</p> <p style="font-size: 2em; font-weight: bold;">7</p> <p>piles</p> 	<p>How did you solve the problem?</p> <p><u>I drew a circle to show 1 pile. Then I put 5 dots in the circle to show the 5 leaves. I continued making piles until I reached 35.</u></p>



$35 \div 5 = 7$

piles

David found 35 leaves for his school art project. He puts them in piles of 5 leaves. How many piles does he have?

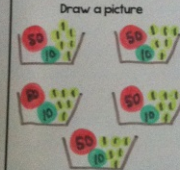
Example pictures of Operations & Algebraic Thinking pages

3.OA.3 Problem solving: Divide Three Digit Numbers

The farmer collected 330 apples. He put them into 5 baskets. How many apples are in each basket?

What is the problem asking? **How many apples are in each basket?**

Draw a picture




Write a number sentence

$$330 \div 5 = 66$$

66 apples

Answer

66 apples



How did you solve the problem?
I draw 5 baskets. I started by putting 50 apples in each basket, which is 250. Then I put 10 apples in each basket. Then I divided the remaining apples.

Multiplication with an unknown number

3.OA.4 I can solve multiplication and division equations with an unknown number.

$8 \times \underline{6} = 48$

$20 = \underline{5} \times 4$

$7 \times \underline{3} = 21$

$18 = \underline{9} \times 2$

Multiplication is a form of repeated addition. You can multiply numbers in any order and the product will be the same. $5 \times 6 = 30$ $6 \times 5 = 30$

Division with an unknown number

3.OA.4 I can solve multiplication and division equations with an unknown number.

$25 \div \underline{5} = 5$

$18 \div \underline{3} = 6$

$72 \div \underline{9} = 8$

$\underline{48} \div 8 = 6$

$\underline{24} \div 8 = 3$

$9 \times \underline{3} = 27$

When you divide, you split things into equal groups or shares.

properties of Multiplication

3.OA.5 I can use properties of operation to quickly solve multiplication and division problems.

$3 \times 4 = \underline{12}$

$8 \times (5 + 2) = \underline{56}$

Commutative property

$3 \times (5 \times 2) = \underline{30}$

Commutative property: you can multiply in any order $2 \times 3 = 6$ $3 \times 2 = 6$
 Associative property: it doesn't matter how you group numbers to multiply $(2 \times 4) \times 3 = 2 \times (4 \times 3)$
 Distributive property: you get the same answer when you multiply a number by a group of numbers added together, just as you do if you multiplied them separately. $3 \times (2 + 4) = 3 \times 2 + 3 \times 4$

Example pictures of Operations & Algebraic Thinking pages

Properties of Multiplication

3.OA.5 I can use properties of operation to quickly solve multiplication and division problems.

$8 \times 6 = 48$

$(4 \times 7) \times 10 = 280$ Associative Property

$6 \times 5 \times 4 = 120$ Associative Property

$24 \times 2 + 8 \times 2 = 64$ Distributive Property

Commutative property: you can multiply in any order $2 \times 3 = 6$ $3 \times 2 = 6$
 Associative property: it doesn't matter how you group numbers to multiply $(2 \times 4) \times 5 = 2 \times (4 \times 5)$
 Distributive property: you get the same answer when you multiply a number by a group of numbers added together, just as you do if you multiplied them separately $3 \times (2 + 4) = 3 \times 2 + 3 \times 4$

Fact Families with x and ÷

3.OA.5 I can use properties of operation to quickly solve multiplication and division problems.

45

9 5

$9 \times 5 = 45$
 $5 \times 9 = 45$
 $45 \div 5 = 9$
 $45 \div 9 = 5$

24

8 3

$8 \times 3 = 24$
 $3 \times 8 = 24$
 $24 \div 3 = 8$
 $24 \div 8 = 3$

20

5 4

$5 \times 4 = 20$
 $4 \times 5 = 20$
 $20 \div 4 = 5$
 $20 \div 5 = 4$

48

6 8

$6 \times 8 = 48$
 $8 \times 6 = 48$
 $48 \div 6 = 8$
 $48 \div 8 = 6$

Properties of operation are strategies to help solve multiplication and division problems.
 Multiplication and division are related.
 $35 \div 7 = 5$ $7 \times 5 = 35$

Understanding Division

3.OA.6 I can use properties of operation to quickly solve multiplication and division problems.

$32 \div 8 = 4$

$36 \div 6 = 6$

$27 \div 3 = 9$

$42 \div 7 = 6$

$100 \div 10 = 10$

$45 \div 9 = 5$

$81 \div 9 = 9$

$55 \div 11 = 5$

Properties of operation are strategies to help solve multiplication and division problems.
 Multiplication and division are related.
 $35 \div 7 = 5$ $7 \times 5 = 35$

Multiplication chart

3.OA.7 I can use mental strategies to quickly multiply and divide within 100.

	0	1	2	3	4	5	6	7	8	9
0	0	0	0	0	0	0	0	0	0	0
1	0	1	2	3	4	5	6	7	8	9
2	0	2	4	6	8	10	12	14	16	18
3	0	3	6	9	12	15	18	21	24	27
4	0	4	8	12	16	20	24	28	32	36
5	0	5	10	15	20	25	30	35	40	45
6	0	6	12	18	24	30	36	42	48	54
7	0	7	14	21	28	35	42	49	56	63
8	0	8	16	24	32	40	48	56	64	72
9	0	9	18	27	36	45	54	63	72	81

Example pictures of Operations & Algebraic Thinking pages

Division charts

3.OA.7 I can use mental strategies to quickly multiply and divide within 100.

Division by 1	Division by 2	Division by 3
1 ÷ 1 = 1	2 ÷ 2 = 1	3 ÷ 3 = 1
2 ÷ 1 = 2	4 ÷ 2 = 2	6 ÷ 3 = 2
3 ÷ 1 = 3	6 ÷ 2 = 3	9 ÷ 3 = 3
4 ÷ 1 = 4	8 ÷ 2 = 4	12 ÷ 3 = 4
5 ÷ 1 = 5	10 ÷ 2 = 5	15 ÷ 3 = 5
6 ÷ 1 = 6	12 ÷ 2 = 6	18 ÷ 3 = 6
7 ÷ 1 = 7	14 ÷ 2 = 7	21 ÷ 3 = 7
8 ÷ 1 = 8	16 ÷ 2 = 8	24 ÷ 3 = 8
9 ÷ 1 = 9	18 ÷ 2 = 9	27 ÷ 3 = 9

Division by 4	Division by 5
4 ÷ 4 = 1	5 ÷ 5 = 1
8 ÷ 4 = 2	10 ÷ 5 = 2
12 ÷ 4 = 3	15 ÷ 5 = 3
16 ÷ 4 = 4	20 ÷ 5 = 4
20 ÷ 4 = 5	25 ÷ 5 = 5
24 ÷ 4 = 6	30 ÷ 5 = 6
28 ÷ 4 = 7	35 ÷ 5 = 7
32 ÷ 4 = 8	40 ÷ 5 = 8
36 ÷ 4 = 9	45 ÷ 5 = 9

Division charts

3.OA.7 I can use mental strategies to quickly multiply and divide within 100.

Division by 6	Division by 7	Division by 8
6 ÷ 6 = 1	7 ÷ 7 = 1	8 ÷ 8 = 1
12 ÷ 6 = 2	14 ÷ 7 = 2	16 ÷ 8 = 2
18 ÷ 6 = 3	21 ÷ 7 = 3	24 ÷ 8 = 3
24 ÷ 6 = 4	28 ÷ 7 = 4	32 ÷ 8 = 4
30 ÷ 6 = 5	35 ÷ 7 = 5	40 ÷ 8 = 5
36 ÷ 6 = 6	42 ÷ 7 = 6	48 ÷ 8 = 6
42 ÷ 6 = 7	49 ÷ 7 = 7	56 ÷ 8 = 7
48 ÷ 6 = 8	56 ÷ 7 = 8	64 ÷ 8 = 8
54 ÷ 6 = 9	63 ÷ 7 = 9	72 ÷ 8 = 9

Division by 9	Division by 10
9 ÷ 9 = 1	10 ÷ 10 = 1
18 ÷ 9 = 2	20 ÷ 10 = 2
27 ÷ 9 = 3	30 ÷ 10 = 3
36 ÷ 9 = 4	40 ÷ 10 = 4
45 ÷ 9 = 5	50 ÷ 10 = 5
54 ÷ 9 = 6	60 ÷ 10 = 6
63 ÷ 9 = 7	70 ÷ 10 = 7
72 ÷ 9 = 8	80 ÷ 10 = 8
81 ÷ 9 = 9	90 ÷ 10 = 9

Multi-step word Problems

3.OA.8

In Josh's desk there are 4 pink crayons. There are 10 more blue crayons than pink crayons, there are 6 more green crayons than blue crayons. How many total crayons are in Josh's desk?

What is the problem asking? **How many crayons are in Josh's desk?**

<p>Draw a picture</p> <p>4 pink</p> <p>10 blue</p> <p>16 green</p>	<p>Write a number sentence</p> $4 + 14 + 20 = 38$
--	---

Answer: **38 crayons**

How did you solve the problem?
I drew the number of crayons for each color. Then, I added them up to find the sum.

Multi-step word Problems

3.OA.8

Taylor saved \$17 in September. He saved \$25 in October and \$12 in November. Then, he spent \$37 on a new backpack. How much money does Taylor have left?

What is the problem asking? **How much money does he have left?**

<p>Draw a picture</p> <p>\$17 Sept. \$25 Oct.</p> <p>\$12 Nov. Spent \$37</p>	<p>Write a number sentence</p> $\begin{array}{r} 17 \\ + 25 \\ + 12 \\ \hline 54 \end{array}$ $\begin{array}{r} 54 \\ - 37 \\ \hline 17 \end{array}$
---	--

Answer: **\$17⁰⁰**

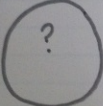
How did you solve the problem?
I added how much Taylor saved. Then I subtracted how much he spent on the backpack to find out how much money he still had.


Example pictures of Operations & Algebraic Thinking pages

3.OA.B Using Variable Equations to solve word problems

Jane bought a pizza. She ate 67 of the pepperoni pieces. Now there are only 8 left. Write an equation to show how many pepperoni pieces were on the pizza originally.

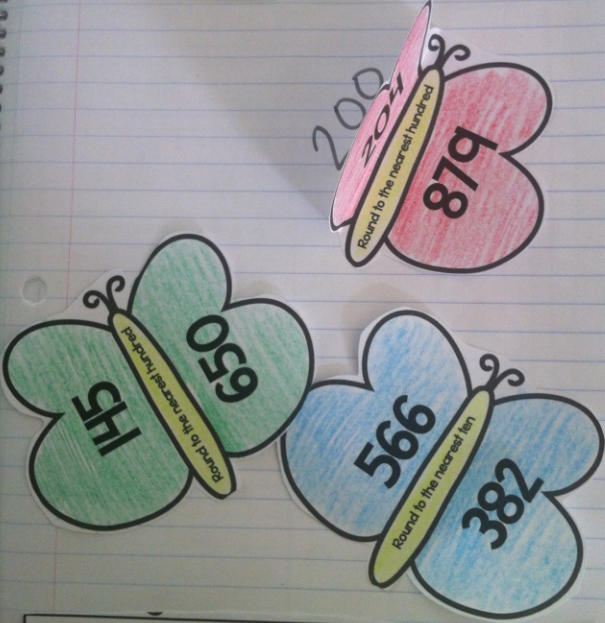
What is the problem asking?
How many pepperoni pieces were on the pizza?

Draw a picture	Write a number sentence
 67 pepperonis eaten	$67 + 8 = 75$
Answer	How did you solve the problem?
75 pepperoni pieces	I added the 8 pieces left on the pizza to the 67 pieces that were eaten to find the total



Rounding

3.OA.B I can solve two-step word problems using an unknown quantity and estimation strategies.





Round down if the digit is less than 5.
Round up if the digit is 5 or more.

3.OA.B ESTIMATION

There were 846 gumballs in the machine. Cameron bought 92. How many gumballs were left in the machine? Estimate your answer.

What is the problem asking?
To estimate how many gumballs were left in the machine

Draw a picture	Write a number sentence using estimation:
	$\begin{array}{r} 846 \\ - 92 \\ \hline 754 \end{array}$ $\begin{array}{r} 850 \\ - 90 \\ \hline 760 \end{array}$
Answer	How did you solve the problem?
about 760 gumballs are left	I rounded 846 to the nearest 10. Then I rounded 92 to the nearest 10. I subtracted to find the difference.



Example pictures of Operations & Algebraic Thinking pages

Addition patterns

3.OA.A.9 I can identify number patterns and explain them using properties of operation.

Rule: add 100	
852	952
45	145
361	461
487	587
212	312

Rule: add 120	
742	862
75	195
622	742
478	598
310	430

Rule: add 25	
351	376
45	70
691	716
282	307
102	434

Rule: add 50	
175	225
445	495
16	66
763	813
906	956

Rule: add 200	
330	530
731	931
543	743
278	478
129	329

Subtraction patterns

3.OA.A.9 I can identify number patterns and explain them using properties of operation.

Rule: subtract 100	
852	752
545	445
361	261
487	387
212	112

Rule: subtract 120	
742	622
275	155
622	502
478	358
310	190

Rule: subtract 25	
351	326
45	20
691	666
282	257
102	77

Rule: subtract 50	
175	125
445	395
96	46
763	713
906	856

Rule: subtract 200	
330	130
731	531
543	343
278	78
429	229

Multiplication patterns

3.OA.A.9 I can identify number patterns and explain them using properties of operation.

Rule: multiply by 2	
0	0
3	6
5	10
7	14
9	18

Rule: multiply by 10	
1	10
4	40
6	60
7	70
9	90

Rule: multiply by 4	
0	0
1	4
3	12
6	24
8	32

Rule: multiply by 9	
2	18
3	27
5	45
7	63
8	72

Rule: multiply by 7	
0	0
1	7
4	28
6	42
9	63

Division patterns

3.OA.A.9 I can identify number patterns and explain them using properties of operation.

Rule: divide by 2	
2	1
4	2
6	3
8	4
10	5

Rule: divide by 10	
10	1
40	4
60	6
80	8
100	10

Rule: divide by 1	
6	6
7	7
8	8
9	9
10	10

Rule: divide by 5	
10	2
20	4
25	5
40	8
45	9

Rule: divide by 3	
3	1
9	3
15	5
21	7
27	9

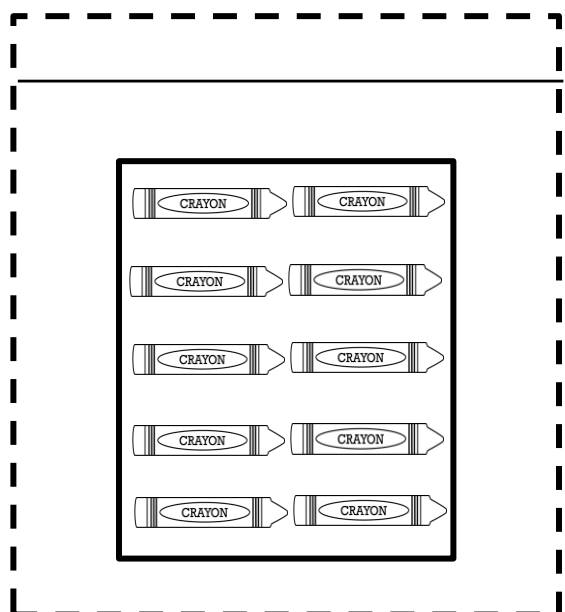
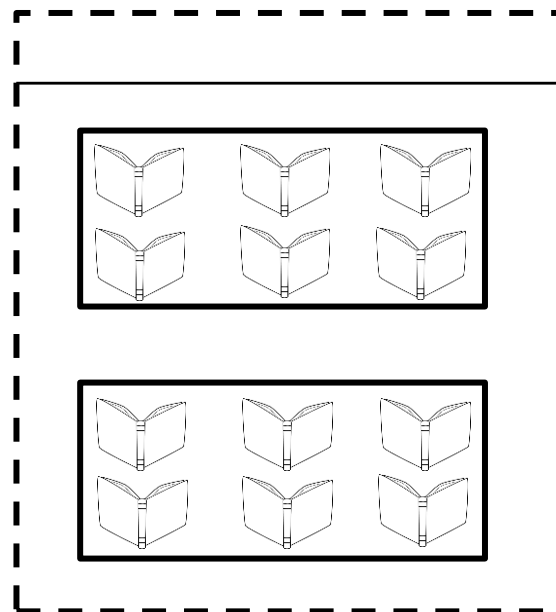
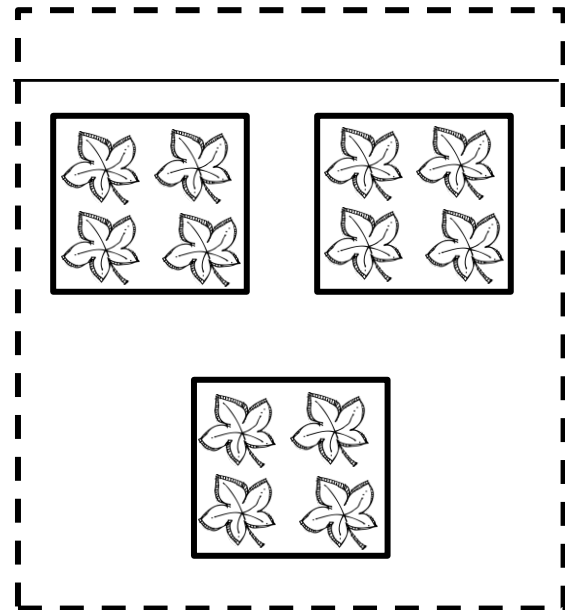
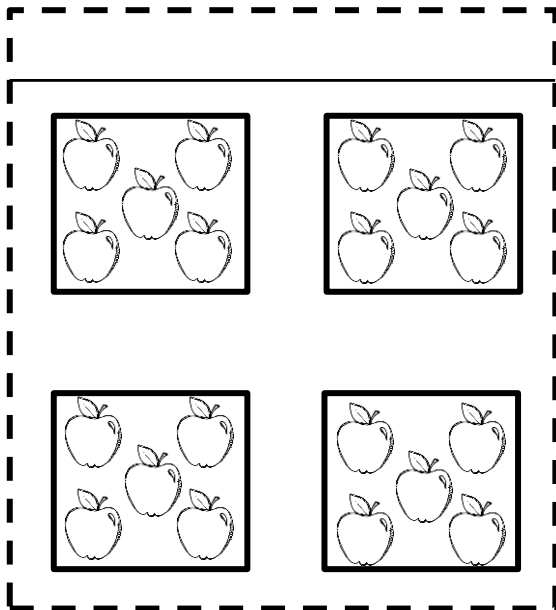
Understanding Multiplication

with a picture

3.OA.1

I can interpret products of whole numbers with pictures and numbers.

Directions: Look at the pictures below. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Write the matching multiplication sentence under each set of frames.



The product is the answer when two or more numbers are multiplied together.

Example: $8 \times 4 = 32$

Understanding Multiplication

with a picture

3.OA.1

I can interpret products of whole numbers with pictures and numbers.

Directions: Look at the multiplication sentences below. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Draw a picture under each frame to match each multiplication sentence. Find the product.

$$8 \times 5 =$$

$$3 \times 7 =$$

$$4 \times 6 =$$

$$9 \times 2 =$$

The product is the answer when two or more numbers are multiplied together.

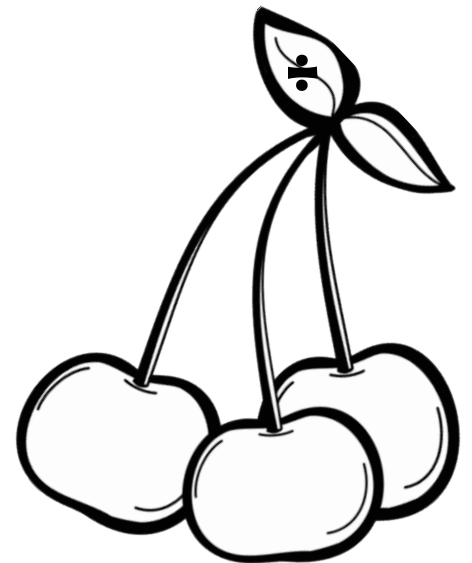
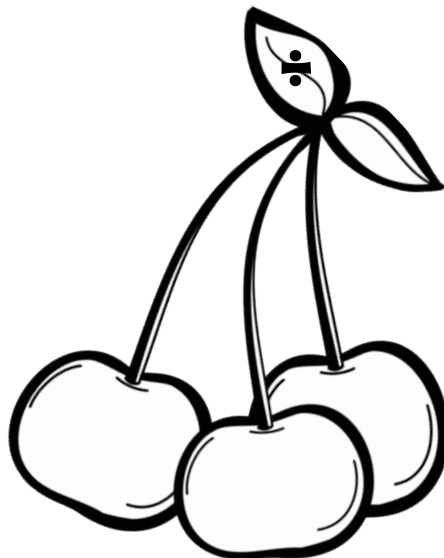
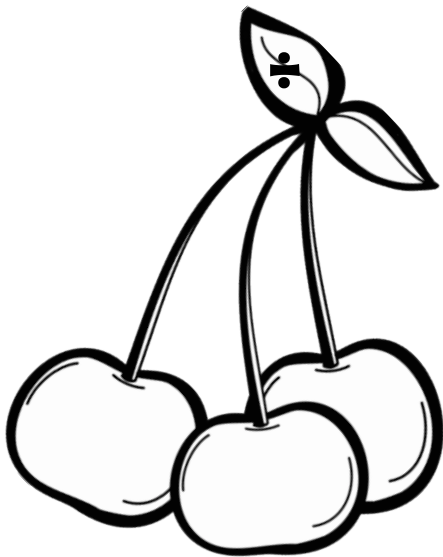
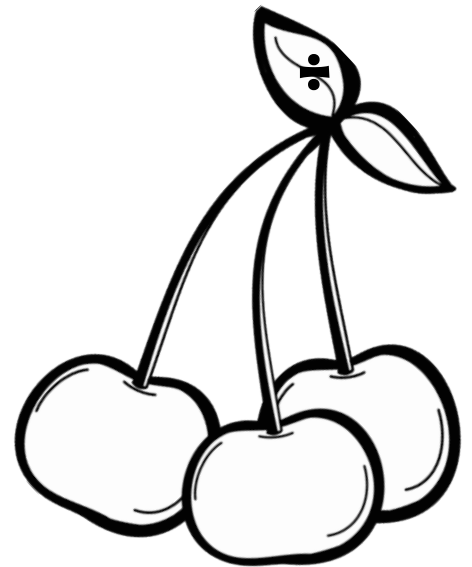
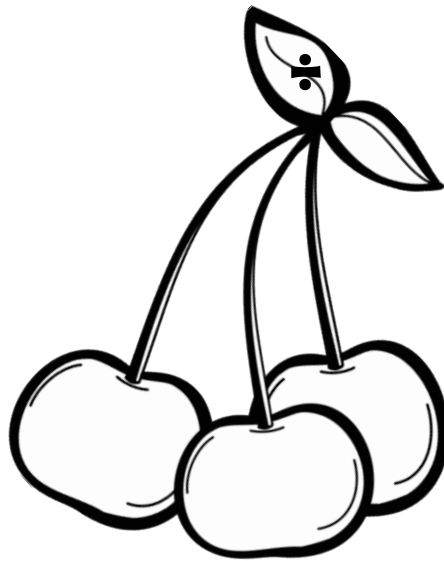
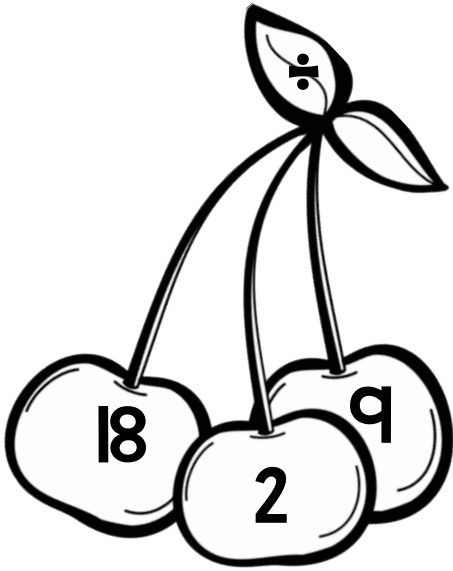
Example: $8 \times 4 = 32$

Quotients

3.OA.2

I can find quotients of whole numbers by dividing shares equally.

Directions: Practice writing division sentences on each bunch of cherries.
Cut and glue the cherry bunches on your paper.



A quotient is the answer after you divide one number by another number

Example: $56 \div 8 = 7$

3.OA.3

problem solving using Multiplication

Max has 9 boxes of pencils. Each box has 6 pencils in it. How many pencils does Max have in all?

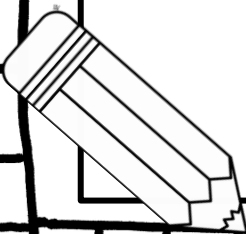
What is the problem asking?

Draw a picture

Write a number sentence

Answer

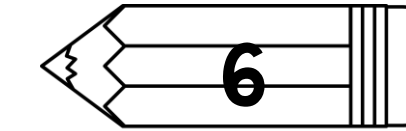
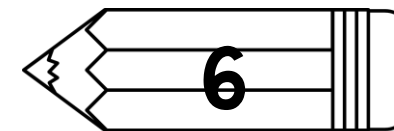
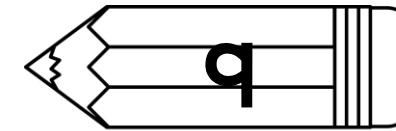
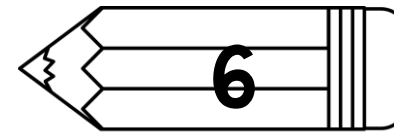
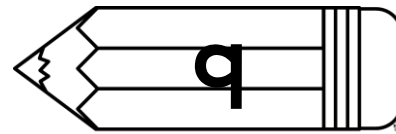
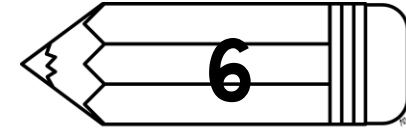
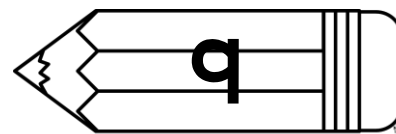
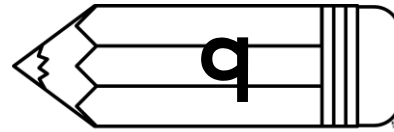
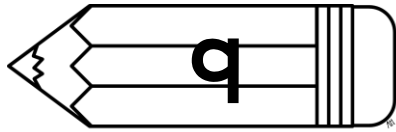
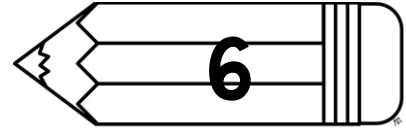
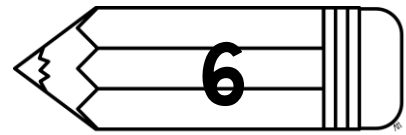
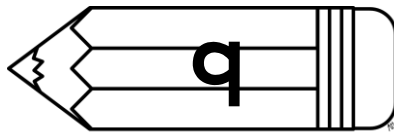
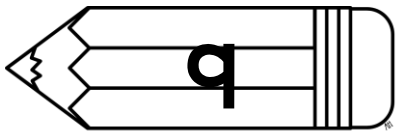
How did you solve the problem?



3.OA.3

Problem Solving Using Multiplication

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



Max has 9 boxes of pencils. Each box has 6 pencils in it. How many pencils does Max have in all?

3.OA.3

problem solving With Missing Factors

The teacher put 5 books in a basket for her students. If she has 40 books, how many baskets will she need?

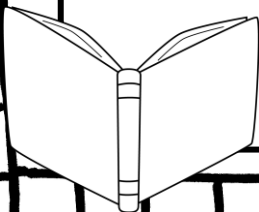
What is the problem asking?

Draw a picture

Write a number sentence

Answer

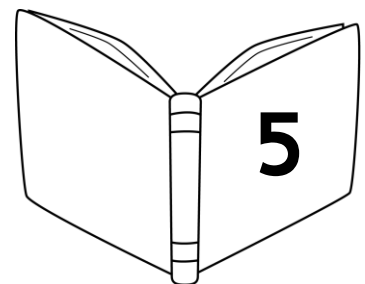
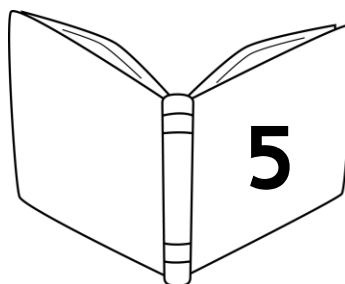
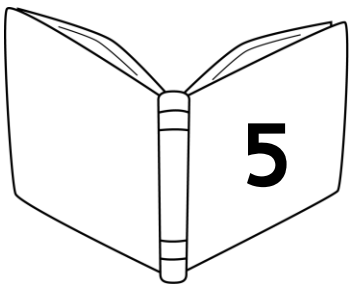
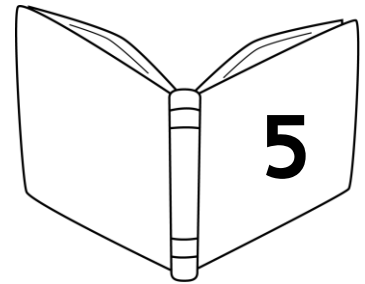
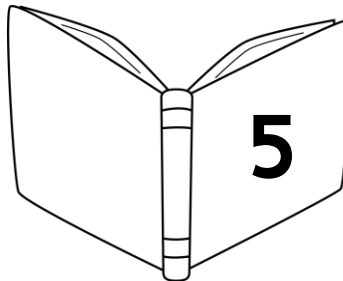
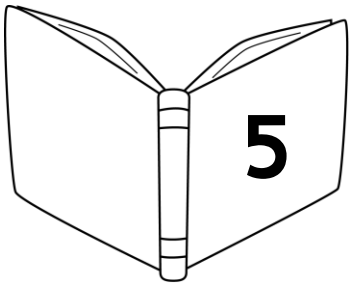
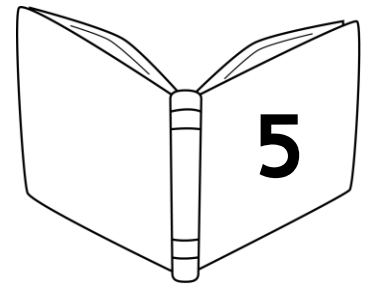
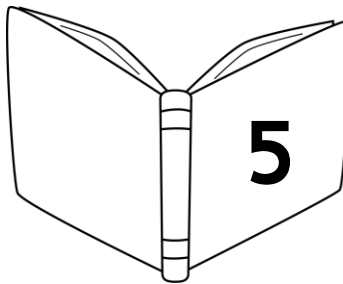
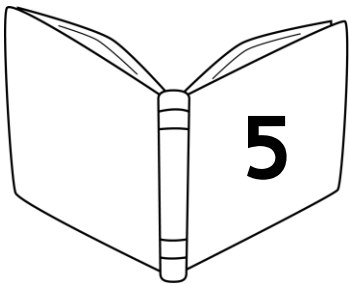
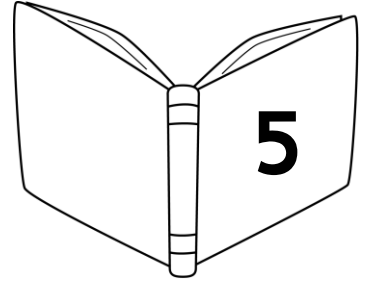
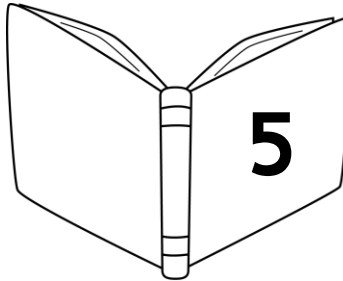
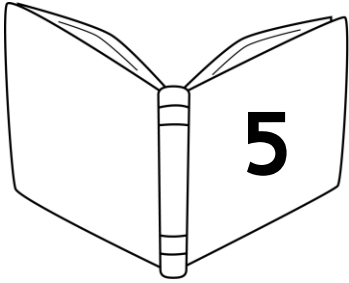
How did you solve the problem?



3.OA.3

Problem Solving With Missing Factors

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



The teacher put 5 books in a basket for her students. If she has 40 books, how many baskets will she need?

3.OA.3

Multiplying using 3 or more numbers

A crayon company puts 6 crayons in a box. The boxes are arranged 3 across and 4 deep in a shipping crate. How many crayons are in the shipping crate?

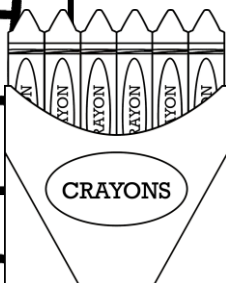
What is the problem asking?

Draw a picture

Write a number sentence

Answer

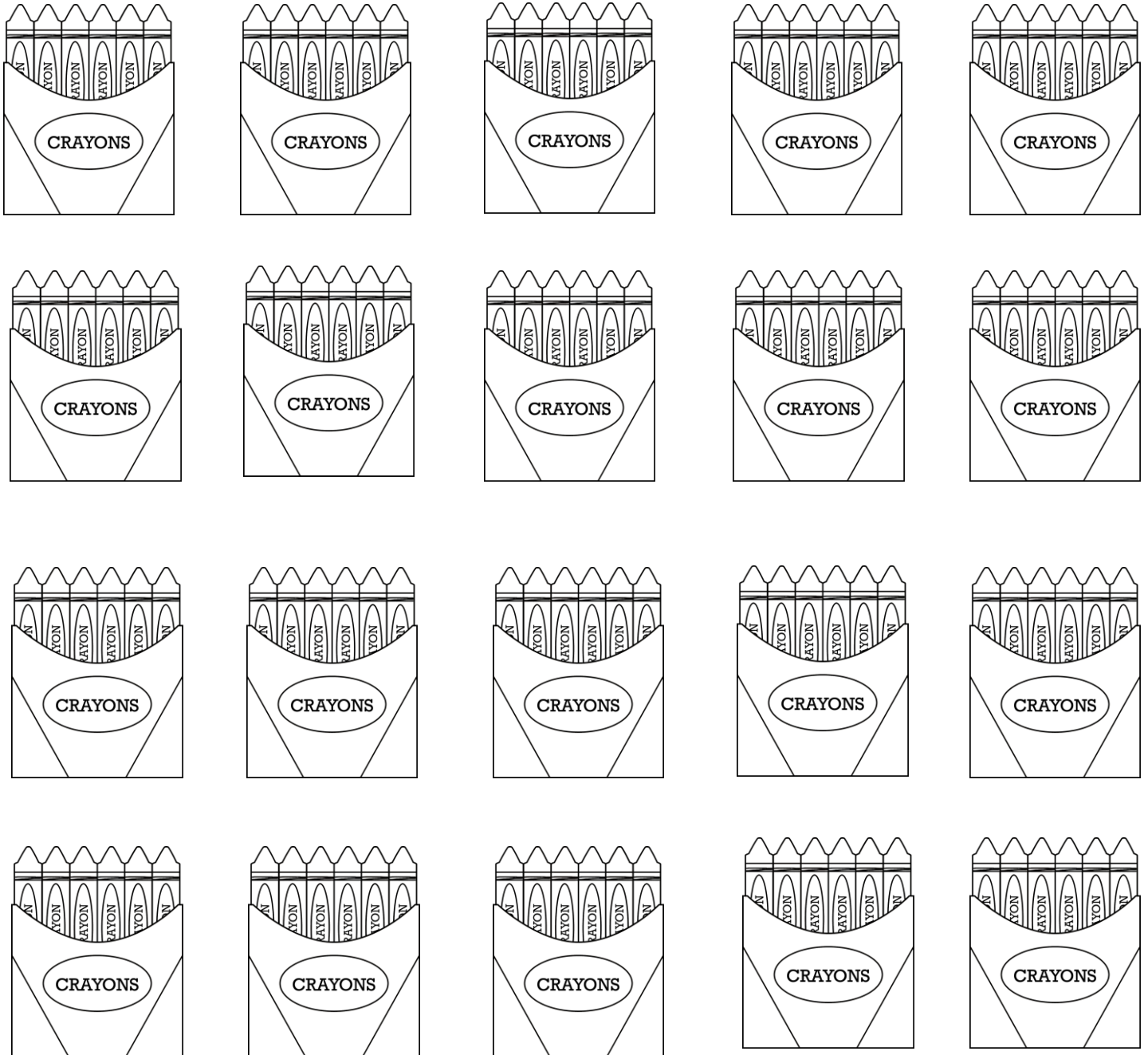
How did you solve the problem?



3.OA.3

Multiplying using 3 or more numbers

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



A crayon company puts 6 crayons in a box. The boxes are arranged 3 across and 4 deep in a shipping crate. How many crayons are in the shipping crate?

3.OA.3

Problem Solving Using Division

David found 35 leaves for his school art project. He puts them in piles of 5 leaves. How many piles does he have?

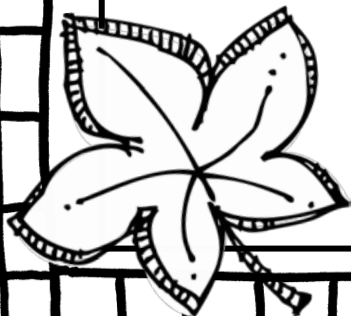
What is the problem asking?

Draw a picture

Write a number sentence

Answer

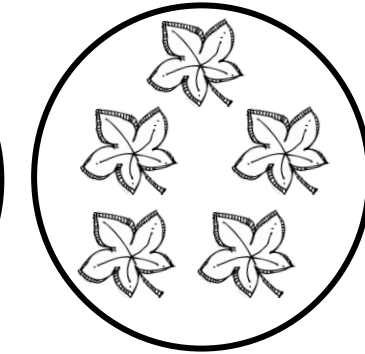
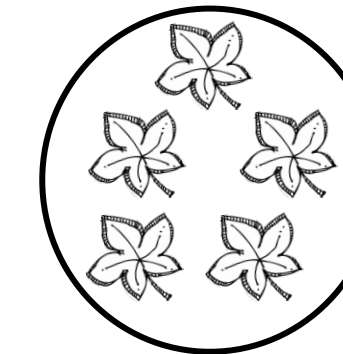
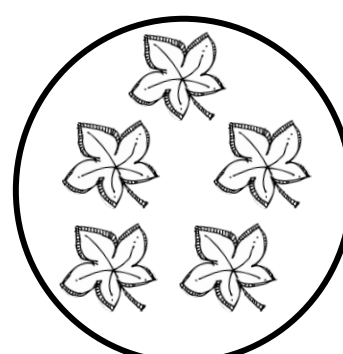
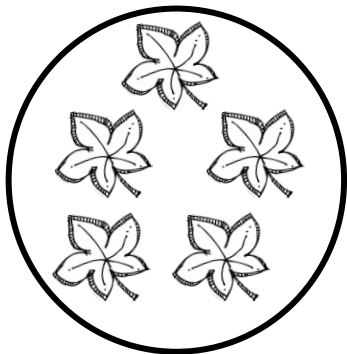
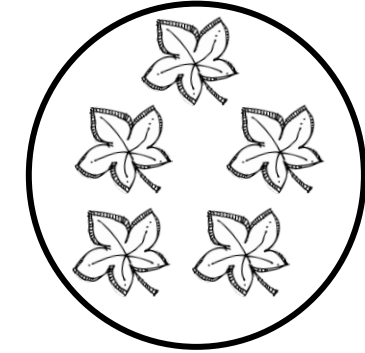
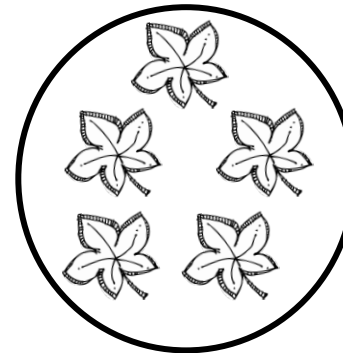
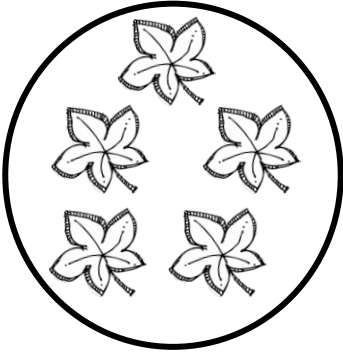
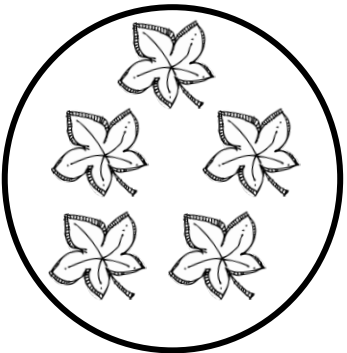
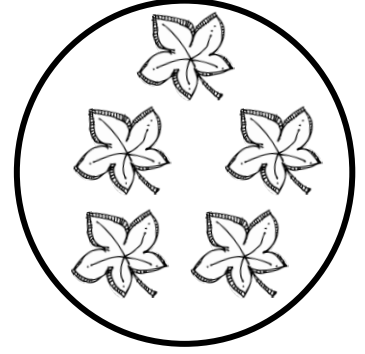
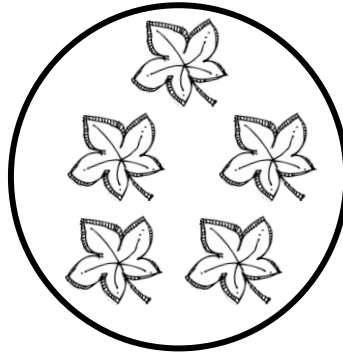
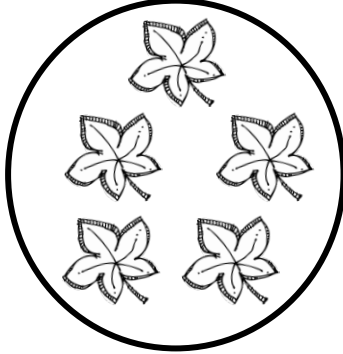
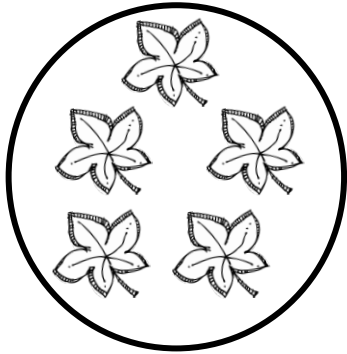
How did you solve the problem?



3.OA.3

Problem Solving using Division

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



David found 35 leaves for his school art project. He puts them in piles of 5 leaves. How many piles does he have?

3.OA.3

Problem Solving: Divide Three Digit Numbers

The farmer collected 330 apples. He put them into 5 baskets. How many apples are in each basket?

What is the problem asking?

Draw a picture

Write a number sentence

Answer

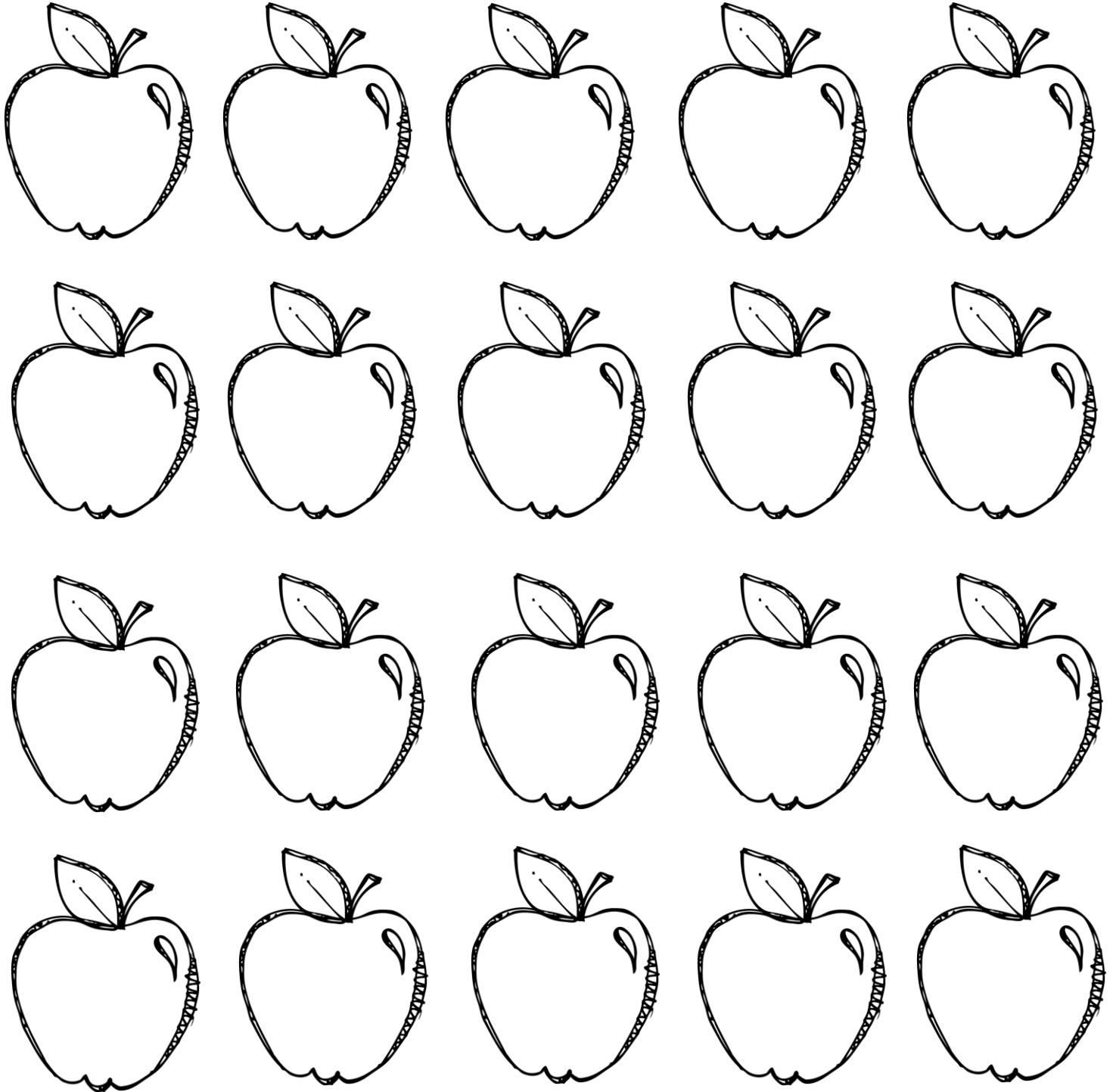
How did you solve the problem?



3.OA.3

Problem Solving: Divide Three Digit Numbers

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



The farmer collected 330 apples. He put them into 5 baskets. How many apples are in each basket?

Multiplication with an unknown number

3.OA.4

I can solve multiplication and division equations with an unknown number.

Directions: Look at the multiplication sentence on each pocket. Cut on the solid lines and glue the top of the pocket flap only. Write the missing number on top of the pocket. Show how you solved the problem under the flap.

$$8 \times \underline{\quad} = 48$$

$$20 = \underline{\quad} \times 4$$

$$7 \times \underline{\quad} = 21$$

$$18 = \underline{\quad} \times 2$$

Multiplication is a form of repeated addition. You can multiply numbers in any order and the product will be the same. $5 \times 3 = 15$ $3 \times 5 = 15$

Division with an unknown number

3.OA.4

I can solve multiplication and division equations with an unknown number.

Directions: Look at each division sentence. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Solve the problem. Show how you solved the problem under each flap.

$$25 \div \underline{\quad} = 5$$

$$18 \div \underline{\quad} = 6$$

$$\underline{\quad} \div 8 = 3$$

$$27 \div 3 = \underline{\quad}$$

$$72 \div \underline{\quad} = 8$$

$$\underline{\quad} \div 8 = 6$$

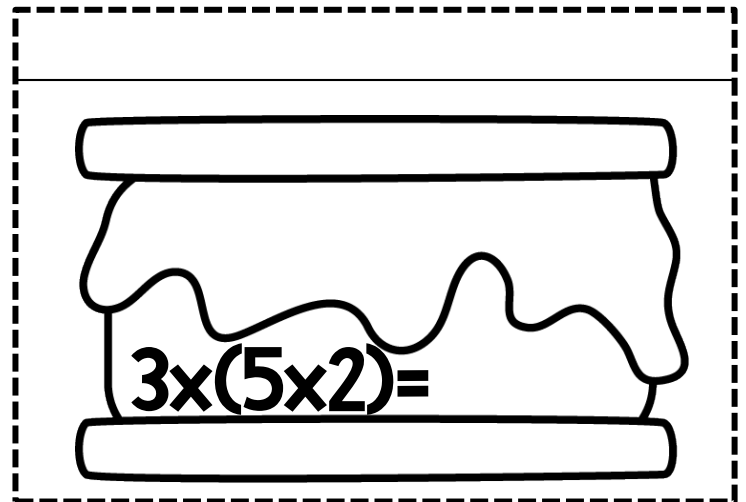
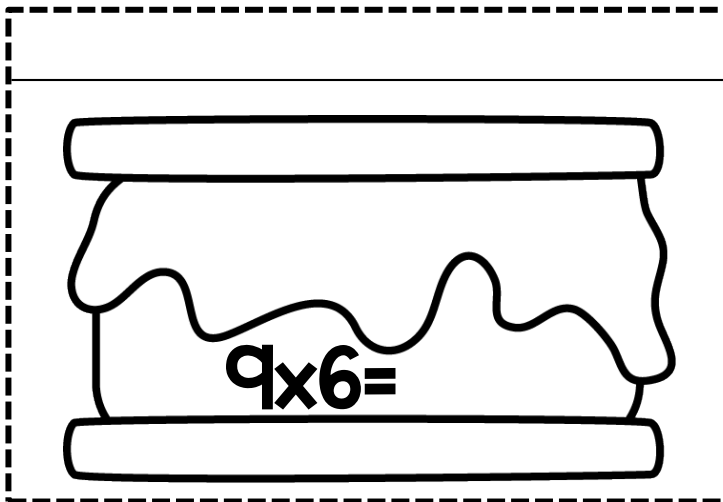
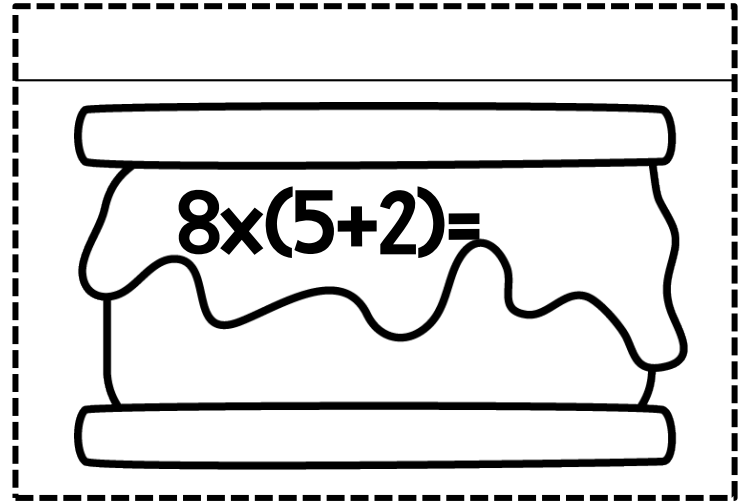
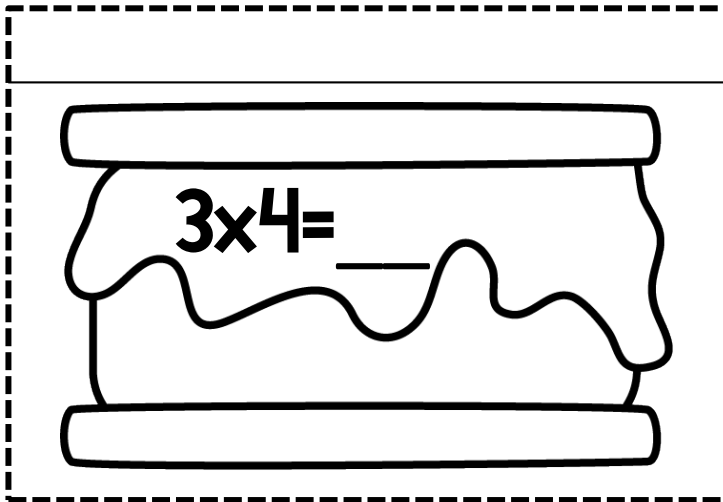
When you divide, you split things into equal groups or shares.

properties of Multiplication

3.OA.5

I can use properties of operation to quickly solve multiplication and division problems.

Directions: Look at the multiplication sentences on each s'more. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Solve each problem. Write the name of the multiplication strategy you used to solve the problem under the flap.



Commutative property: you can multiply in any order $2 \times 3 = 6$ $3 \times 2 = 6$

Associative property: it doesn't matter how you group numbers to multiply $(2 \times 4) \times 3 = 2 \times (4 \times 3)$

Distributive property: you get the same answer when you multiply a number by a group of numbers added together, just as you do if you multiplied them separately $3 \times (2 + 4) = 3 \times 2 + 3 \times 4$

properties of Multiplication

3.OA.5

I can use properties of operation to quickly solve multiplication and division problems.

Directions: Look at the multiplication sentences on each cracker. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Solve each problem under the flap using the Property of Multiplication on each marshmallow.

$$6 \times 8 =$$

Commutative
Property

$$(4 \times 7) \times 10 =$$

Associative
Property

$$6 \times 5 \times 4 =$$

Associative
Property

$$24 \times 2 + 8 \times 2 =$$

Distributive
Property

Commutative property: you can multiply in any order $2 \times 3 = 6$ $3 \times 2 = 6$

Associative property: it doesn't matter how you group numbers to multiply $(2 \times 4) \times 3 = 2 \times (4 \times 3)$

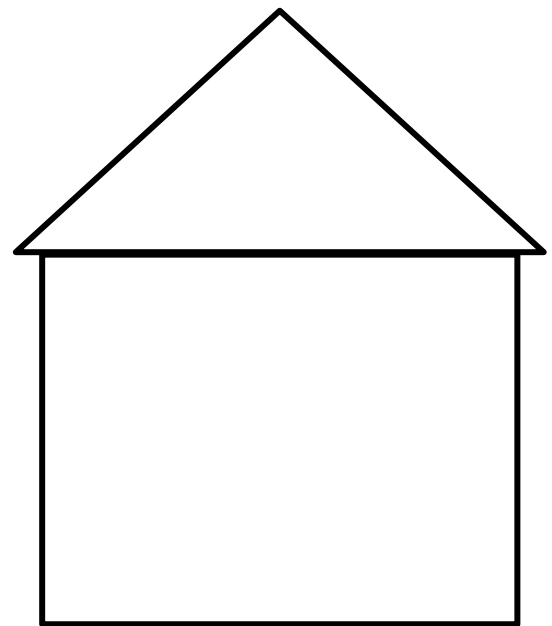
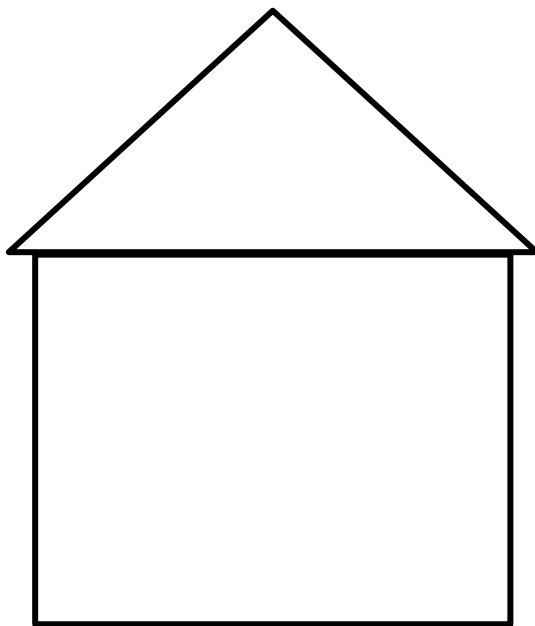
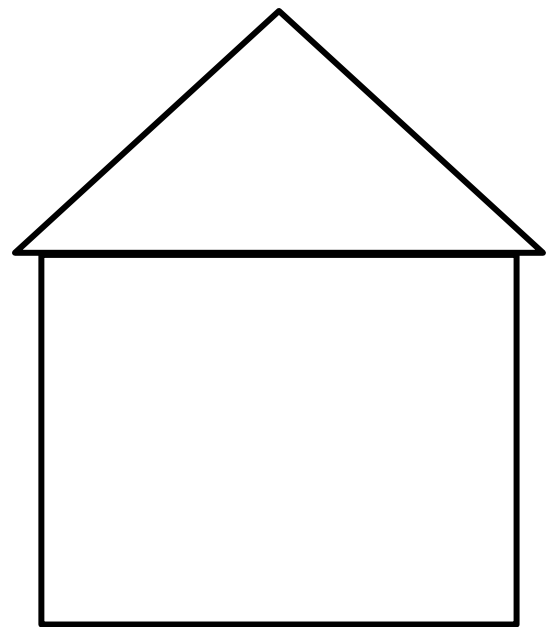
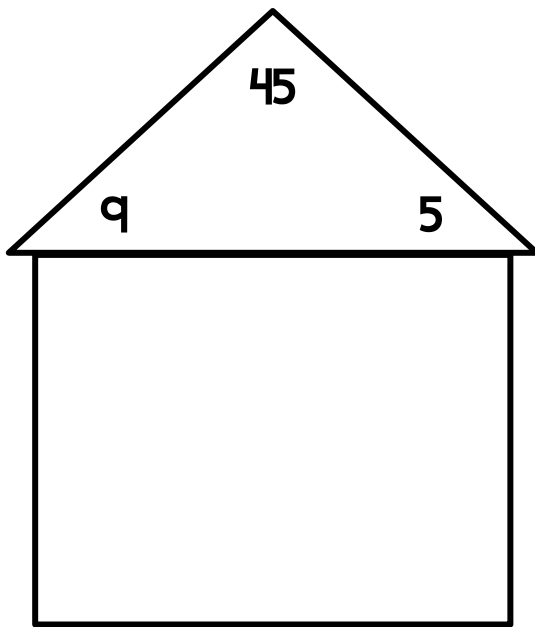
Distributive property: you get the same answer when you multiply a number by a group of numbers added together, just as you do if you multiplied them separately $3 \times (2 + 4) = 3 \times 2 + 3 \times 4$

Fact Families with \times and \div

3.OA.5

I can use properties of operation to quickly solve multiplication and division problems.

Directions: Cut out and glue the fact family "houses" on your paper. Write the 3 numbers for your fact family on the roof. Write the 4 fact family number sentences in the box below the roof.



Properties of operation are strategies to help solve multiplication and division problems.

Multiplication and division are related.

$$35 \div 7 = 5 \quad 7 \times 5 = 35$$

Understanding Division

3.OA.6

I can use properties of operation to quickly solve multiplication and division problems.

Directions: Write a division fact on each rectangle. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Write the related multiplication sentence under the flap. Solve each problem.

	$32 \div 8 =$
--	---------------

--	--

--	--

--	--

--	--

--	--

--	--

--	--

Properties of operation are strategies to help solve multiplication and division problems.

Multiplication and division are related.

$$35 \div 7 = 5 \quad 7 \times 5 = 35$$

Multiplication Chart

3.OA.7

I can use mental strategies to quickly multiply and divide within 100.

Directions: Look at the multiplication chart below. Fill in the missing numbers. Cut on the dotted lines and glue your chart onto your paper.

	0	1	2	3	4	5	6	7	8	9
0	0									
1						5				
2		2								
3									24	
4					16					
5								35		
6			12							
7										63
8	0									
9							54			

Division Charts

3.OA.7

I can use mental strategies to quickly multiply and divide within 100.

Directions: Look at the division charts below. Fill in the missing numbers. Cut and glue your charts onto your paper.

<u>Division by 1</u>
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$
$\div 1 =$

<u>Division by 2</u>
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$
$\div 2 =$

<u>Division by 3</u>
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$
$\div 3 =$

<u>Division by 4</u>
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$
$\div 4 =$

<u>Division by 5</u>
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$
$\div 5 =$

Division Charts

3.OA.7

I can use mental strategies to quickly multiply and divide within 100.

Directions: Look at the division charts below. Fill in the missing numbers. Cut and glue your charts onto your paper.

<u>Division by 6</u>
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$
$\div 6 =$

<u>Division by 7</u>
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$
$\div 7 =$

<u>Division by 8</u>
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$
$\div 8 =$

<u>Division by 9</u>
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$
$\div 9 =$

<u>Division by 10</u>
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$
$\div 10 =$

3.OA.8

Multi-step word problems

In Josh's desk there are 4 pink crayons. There are 10 more blue crayons than pink crayons, there are 6 more green crayons than blue crayons. How many total crayons are in Josh's desk?

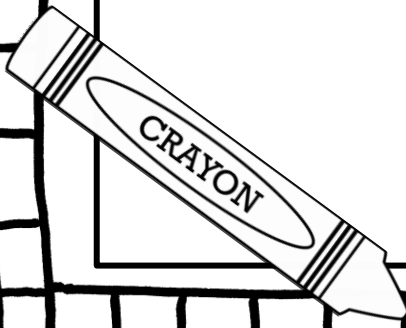
What is the problem asking?

Draw a picture

Write a number sentence

Answer

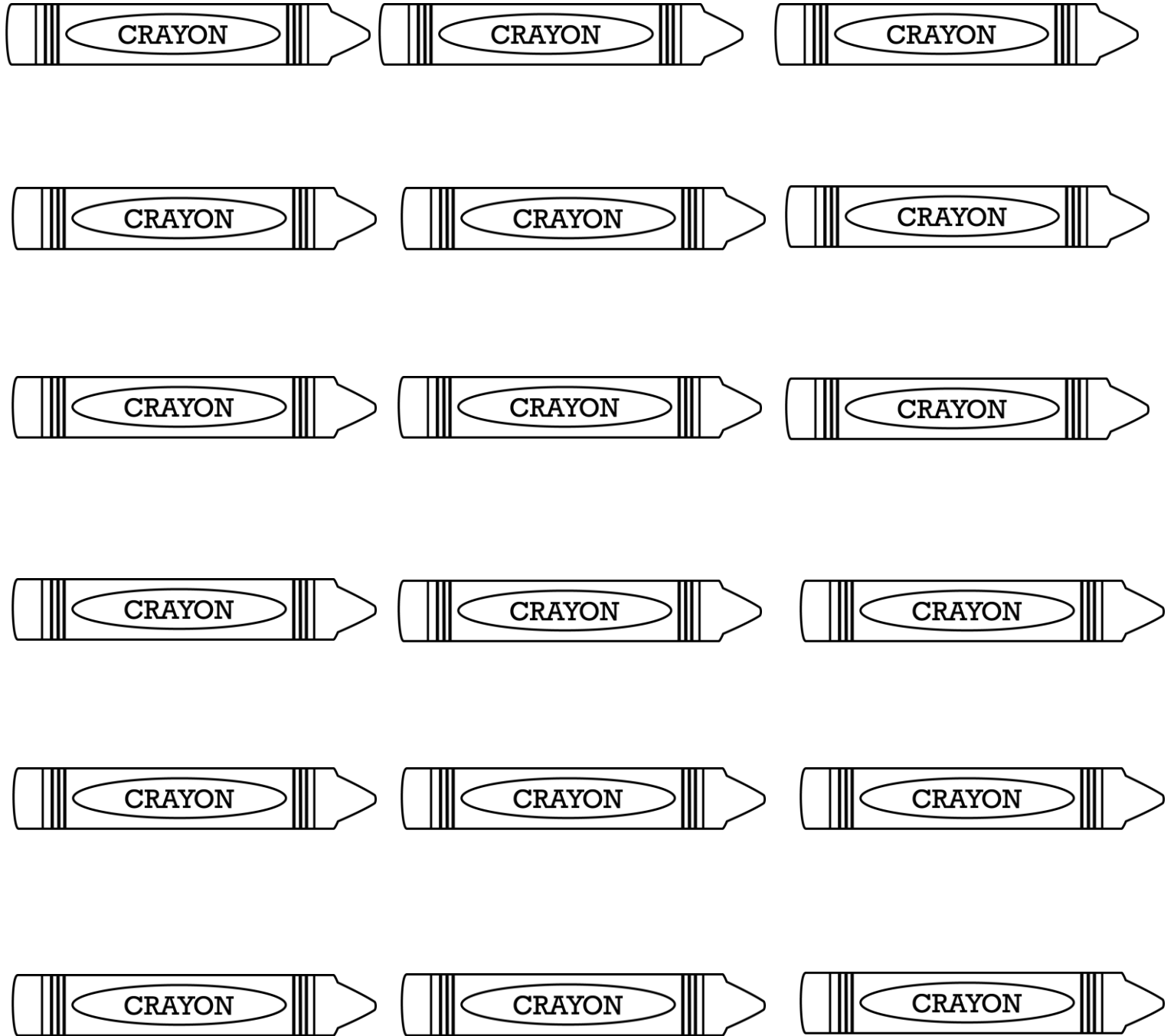
How did you solve the problem?



3.OA.8

Multi-step word problems

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



In Josh's desk there are 4 pink crayons. There are 10 more blue crayons than pink crayons, there are 6 more green crayons than blue crayons. How many total crayons are in Josh's desk?

3.OA.8

Multi-step word problems

Taylor saved \$17 in September. He saved \$25 in October and \$12 in November. Then, he spent \$37 on a new backpack. How much money does Taylor have left?

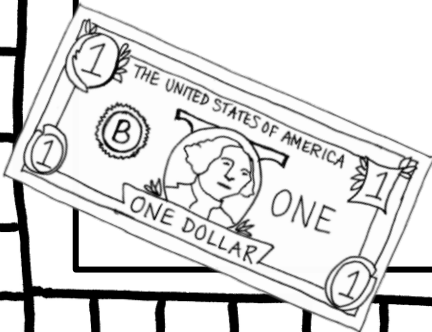
What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?



3.OA.8

Using Variable Equations to solve word problems

Jane bought a pizza. She ate 67 of the pepperoni pieces. Now there are only 8 left. Write an equation to show how many pepperoni pieces were on the pizza originally.

What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?

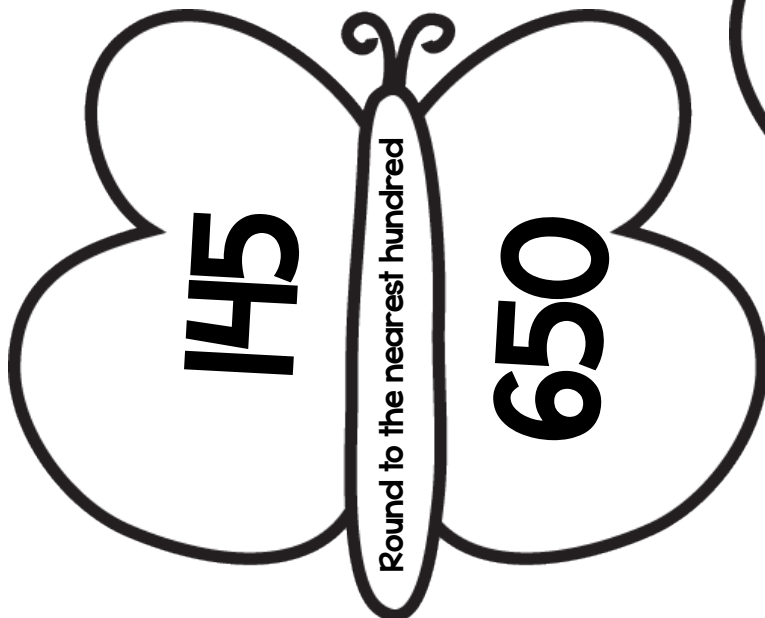
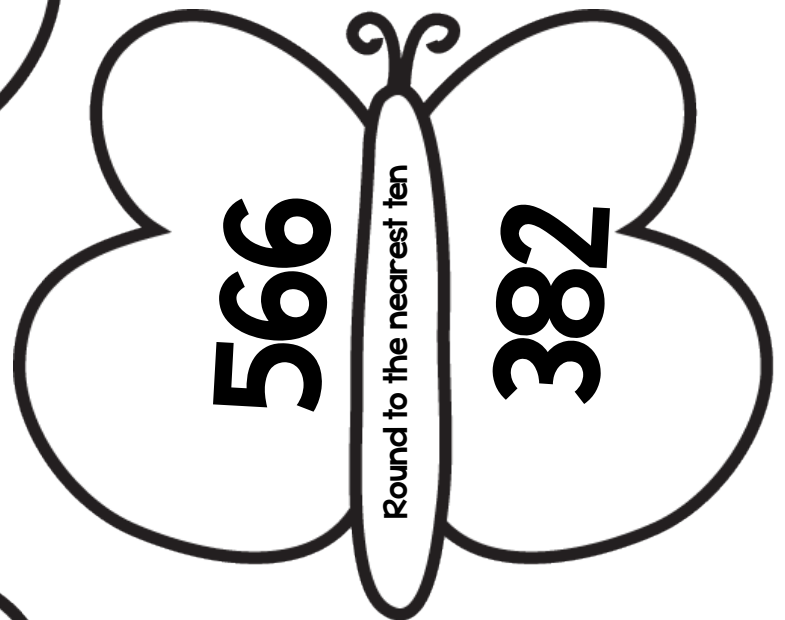
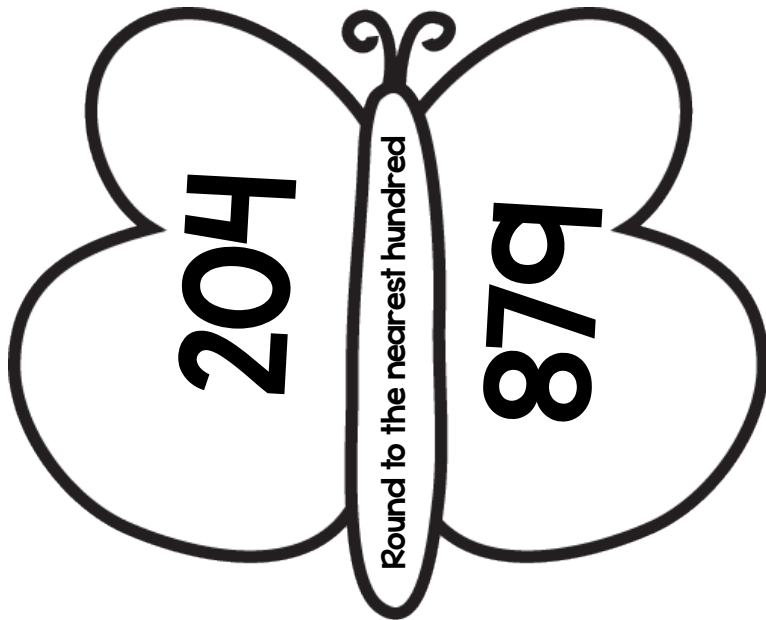


Rounding

3.OA.8

I can solve two-step word problems using an unknown quantity and estimation strategies.

Directions: Cut out the butterfly. Glue the center of the body only. Read the number on each wing. Round each number. Write your answer under each wing.



Round down if the digit is less than 5.
Round up if the digit is 5 or more.

3.OA.8

Estimation

There were 846 gumballs in the machine. Cameron bought 92. How many gumballs were left in the machine? Estimate your answer.

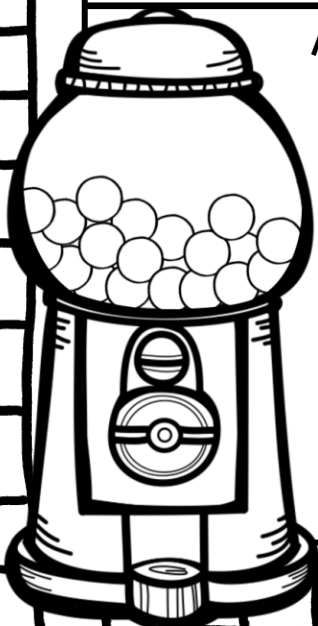
What is the problem asking?

Draw a picture

Write a number sentence using estimation:

Answer

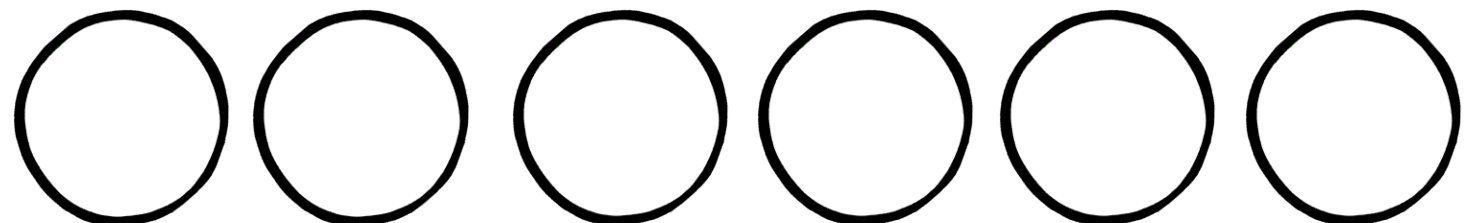
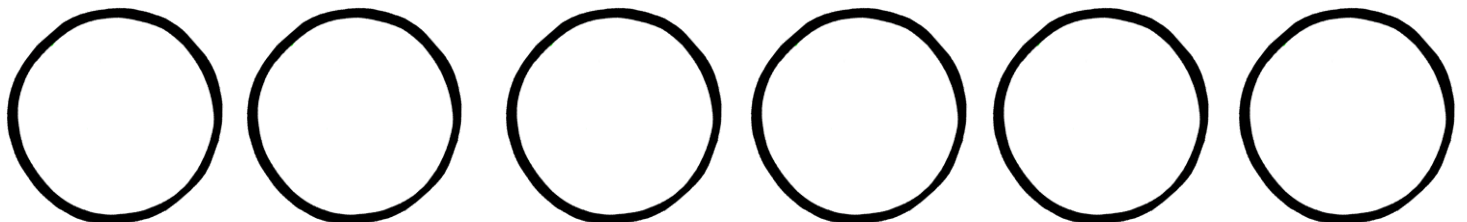
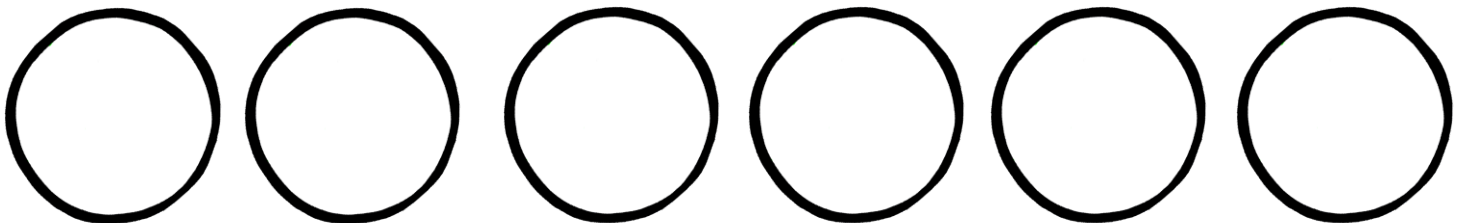
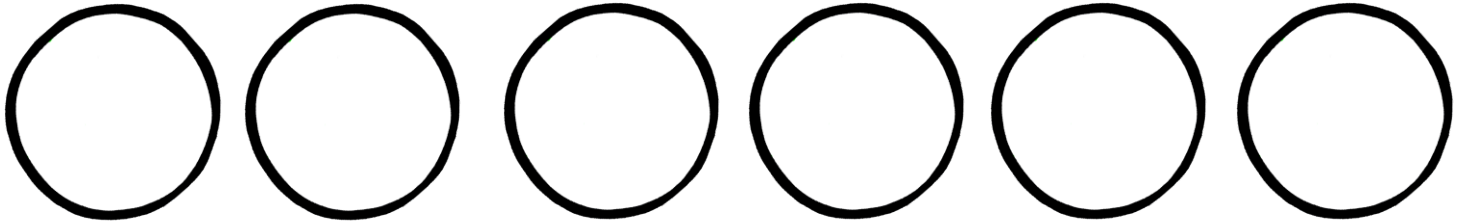
How did you solve the problem?



3.OA.8

Estimation

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



There were 846 gumballs in the machine. Cameron bought 92. How many gumballs were left in the machine? Estimate your answer.

Addition patterns

3.OA.9

I can identify number patterns and explain them using properties of operation.

Directions: Look at the addition tables below. Fill in the missing numbers. Cut and glue the rectangles by folding on the top line and gluing the tab on your paper. Under each tab, explain the pattern you see and how you solved it.

<u>Rule: add</u> <u>100</u>	
852	
45	
361	
487	
212	

<u>Rule: add</u> <u>120</u>	
742	
75	
622	
478	
310	

<u>Rule:</u> <u>add 25</u>	
351	
45	
691	
282	
102	

<u>Rule: add</u> <u>50</u>	
175	
445	
16	
763	
906	

<u>Rule: add</u> <u>200</u>	
330	
731	
543	
278	
129	

subtraction patterns

3.OA.9

I can identify number patterns and explain them using properties of operation.

Directions: Look at the subtraction tables below. Fill in the missing numbers. Cut and glue the rectangles by folding on the top line and gluing the tab on your paper. Under each tab, explain the pattern you see and how you solved it.

<u>Rule: subtract</u> <u>100</u>	
852	
545	
361	
487	
212	

<u>Rule: subtract</u> <u>120</u>	
742	
275	
622	
478	
310	

<u>Rule: subtract</u> <u>25</u>	
351	
45	
691	
282	
102	

<u>Rule: subtract</u> <u>50</u>	
175	
445	
96	
763	
906	

<u>Rule: subtract</u> <u>200</u>	
330	
731	
543	
278	
429	

Multiplication patterns

3.OA.9

I can identify number patterns and explain them using properties of operation.

Directions: Look at the multiplication tables below. Fill in the missing numbers. Cut and glue the rectangles by folding on the top line and gluing the tab on your paper. Under each tab, explain the pattern you see and how you solved it.

<u>Rule: multiply</u> <u>by 2</u>	
0	
3	
5	
7	
9	

<u>Rule: multiply</u> <u>by 10</u>	
1	
4	
6	
7	
9	

<u>Rule: multiply</u> <u>by 4</u>	
0	
1	
3	
6	
8	

<u>Rule: multiply</u> <u>by 9</u>	
2	
3	
5	
7	
8	

<u>Rule: multiply</u> <u>by 7</u>	
0	
1	
4	
6	
9	

Division patterns

3.OA.9

I can identify number patterns and explain them using properties of operation.

Directions: Look at the division tables below. Fill in the missing numbers. Cut and glue the rectangles by folding on the top line and gluing the tab on your paper. Under each tab, explain the pattern you see and how you solved it.

<u>Rule: divide</u> <u>by 2</u>	
2	
4	
6	
8	
10	

<u>Rule: divide</u> <u>by 10</u>	
10	
40	
60	
80	
100	

<u>Rule: divide</u> <u>by 1</u>	
6	
7	
8	
9	
10	

<u>Rule: divide</u> <u>by 5</u>	
10	
20	
25	
40	
45	

<u>Rule: divide</u> <u>by 3</u>	
3	
9	
15	
21	
27	

Example pictures of Numbers and Operations in Base 10 pages

Rounding to the Nearest 10
 3.NBT.1 I can round numbers to the nearest 10 or 100

250

Round up= if a number has 5 or greater in the ones column, round up to the next even ten. Ex: 75=80
 Round down= if a number has 1-4 in the ones column, round down to the next lower number that ends in a 0. ex: 74=70

Rounding to the Nearest 100
 3.NBT.1 I can round numbers to the nearest 10 or 100.

300

Round up= if a number has 5 or greater in the tens column, round up to the next hundred. Ex: 762=800
 Round down= if a number has 1-4 in the tens column, round down to the next lower hundred that ends in a 0. ex: 743=700

Adding within 1000
 2.NBT.7 I can add and subtract within a 1000 by breaking up 3-digit numbers by the hundreds, tens and ones place.

$\begin{array}{r} 135 \\ +248 \\ \hline 383 \end{array}$	$\begin{array}{r} 341 \\ +127 \\ \hline 468 \end{array}$
$\begin{array}{r} 524 \\ +249 \\ \hline 773 \end{array}$	$\begin{array}{r} 634 \\ +218 \\ \hline 852 \end{array}$

Example pictures of Numbers and Operations in Base 10 pages

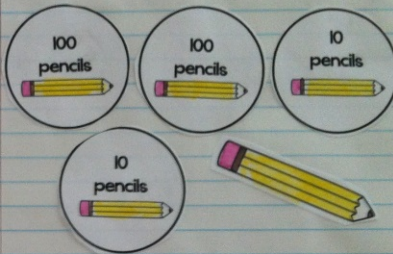
Problem Solving: Adding within 1000

2.NBT.7 Addison's school bought 221 pencils. Then the school bought 110 more. How many pencils did they buy in all?

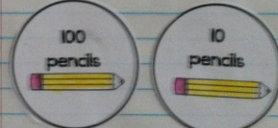
2.NBT.9

What is the problem asking?
How many pencils in all?

Draw a picture	Write a number sentence
$\begin{array}{r c c} \text{H} & \text{T} & \text{O} \\ \hline 2 & 2 & 1 \\ + & 1 & 1 & 0 \\ \hline \end{array}$	$221 + 110 = 331$
Answer 331 pencils	How did you solve the problem? I used hundreds, tens and ones columns to line up my numbers correctly. Then I added each column.



221 pencils



110 pencils

$221 + 110 = 331$

Addison's school bought 221 pencils. Then the school bought 110 more. How many pencils did they buy in all?

subtracting within 1000

2.NBT.7 I can add and subtract within a 1000 by breaking up 3-digit numbers by the hundreds, tens and ones place.

$\begin{array}{r} 2 \quad 12 \\ 327 \\ -164 \\ \hline 163 \end{array}$	$\begin{array}{r} 4 \quad 14 \\ 549 \\ -295 \\ \hline 254 \end{array}$
$\begin{array}{r} 2 \quad 15 \\ 835 \\ -516 \\ \hline 319 \end{array}$	$\begin{array}{r} 6 \quad 15 \\ 755 \\ -283 \\ \hline 472 \end{array}$

Example pictures of Numbers and Operations in Base 10 pages

3.NBT.2 **problem solving: subtracting within 1000** **3.NBT.2**


Molly saw 327 ladybugs in her garden. 125 ladybugs flew away. How many ladybugs were left in the garden?

What is the problem asking?
How many ladybugs are in the garden?

Draw a picture			Write a number sentence		
H	T	O	3	2	7
-	1	2	5		
2	0	2			

Answer
202 ladybugs


How did you solve the problem?
I used 100s, 10s and 1s to solve my problem.



3.NBT.2 **problem solving: subtracting within 1000** **3.NBT.2**

Molly saw 327 ladybugs in her garden. 125 ladybugs flew away. How many ladybugs were left in the garden?

subtract 125



$327 - 125 = 202$

Molly saw 327 ladybugs in her garden. 125 ladybugs flew away. How many ladybugs were left in the garden?

Multiplying by Multiples of 10

3.NBT.3 I can multiply one-digit whole numbers by multiples of 10

$50 \times 6 =$	$8 \times 30 =$
$2 \times 70 =$	$40 \times 5 =$
$60 \times 4 =$	$3 \times 10 =$
$7 \times 20 =$	$80 \times 9 =$

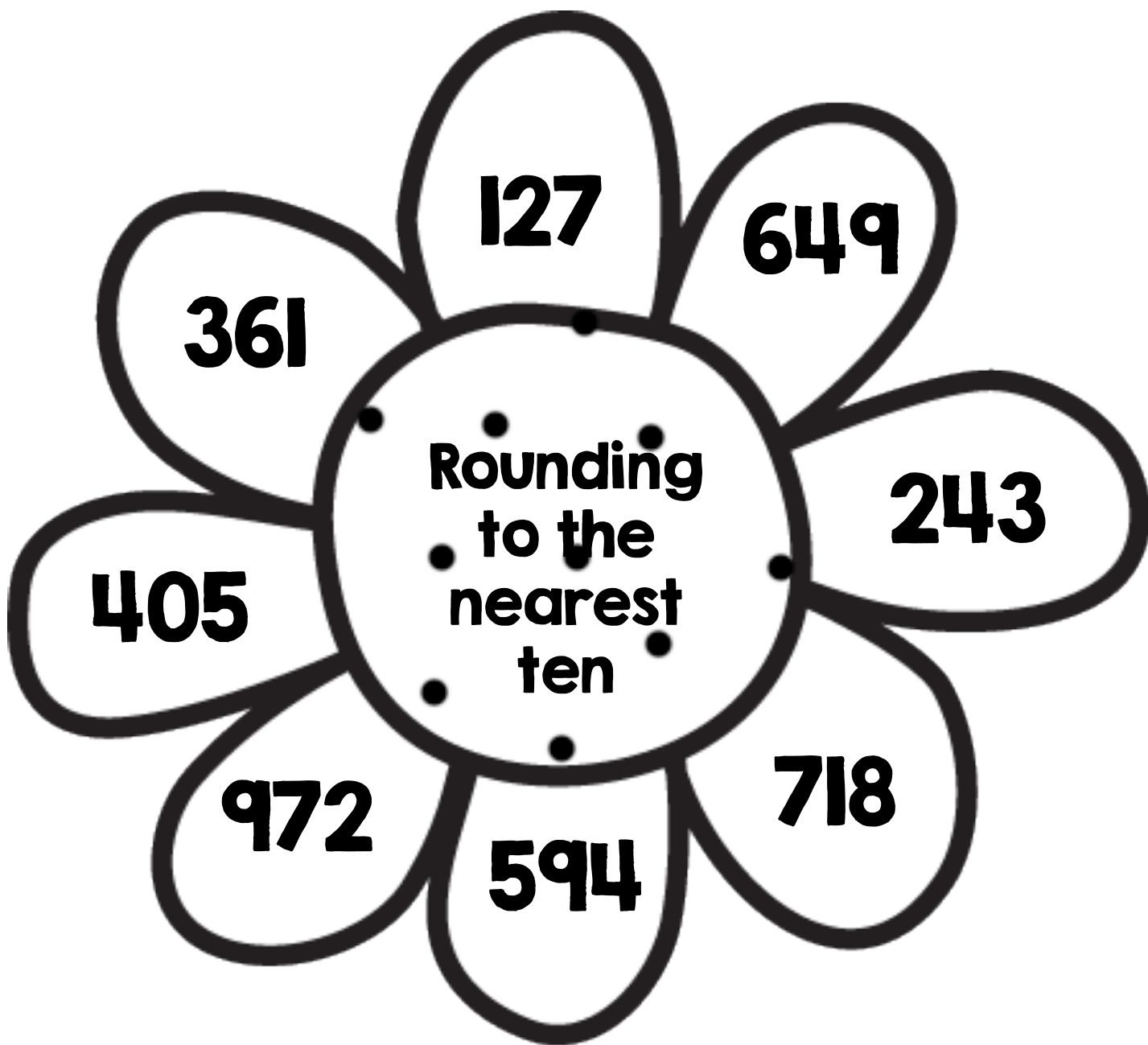
A multiple is the result of multiplying a number by an integer (not a fraction).
Ex. 24 is a multiple of 3, because $3 \times 8 = 24$

Rounding to the Nearest 10

3.NBT.1

I can round numbers to the nearest 10 or 100.

Directions: Cut out the flower. Glue the center of the flower only. Look at the number on each flower petal. Round each number to the nearest 10 and write your answer under each petal.



Round up= if a number has 5 or greater in the ones column, round up to the next even ten. Ex: $75=80$

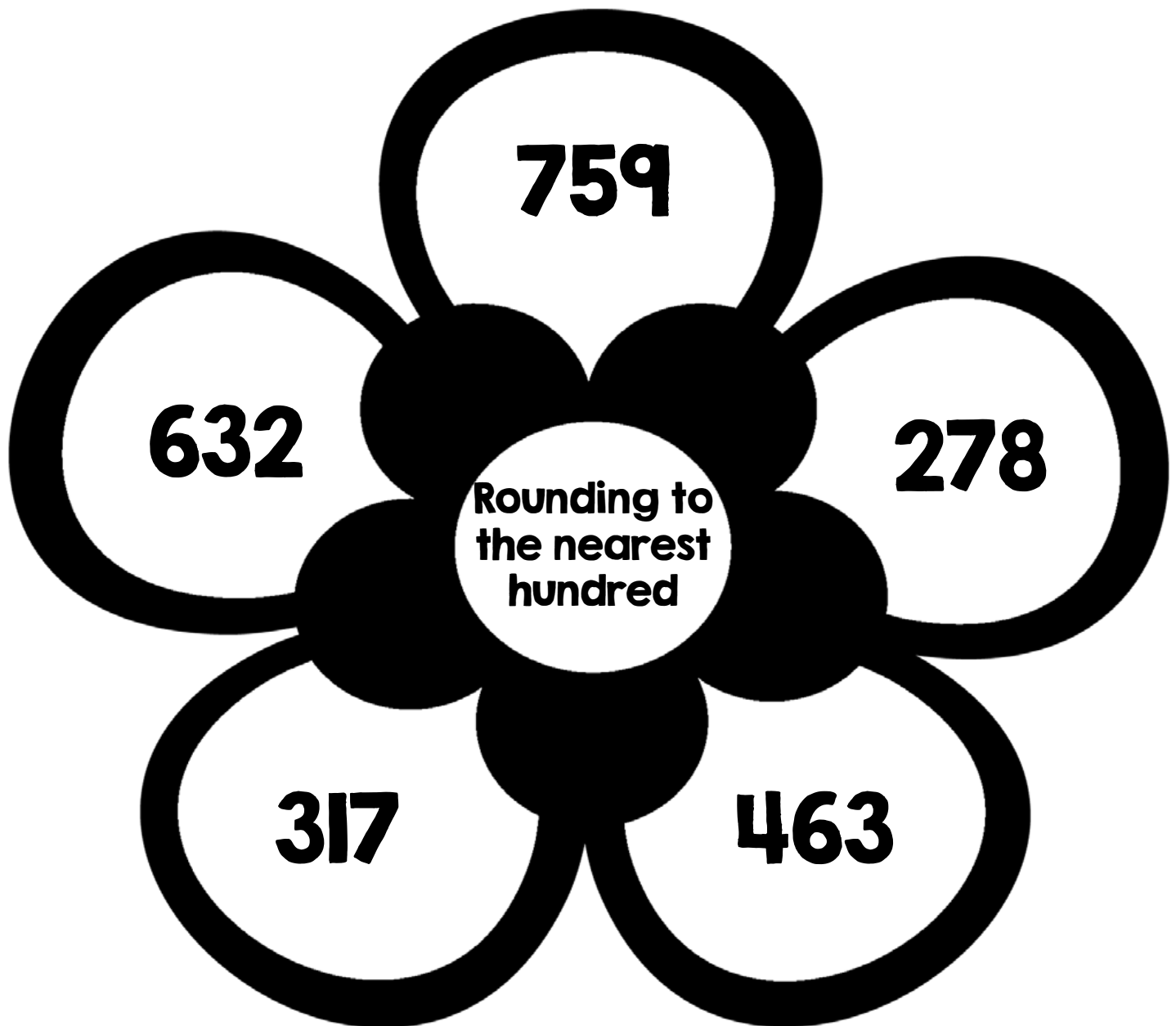
Round down= if a number has 1-4 in the ones column, round down to the next lower number that ends in a 0. ex: $74=70$

Rounding to the Nearest 100

3.NBT.1

I can round numbers to the nearest 10 or 100.

Directions: Cut out the flower. Glue the center of the flower only. Look at the number on each flower petal. Round each number to the nearest 100 and write your answer under each petal.



Round up= if a number has 5 or greater in the tens column, round up to the next hundred. Ex: $762=800$

Round down= if a number has 1-4 in the tens column, round down to the next lower hundred that ends in a 0. ex: $743=700$

Adding within 1000

3.NBT.2

I can add and subtract within 1000 by using place value strategies and relationships between addition and subtraction.

Directions: Look at the addition problems below. Cut on the dotted lines and glue the flap only. Solve each problem. After you solve the problem, draw a picture or write number sentences using place value strategies and relationships between addition and subtraction.

$$\begin{array}{r} 453 \\ + 241 \\ \hline \end{array}$$

$$\begin{array}{r} 314 \\ + 127 \\ \hline \end{array}$$

$$\begin{array}{r} 634 \\ + 329 \\ \hline \end{array}$$

$$\begin{array}{r} 254 \\ + 216 \\ \hline \end{array}$$

3.NBT.2

Problem Solving: Adding within 1000

Adam's school bought 321 pencils. Then the school bought 211 more. How many pencils did they buy in all?

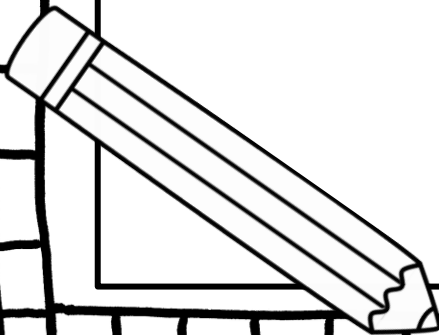
What is the problem asking?

Draw a picture

Write a number sentence

Answer

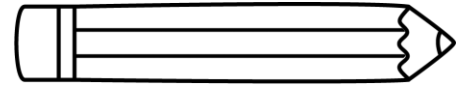
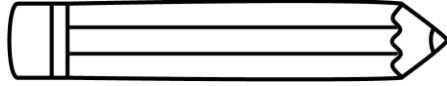
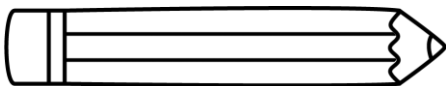
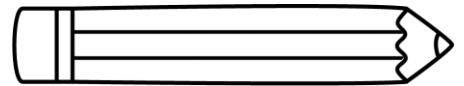
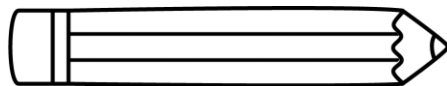
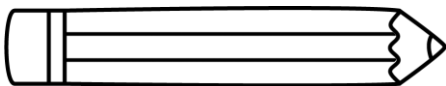
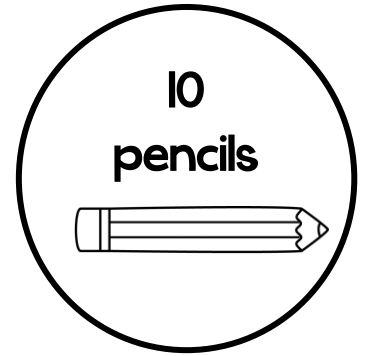
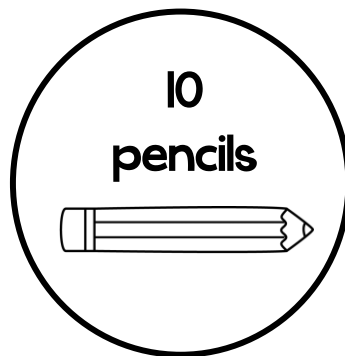
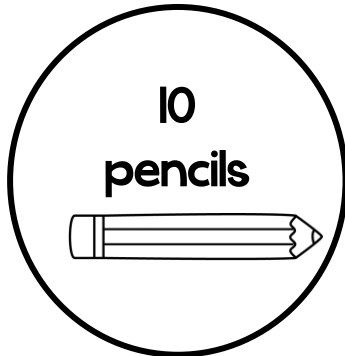
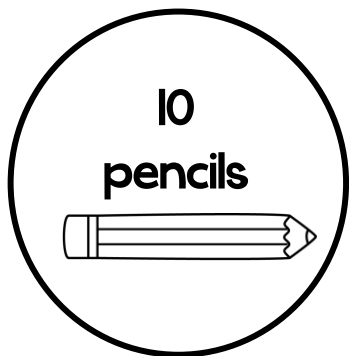
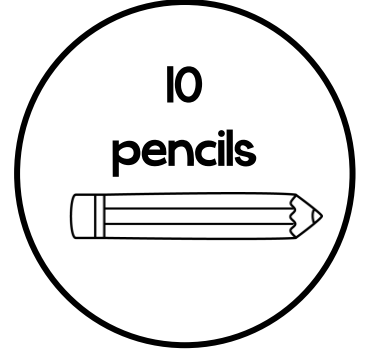
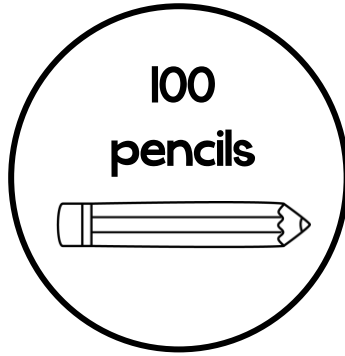
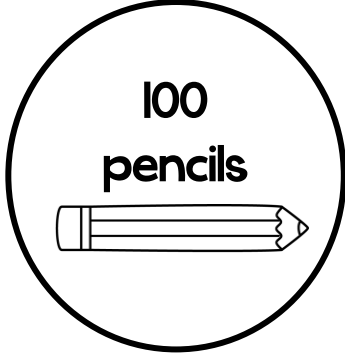
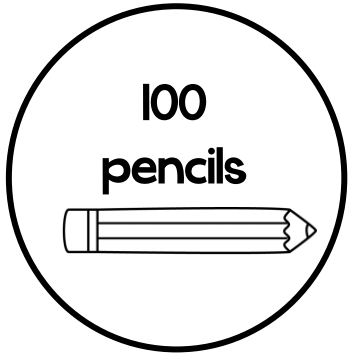
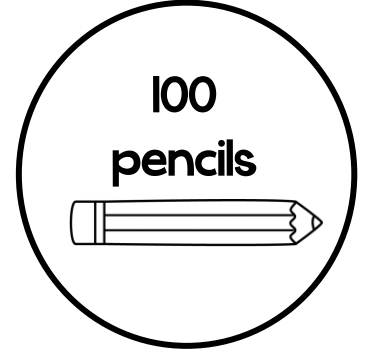
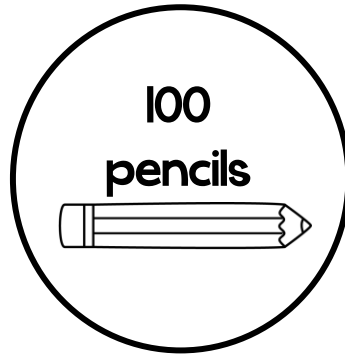
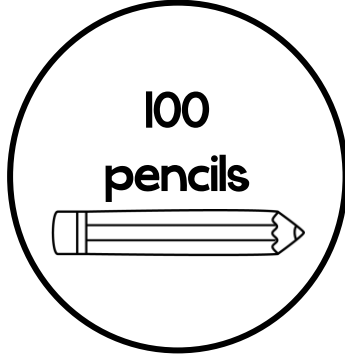
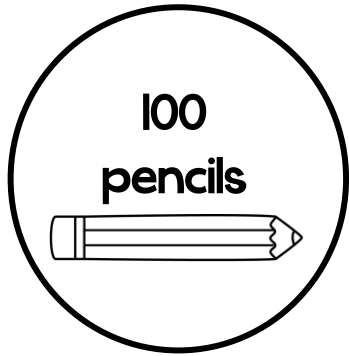
How did you solve the problem?



3.NBT.2

Problem Solving: Adding within 1000

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



Adam's school bought 321 pencils. Then the school bought 211 more. How many pencils did they buy in all?

Subtracting within 1000

3.NBT.2

I can add and subtract within 1000 by using place value strategies and relationships between addition and subtraction.

Directions: Look at the subtraction problems below. Cut on the dotted lines and glue the flap only. Solve each problem. After you solve the problem, draw a picture or write number sentences using place value strategies and relationships between addition and subtraction.

$$\begin{array}{r} 628 \\ -214 \\ \hline \end{array}$$

$$\begin{array}{r} 439 \\ -385 \\ \hline \end{array}$$

$$\begin{array}{r} 842 \\ -636 \\ \hline \end{array}$$

$$\begin{array}{r} 734 \\ -281 \\ \hline \end{array}$$

3.NBT.2

Problem solving: subtracting within 1000

Molly saw 423 ladybugs in her garden. 314 ladybugs flew away. How many ladybugs were left in the garden?

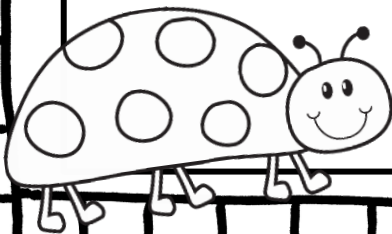
What is the problem asking?

Draw a picture

Write a number sentence

Answer

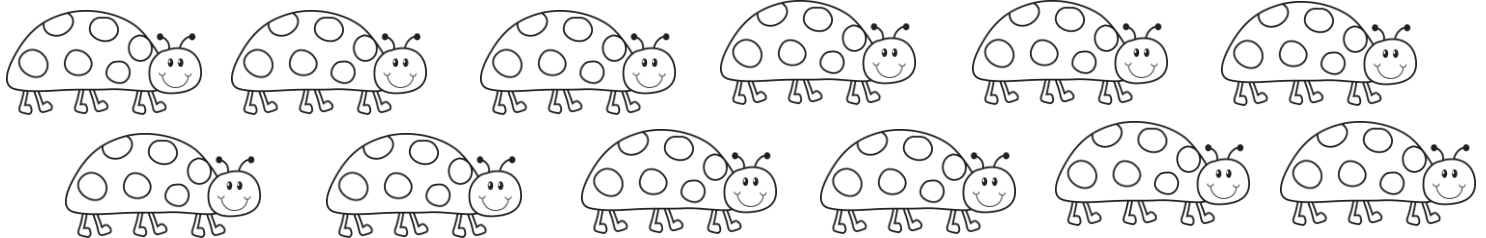
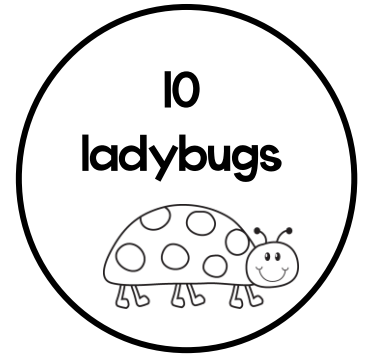
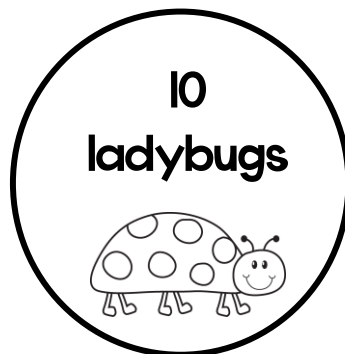
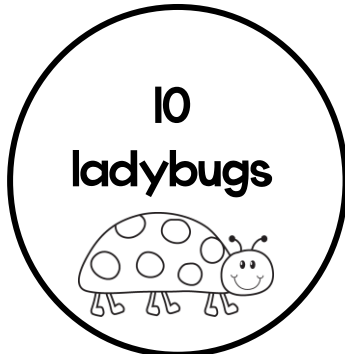
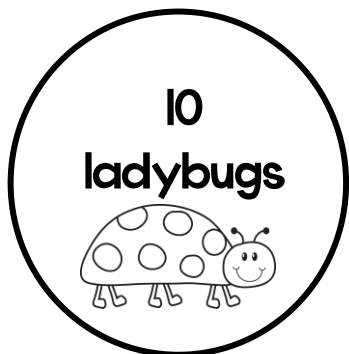
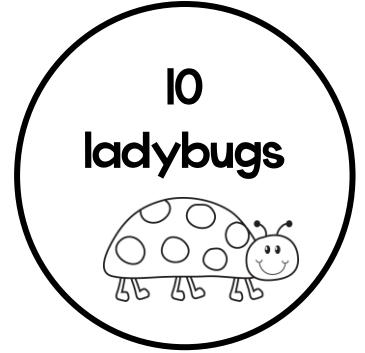
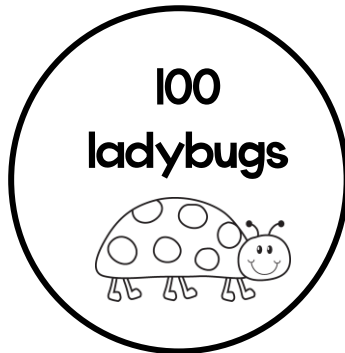
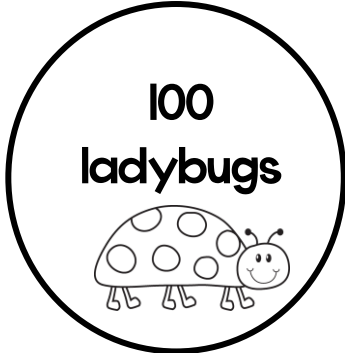
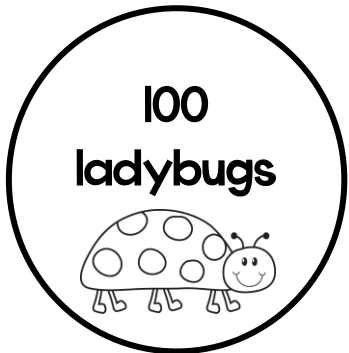
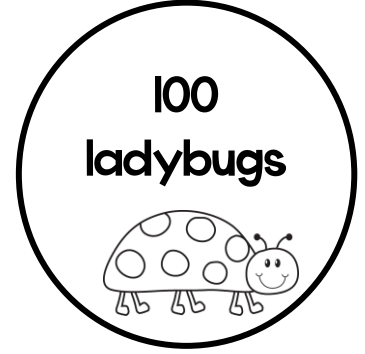
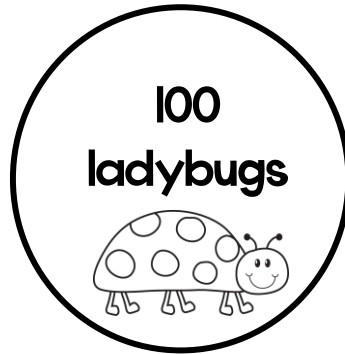
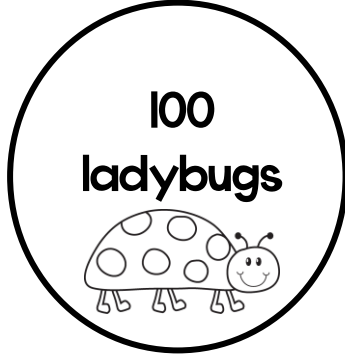
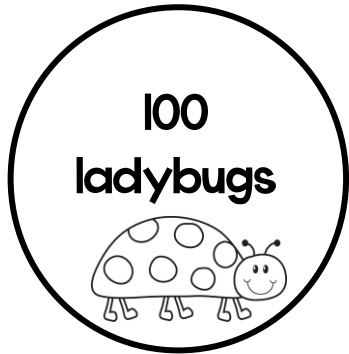
How did you solve the problem?



3.NBT.2

problem solving: subtracting within 1000

Directions: Cut out the prompt below and glue it into your notebook. Use the pictures below to solve the problem and show your work.



Molly saw 423 ladybugs in her garden. 314 ladybugs flew away. How many ladybugs were left in the garden?

Multiplying by Multiples of 10

3.NBT.3

I can multiply one-digit whole numbers by multiples of 10

Directions: Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Write a multiplication sentence on each rectangle. One multiple must be between 1-9. The other multiple must be a multiple of 10. Write your answer under the flap.

$$50 \times 6 =$$

$$8 \times 30 =$$

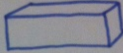





A multiple is the result of multiplying a number by an integer (not a fraction).

Ex. 24 is a multiple of 3, because $3 \times 8 = 24$

Example pictures of Geometry

Solid Figures








2.6.1 I can recognize, draw and identify shapes such as triangles, quadrilaterals, pentagons, hexagons and cubes

rectangular prism	
cube	
cone	
cylinder	
pyramid	
sphere	

A solid figure has length, width and height. Examples: cube, cylinder, cone, rectangular prism.

Plane Shapes

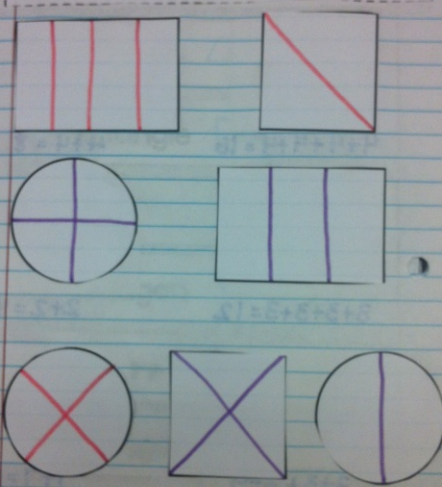
2.6.1 I can recognize, draw and identify shapes such as triangles, quadrilaterals, pentagons, hexagons and cubes

rhombus	
rectangle	
circle	
hexagon	
square	
pentagon	
triangle	

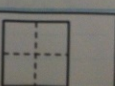
A plane shape is a 2D shape. Examples: triangles, pentagons, hexagons and quadrilaterals.

Equal Parts

2.6.5 I can divide rectangles and circles into two, three, or four equal shares and describe the shares using fraction words


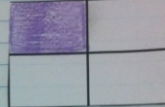


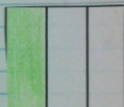




An equal part means an object has parts that are all the same size.



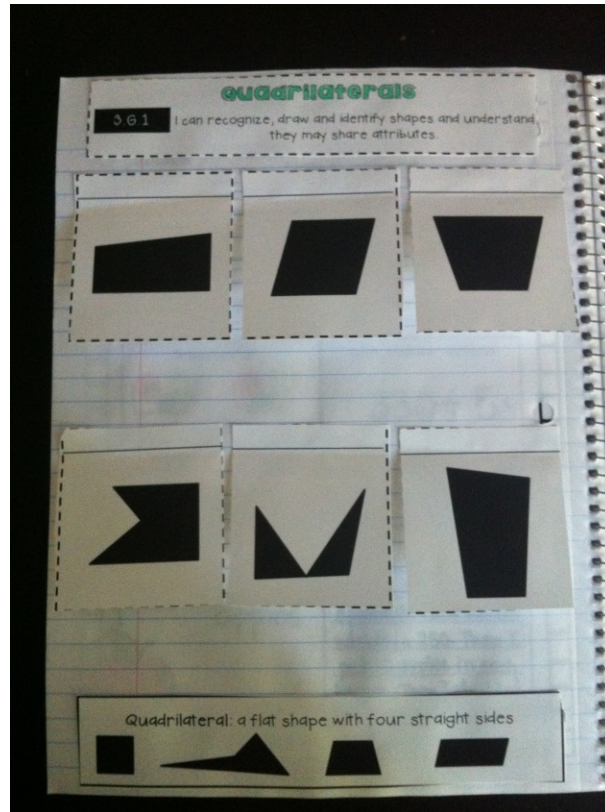
Fractions

2.6.5 I can divide rectangles and circles into two, three, or four equal shares and describe the shares using fraction words

	$\frac{3}{4}$ three-fourths		$\frac{1}{4}$ one-fourth
	$\frac{1}{2}$ one-half		$\frac{2}{2}$ 1 whole
	$\frac{1}{3}$ one-third		$\frac{2}{3}$ two-thirds
	$\frac{2}{3}$ two-thirds		

Halves: when 1 whole is separated into 2 equal parts.
 Thirds: when 1 whole is separated into 3 equal parts.
 Fourths: when 1 whole is divided into 4 equal parts.

Example pictures of Geometry



plane shapes

3.G.1

I can recognize, draw and identify shapes and understand they may share attributes.

Directions: Cut out each rectangle. Fold on the line and glue the tab on your paper. Draw the shape on top. Underneath the flap describe the shape. For example you can write how many sides and corners each shape has.

pentagon

circle

triangle

hexagon

square

rectangle

rhombus

A plane shape is a flat shape.
Examples: triangles, pentagons, hexagons and quadrilaterals.

Solid Figures

3.G.1

I can recognize, draw and identify shapes and understand they may share attributes.

Directions: Cut out each rectangle. Fold on the line and glue the tab on your paper. Draw the shape on top. Underneath the flap write how many faces, vertices & edges each shape has.

sphere

pyramid

cylinder

cone

cube

**rectangular
prism**

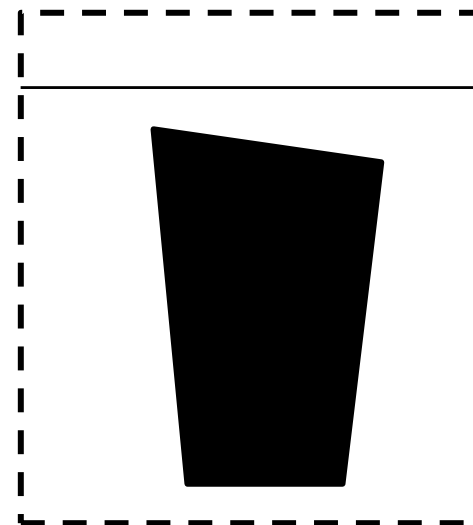
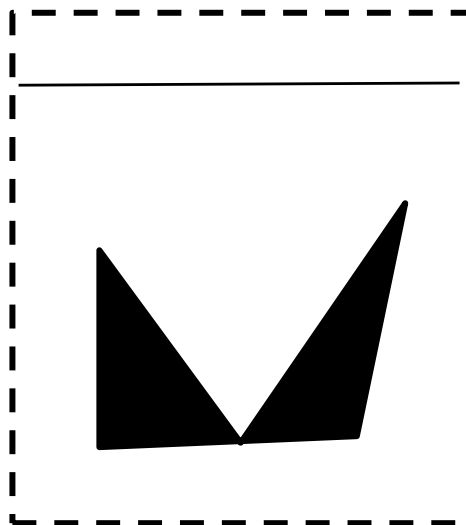
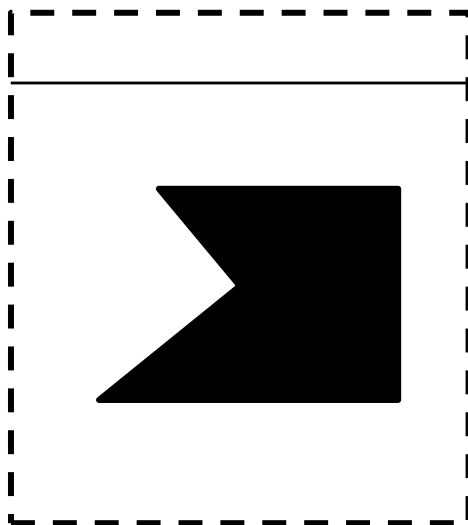
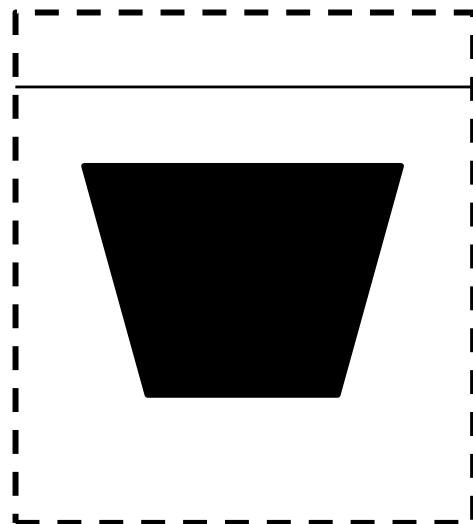
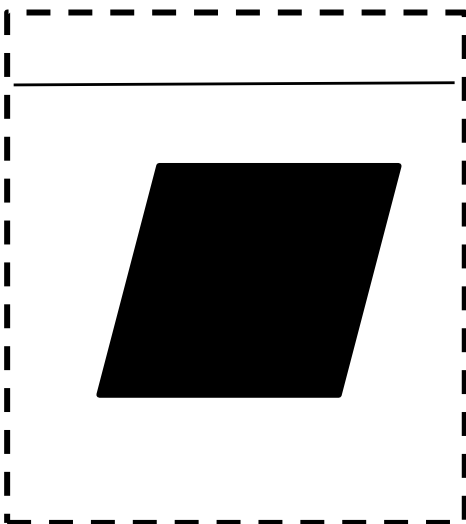
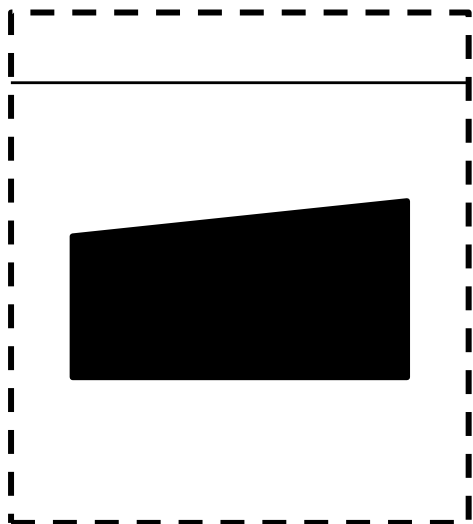
A solid figure has length, width and height. Examples: cube, cylinder, cone, rectangular prism.

Quadrilaterals

3.G.1

I can recognize, draw and identify shapes and understand they may share attributes.

Directions: Look at each shape below. Cut on the dotted lines and glue the flap only. Write the vocabulary word(s) that describe each shape under the flap to explain your answer. Possible answers could include: rhombus, square, rectangle, parallelogram, trapezoid, not a quadrilateral etc.



Quadrilateral: a flat shape with four straight sides

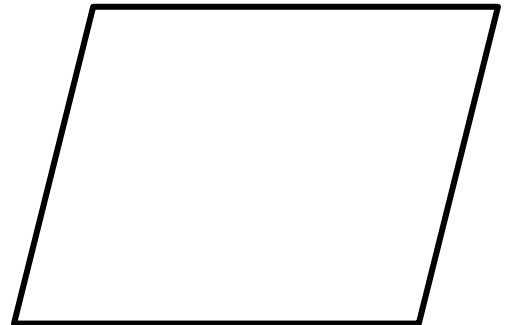
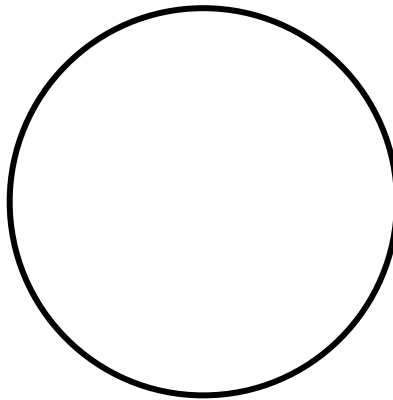
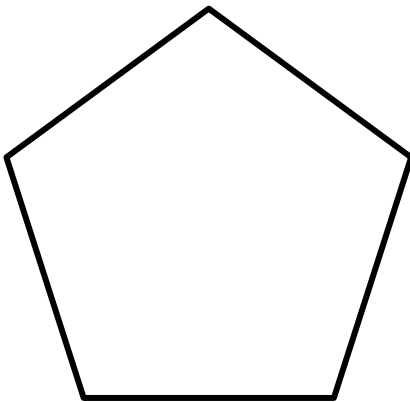
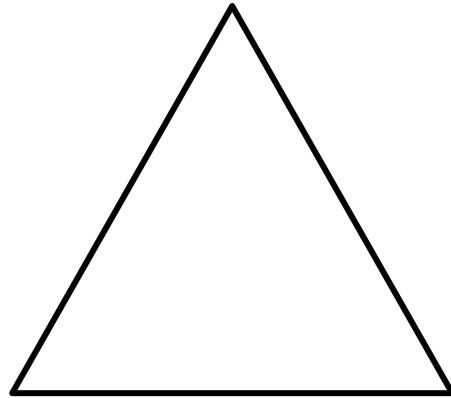
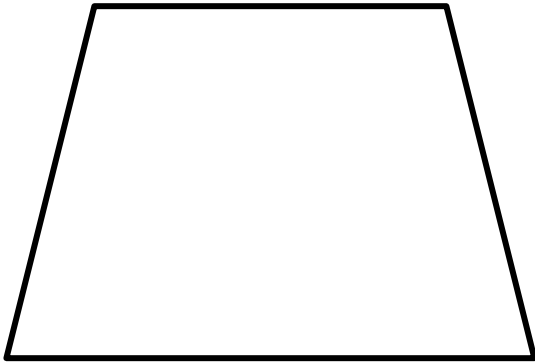


Equal parts

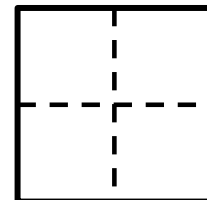
3.G.2

I can divide shapes into equal shares and describe the shares using fraction words.

Directions: Cut out each shape and glue it onto your paper. Divide each shape into equal parts.



An equal part means an object has parts that are all the same size.

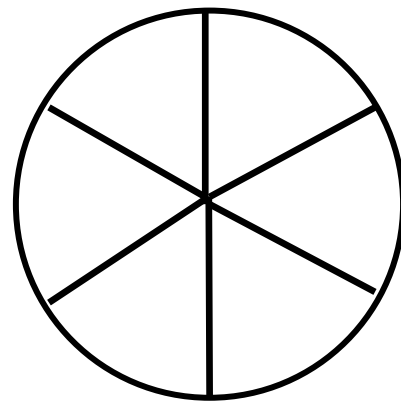
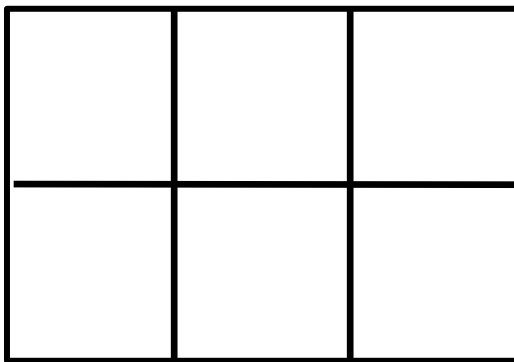
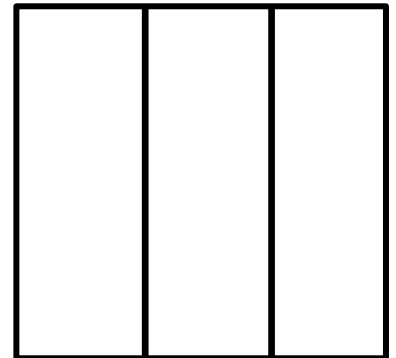
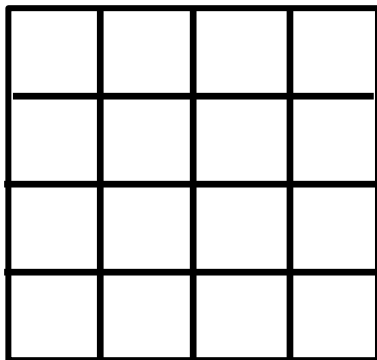
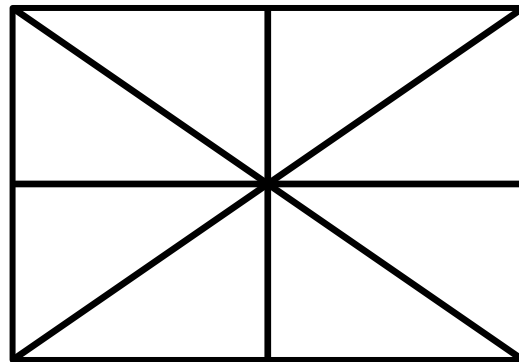
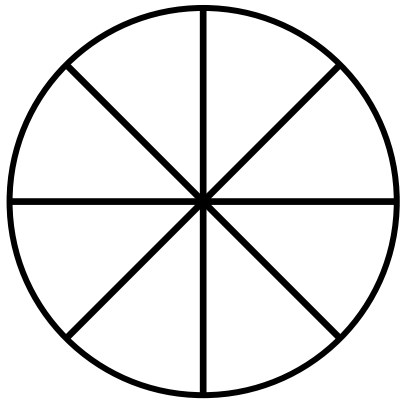


Fractions

3.G.2

I can divide shapes into equal shares and describe the shares using fraction words.

Directions: Cut out each shape and glue it onto your paper. Shade each shape to show a fraction. Write the shaded fraction next to each shape in numbers AND in words.



Numerator: the top number in a fraction. It shows how many parts you have.

Denominator: the bottom number in a fraction. It shows how many equal parts the shape is divided into.

Example pictures of Measurement and Data

2.MD.7 Telling Time
I can tell and write time from analog and digital clocks to the nearest five minutes using a.m. and p.m.

Digital clock **9:00** Analog clock

Step 1 Elapse Time

The baseball game started at 7:05. The game ended at 9:47. How long was the baseball game?

What is the problem asking? **How long was the baseball game?**

Draw a picture	Write a number sentence
	$\begin{array}{r} 9:47 \\ - 7:05 \\ \hline 2:42 \end{array}$
Answer	How did you solve the problem?
2 hours 42 minutes	I drew a picture of both times. Then, I subtracted the start time of the game from the time the game ended to find the elapse time.

Step 1 Elapse Time

The school concert started at 5:45. It ended 1 hour and 50 minutes later. What time was it when the school concert ended?

What is the problem asking? **What time did the school concert end?**

Draw a picture	Write a number sentence
	$\begin{array}{r} 5:45 \\ + 1:50 \\ \hline 6:95 \\ - 60 \\ \hline 7:35 \end{array}$
Answer	How did you solve the problem?
7:35	I added the concert start time & the length of the concert. I got 6:95 which is not possible because there are only 60 mins in 1 hour. I changed the time to answer 7:35.

3.MD.1 Time Lines
I can tell and write time to the nearest minute and measure time intervals to the nearest minute.

Pam's Time Line

- What happens between 4 PM and 8 PM? **finishes homework**
- Did Pam finish her homework before or after soccer practice? **after**
- What happens right before 12 PM? **Pam eats lunch.**
- What does Pam do before she eats lunch? **computer class**
- What happens between 8 AM and 10 AM? **computer class**
- Which happened first, computer class or eating lunch? **computer class**

A time line is a diagram that shows when things happen by position on a line.

Example pictures of Measurement and Data

Measuring with Metric Units
 3 MD.2 I can measure and estimate liquids and solids using standard measurements, as well as solve one step word problems with the units of measurements.

kilograms

Grams (g)- metric unit of mass (weight) 1000g=1kg
 Meter (m)- metric unit of length
 Liters (l)- metric unit of volume usually used to measure liquid

Metric Measurement
 3 MD.2

Dylan and his sister Mandy get weighed at the doctor's office. Dylan weighs 31 kilograms and Mandy weighs 44 kilograms. What is their total weight? How much heavier is Mandy than Dylan?

What is the problem asking? **What is the total weight of Dylan and Mandy? How much heavier is Mandy?**

Draw a picture		Write a number sentence	
Mandy 44kg	Dylan 31kg	Total Weight 31 kg + 44 kg ----- 75 kg	Heavier? 44 kg - 31 kg ----- 13 kg





Answer
 • Together they weigh 75 kg.
 • Mandy is 13 kg heavier than Dylan

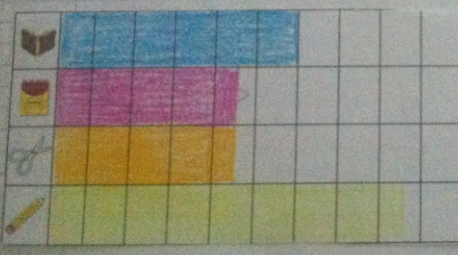
How did you solve the problem?
 I added both of their weights together to find their total weight. Then I subtracted Dylan's weight from Mandy's to find out their weight difference

Example pictures of Measurement and Data

bar graphs

3 MD 3 I can draw a picture graph and bar graph and solve different problems using the data in the graphs.

	12
	9
	9
	17


























A bar graph uses bars to show data in an organized way.

- How many children use pencils? 17
- How many children use scissors? 9
- Which school supply is used the least?
crayons and scissors
- Which school supply is used the most?
pencils
- How many more children use books than crayons? Show your work.
 $12 - 9 = 3$ more children
- How many more children use scissors than crayons? Show your work.
 $9 - 9 = 0$ children

pictograph problem solving

2 MD 10 I can draw a picture graph and bar graph and solve different problems using the data in the graphs.

Our Favorite Beach Toys

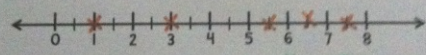
shovel	        <u>6</u>
pail	    <u>3</u>
ball	           <u>10</u>

- How many children like to play with shovels? 6
- How many children like balls the best? 10
- Which beach toy is the least favorite? pails
- Which beach toy is the most favorite? balls
- How many more children like shovels than pails? Show your work.
 $6 - 3 = 3$ children
- How many more children like balls than pails? Show your work.
 $10 - 3 = 7$ children

Measuring and Line Plots

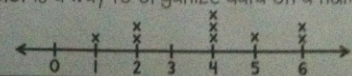
3 MD 4 I can make a line plot to show the different lengths of objects I have measured.

Noodle	Length in Inches
#1	$6\frac{1}{2}$
#2	3
#3	$7\frac{1}{2}$
#4	$5\frac{1}{2}$
#5	1



- Which noodle is the longest? noodle #3
- Is noodle 3 longer than noodle 4? yes
- How can you tell?
It is further to the right on the line plot.
- How much longer is noodle 1 than noodle 4?
 $6\frac{1}{2} - 5\frac{1}{2} = 1$ inch longer

A line plot is a way to organize data on a number line.



Example pictures of Measurement and Data

Area & square units

3 MD 5
3 MD 6

I can recognize and understand the area of plane shapes.

Area =
(3x2)+1
6+1=7
I found the area
of the rectangle
and add the 3
extra unit feet.

Area = the size of a shapes surface

Area = 4 square units

Area of a Rectangle

3 MD 7

I can find the area of a rectangle and explain how I solved the problem.

$A = 2 \times 8 = 16$
 16 in^2
Area = length \times width

Area = the size of a shapes surface

Area: $1 \times 4 = 4$ square units

Area of Rectangles

3 MD 7

The third grade class garden is 6 feet long and 3 feet wide. What is the garden's area?

What is the problem asking? **What is the garden's area?**

<p>Draw a picture</p>	<p>Write a number sentence</p> $6 \times 3 = 18 \text{ft}$
<p>Answer</p> <p>18 ft</p>	<p>How did you solve the problem?</p> <p>I multiplied the length of the garden by its width to find the area.</p>

Area of Rectangles

3 MD 7

A painting at the museum is 12 feet wide and 5 feet tall. What is the painting's area?

What is the problem asking?

<p>Draw a picture</p>	<p>Write a number sentence</p> $12 \times 5 = 60$
<p>Answer</p> <p>60 feet</p>	<p>How did you solve the problem?</p> <p>I draw and labeled the width and height of the painting. Then I multiplied them together to find the area.</p>

Example pictures of Measurement and Data

Area of a Rectangle
 3 MD 7 I can find the area of a rectangle and explain how I solved the problem.

$A = 4\text{cm} \times 10\text{cm} = 40$
 $4\text{cm} \times 4\text{cm} = 16\text{cm}$
 $A = 56\text{cm}$
 I broke the picture down into 1 rectangle and a square.

Area = the size of a shape's surface
 Area: $1 \times 4 = 4$ square units

perimeter
 3 MD 8 I can find the area of a rectangle and explain how I solved the problem.

$P = 15 + 21 + 17 = 53\text{cm}$
 I added all the sides of the triangle.

Perimeter = the distance around a two dimensional shape
 Perimeter: $8 + 3 + 7 = 18\text{cm}$

Perimeter with unknown side
 3 MD 8 I can find the area of a rectangle and explain how I solved the problem.

$25 + 12 = 37$
 Perimeter = 49
 $49 - 37 = 12$
 $x = 12\text{cm}$

Perimeter = 90 mm

Perimeter = the distance around a two dimensional shape
 The perimeter is 18 cm.
 $X = 18 - (8 + 5)$

Area vs. Perimeter
 3 MD 8

The rectangles have the same perimeter. If the area of the shaded rectangle is 9cm^2 , what are its dimensions?

What is the problem asking? **What are the dimensions of the shaded rectangle?**

Draw a picture

$P = 20\text{cm}$

Write a number sentence
 $P = 3 + 7 + 3 + 7 = 20\text{cm}$
 Possible Areas:
 $1 \times 9 = 9$ or $3 \times 3 = 9$
 Possible Perimeters
 $1 + 9 + 1 + 9 = 20$
 $3 + 3 + 3 + 3 = 12$

Answer
 Dimensions of shaded rectangle:
 $A = 1\text{cm} \times 9\text{cm}$
 $P = 1 + 9 + 1 + 9 = 20\text{cm}$

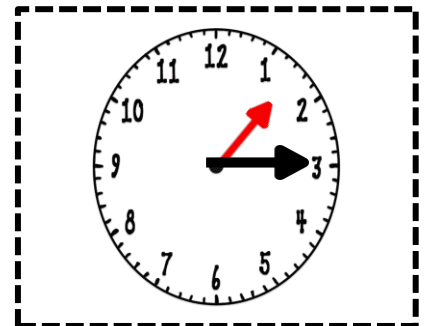
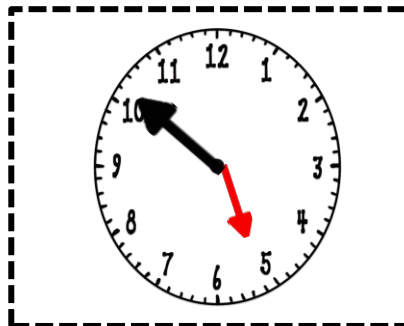
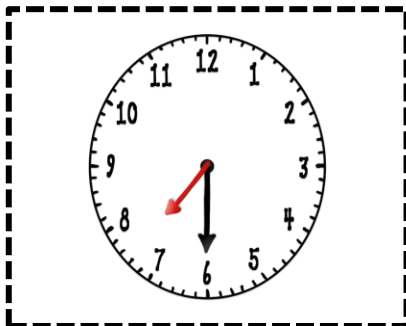
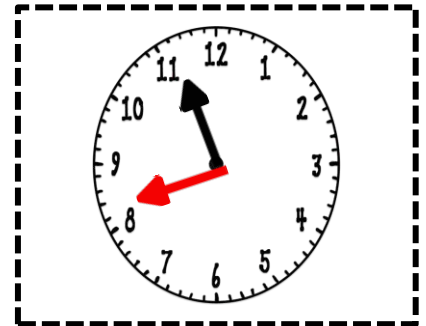
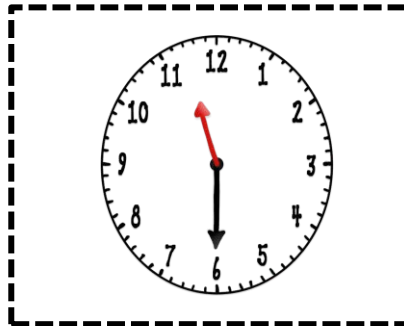
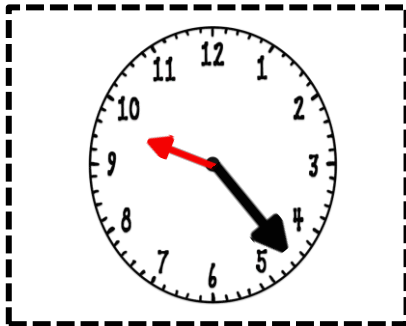
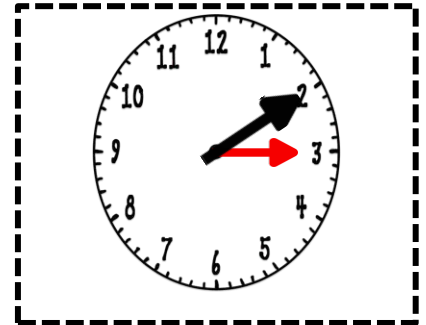
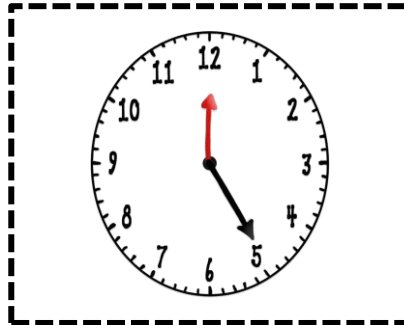
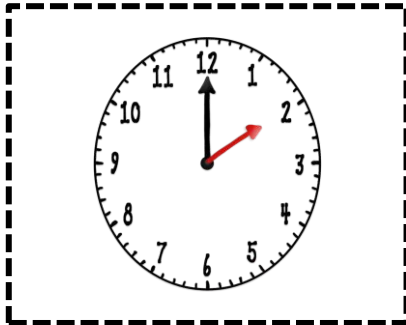
How did you solve the problem?
 First, I solved for the perimeter. It equals 20cm. Then, I listed possible area dimensions & perimeters. I saw that $A = 1 \times 9$ & $P = 1 + 9 + 1 + 9 = 20\text{cm}$ which matches the first rectangle.

3.MD.1

Telling Time

I can tell and write time to the nearest minute and measure time intervals to the nearest minute.

Directions: Cut out and glue each clock. Write the digital time next to each clock.



Digital clock

9:00

Analog clock



3.MD.1

Elapsed Time

The baseball game started at 7:05. The game ended at 9:47. How long was the baseball game?

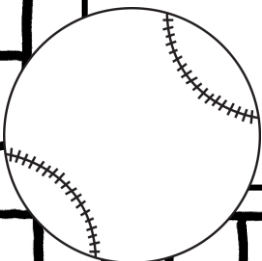
What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?



3.MD.1

Elapsed Time

The school concert started at 5:45. It ended 1 hour and 50 minutes later. What time was it when the school concert ended?

What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?

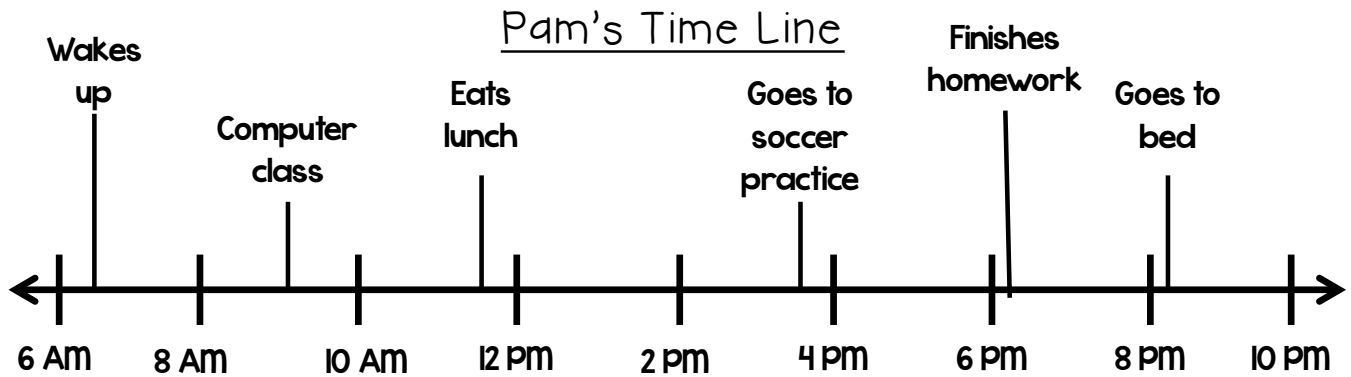


Time Lines

3.MD.1

I can tell and write time to the nearest minute and measure time intervals to the nearest minute.

Cut out and glue the time line on your paper. Use the time line to answer the questions.



1. What happens between 4 PM and 8 PM? _____
2. Did Pam finish her homework before or after soccer practice? _____
3. What happens right before 12 PM? _____
4. What does Pam do before she eats lunch? _____
5. What happens between 8 AM and 10 AM? _____
6. Which happened first, computer class or eating lunch?

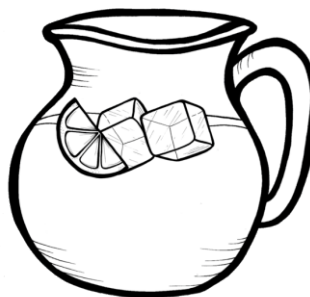
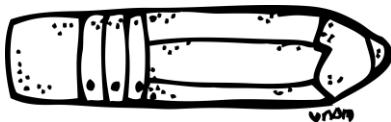
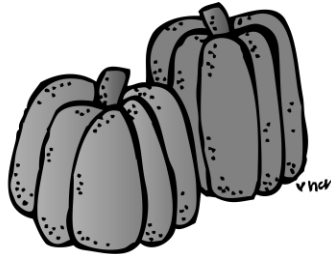
A time line is a diagram that shows when things happen by position on a line.

Measuring with Metric Units

3.MD.2

I can measure and estimate liquids and solids using standard measurements and solve word problems with the units of measurements.

Directions: Look at each picture below. Cut on the dotted lines and glue the flap only. Write the unit of measurement you would use under each flap and explain your answer.



Grams (g)- metric unit of mass (weight) $1000g=1kg$
Meter (m)- metric unit of length
Liters (l)- metric unit of volume usually used to measure liquid

3.MD.2

Metric Measurement

Dylan and his sister Mandy get weighed at the doctor's office. Dylan weighs 31 kilograms and Mandy weighs 44 kilograms. What is their total weight? How much heavier is Mandy than Dylan?

What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?

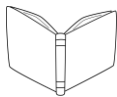


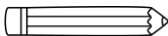



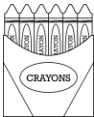

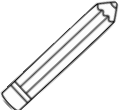
Bar Graphs

3.MD.3

I can draw a picture graph and bar graph and solve different problems using the data in the graphs.

Directions: Cut out and glue the frequency table on your paper. Use the information to complete the bar graph. Then, glue the bar graph in your notebook. Use the bar graph to answer the questions on the following page.

	12
	9
	9
	17

A bar graph uses bars to show data in an organized way.

Bar Graphs

3.MD.3

I can draw a picture graph and bar graph and solve different problems using the data in the graphs.

1. How many children use pencils? _____
2. How many children use scissors? _____
3. Which school supply is used the least?

4. Which school supply is used the most?

5. How many more children use books than crayons? Show your work.

6. How many more children use scissors than crayons? Show your work.

** Use this page with the school supply bar graph**

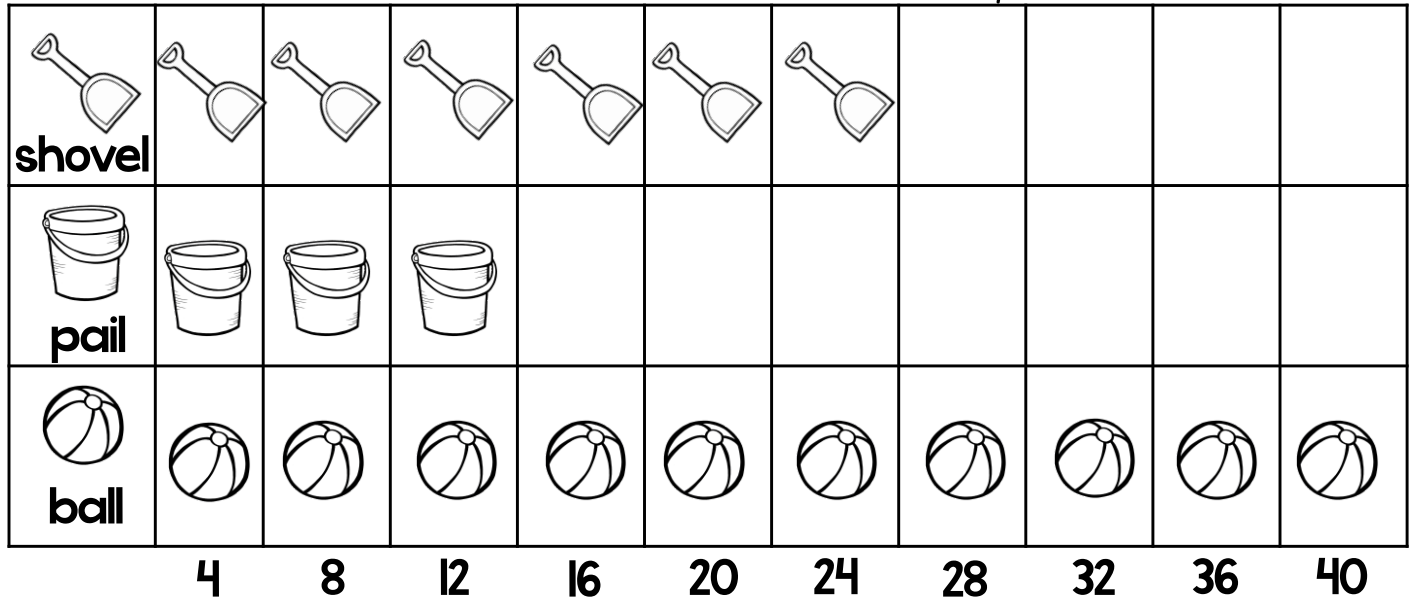
pictograph problem solving

3.MD.3

I can draw a picture graph and bar graph and solve different problems using the data in the graphs.

Directions: Cut out and glue the pictograph on your paper. Write how many children chose each toy. Use the graph to answer the questions. Then, glue the bar graph in your notebook.

Our Favorite Beach Toys



- How many children like to play with shovels? _____
- How many children like balls the best? _____
- Which beach toy is the least favorite? _____
- Which beach toy is the most favorite? _____
- How many more children like shovels than pails? Show your work. _____
- How many more children like balls than pails? Show your work. _____
- How much does each symbol represent in the graph? _____

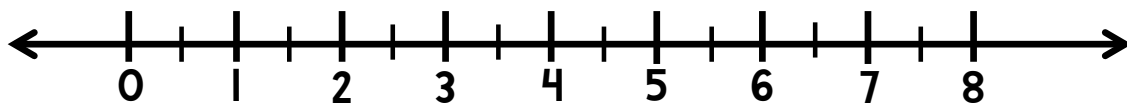
Measuring and Line Plots

3.MD.4

I can make a line plot to show the different lengths of objects I have measured.

Directions: Use the table to complete the line plot. Then, use the line plot to answer the questions. Cut on the dotted lines and glue the page in your notebook.

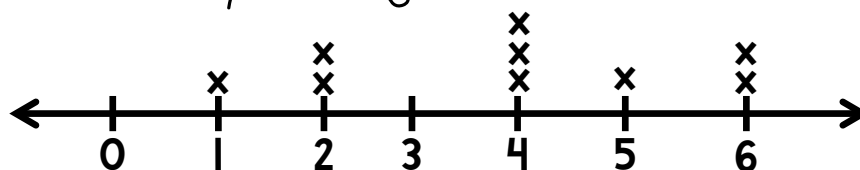
Noodle	Length in Inches
#1	6 $\frac{1}{2}$
#2	3
#3	7 $\frac{1}{2}$
#4	5 $\frac{1}{2}$
#5	1



1. Which noodle is the longest? _____
2. Is noodle 3 longer than noodle 4? _____
3. How can you tell?

4. How much longer is noodle 1 than noodle 4?

A line plot is a way to organize data on a number line.



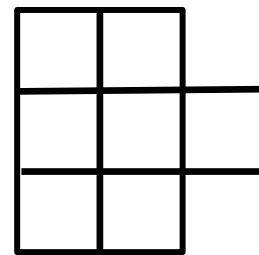
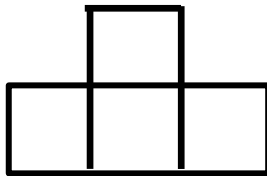
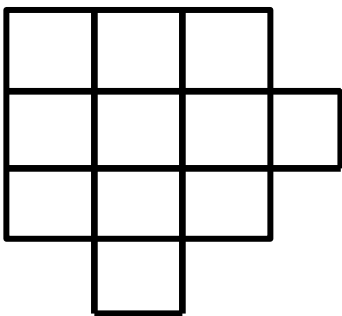
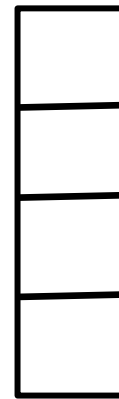
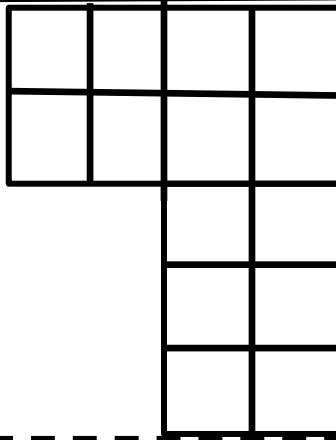
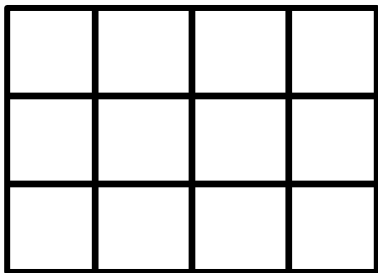
Area & Square Units

3.MD.5

3.MD.6

I can recognize and understand the area of plane shapes

Directions: Look at each shape below. Cut on the dotted lines and glue the flap only.
Write the area under each flap and explain how you know.



Area= the size of a shapes surface



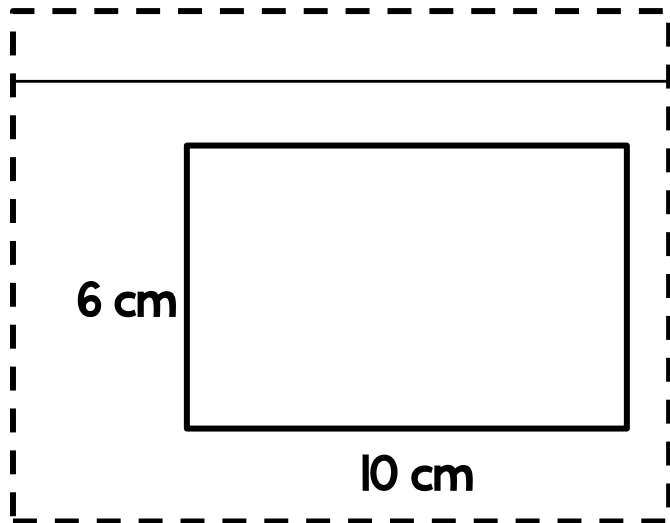
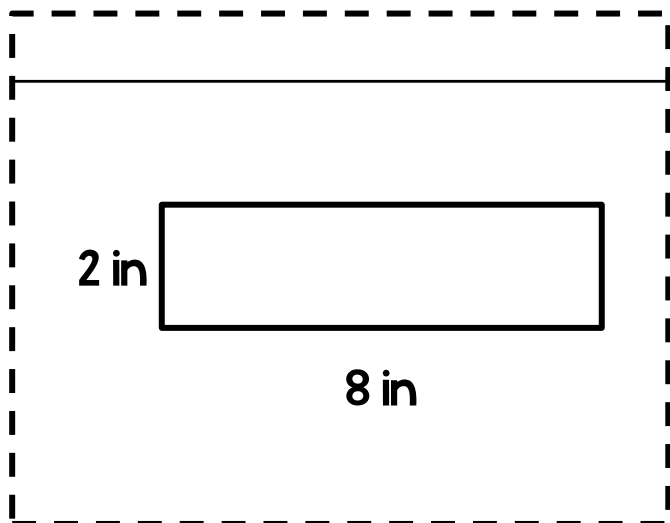
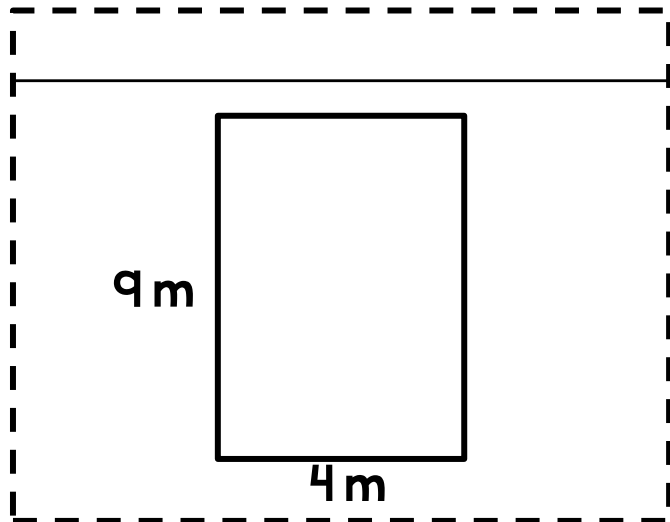
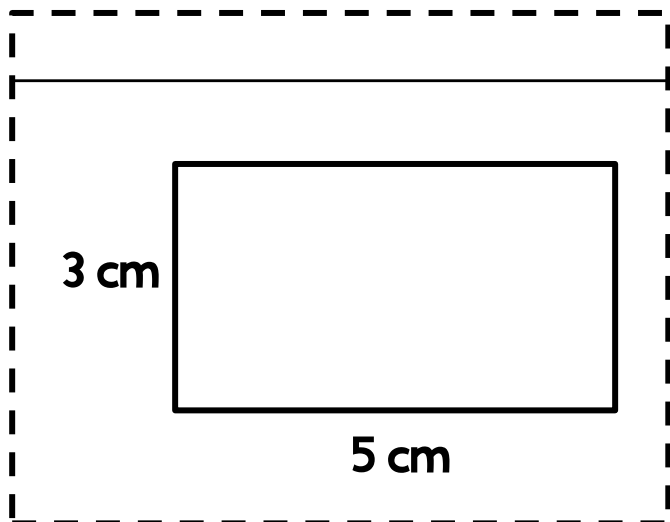
Area= 4 square units

Area of a Rectangle

3.MD.7

I can find the area of a rectangle and explain how I solved the problem.

Directions: Look at the shapes. Cut on the dotted lines and glue the flap only. Solve each problem. Write the area under each flap and show your work.



Area = the size of a shapes surface



Area: $1 \times 4 = 4$ square units

3.MD.7

Area of Rectangles

The third grade class garden is 6 feet long and 3 feet wide. What is the garden's area?

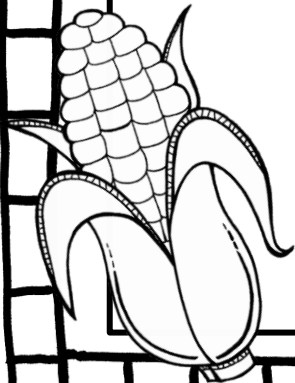
What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?



3.MD.7

Area of Rectangles

A painting at the museum is 12 feet wide and 5 feet tall. What is the painting's area?

What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?

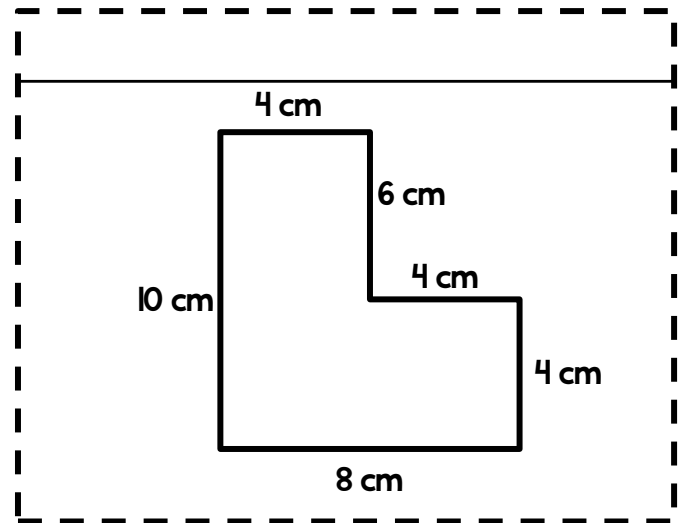
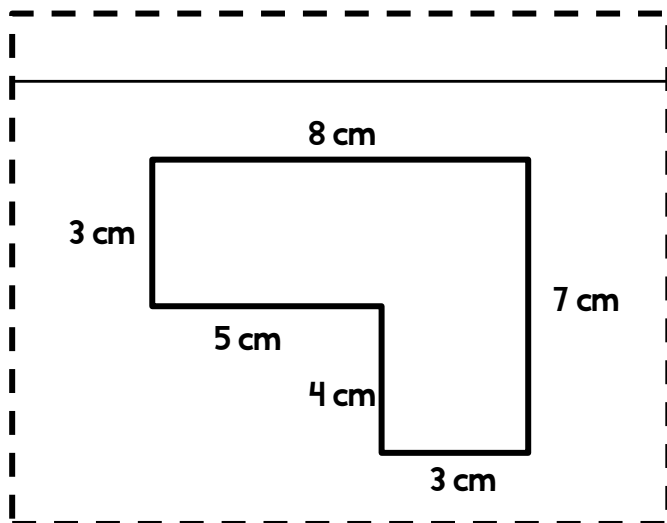
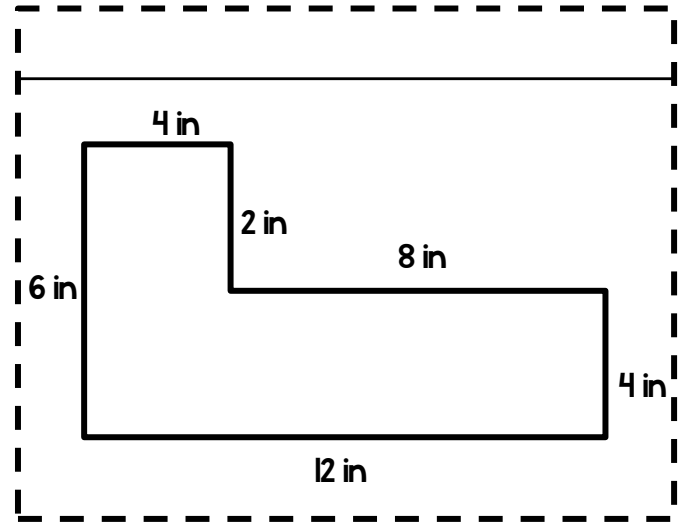
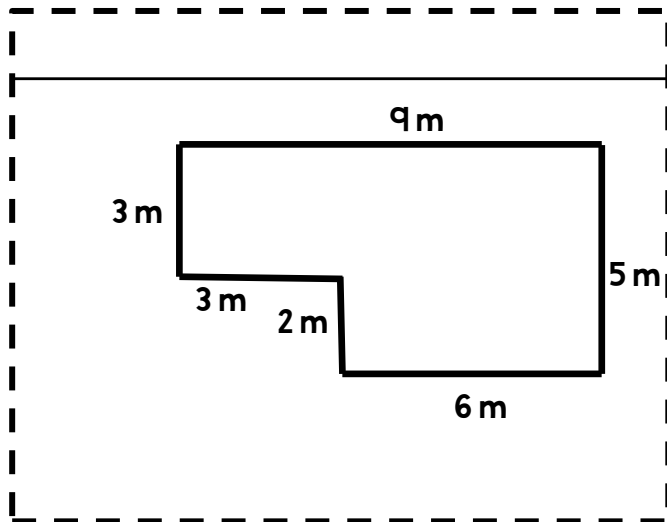


Area of a Rectangle

3.MD.7

I can find the area of a rectangle and explain how I solved the problem.

Directions: Look at the shapes. Cut on the dotted lines and glue the flap only. Solve each problem. Write the area under each flap and show your work.



Area = the size of a shape's surface



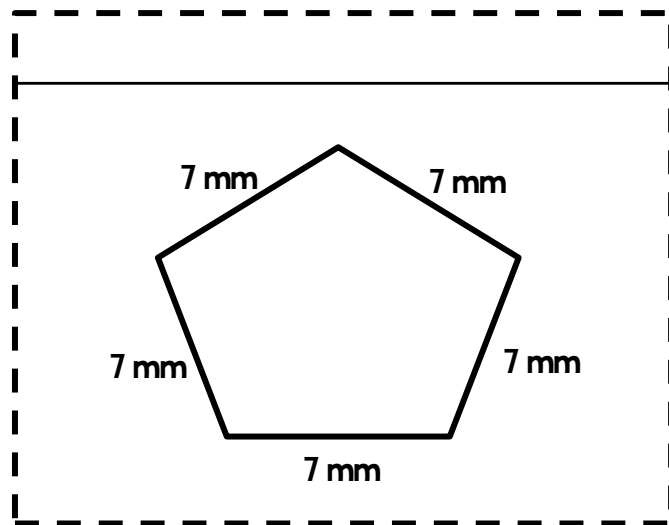
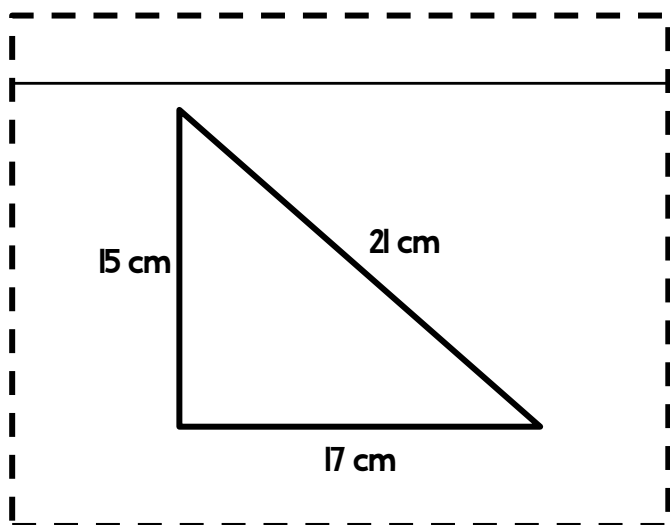
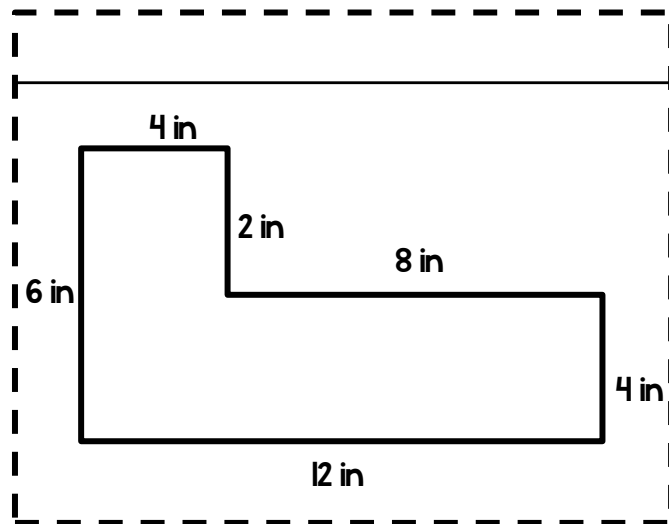
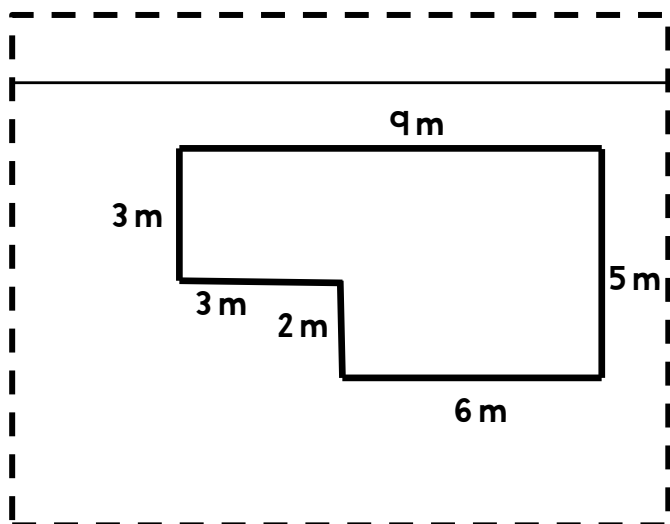
Area: $1 \times 4 = 4$ square units

perimeter

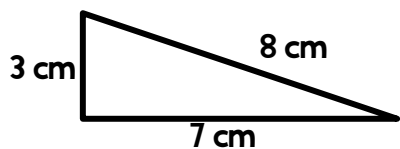
3.MD.8

I can find the perimeter of a rectangle and explain how I solved the problem.

Directions: Look at the shapes. Cut on the dotted lines and glue the flap only. Solve each problem. Write the perimeter under each flap and show your work.



Perimeter = the distance around a two dimensional shape



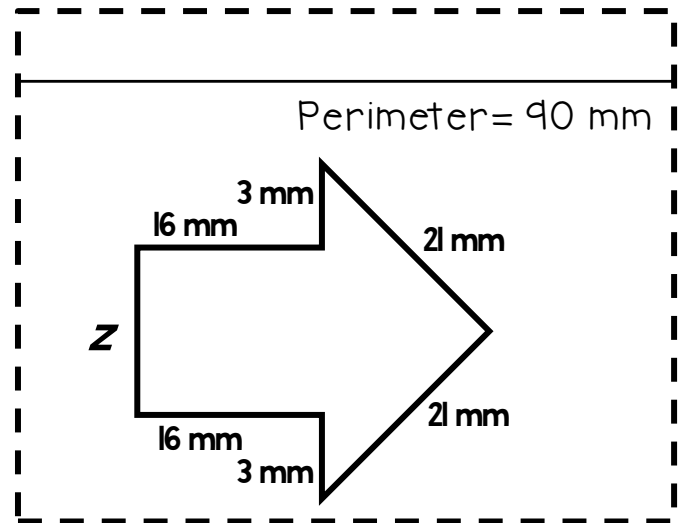
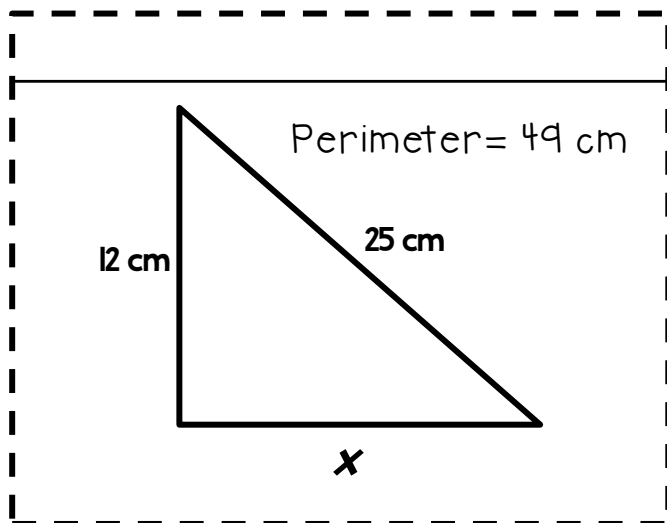
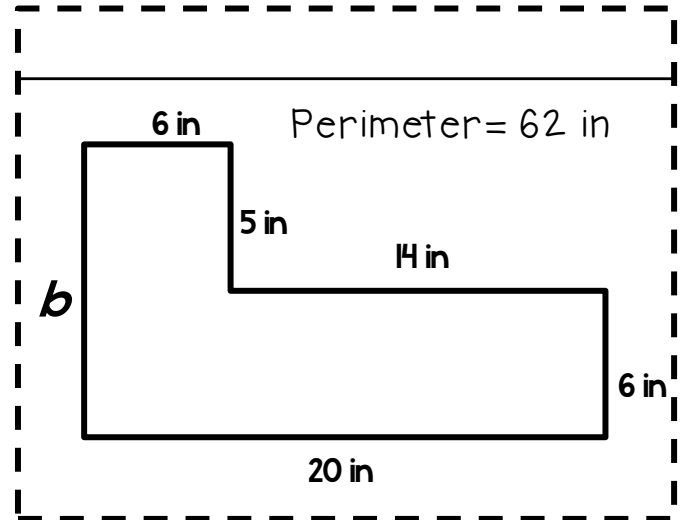
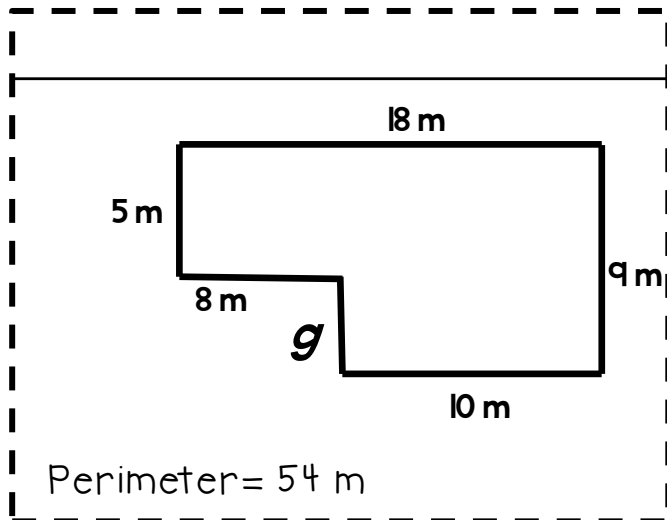
$$\text{Perimeter: } 8 + 3 + 7 = 18 \text{ cm}$$

Perimeter with Unknown Side

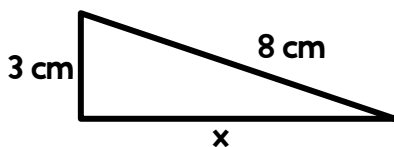
3.MD.8

I can find the perimeter of a rectangle and explain how I solved the problem.

Directions: Look at the shapes. Cut on the dotted lines and glue the flap only. Solve each problem. Write the unknown side value under each flap and show your work.



Perimeter = the distance around a two dimensional shape



The perimeter is 18 cm.

$$X = 18 - (8 + 3)$$

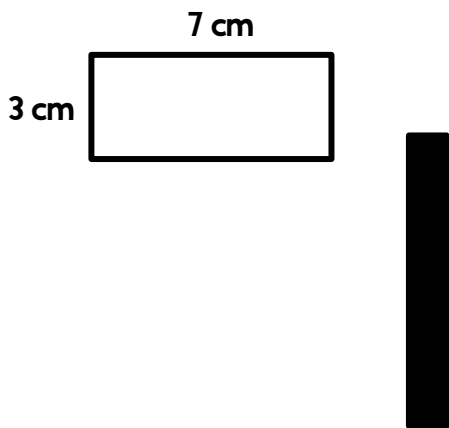
3.MD.8

Area vs. perimeter

The rectangles have the same perimeter. If the area of the shaded rectangle is 9 cm^2 , what are its dimensions?

What is the problem asking?

Draw a picture



Write a number sentence

Answer

How did you solve the problem?

Example pictures of Number & Operations- Fractions

Identifying Fractions
3.NF.1 I can understand, identify, and write fractions.

Numerator: the top number in a fraction. It shows how many parts you have.
Denominator: the bottom number in a fraction. It shows how many equal parts the shape is divided into.

Identifying Fractions
3.NF.1

Susie's mom baked 12 cookies. Susie ate 3 for a snack. What fraction of the cookies did she eat?

What is the problem asking? What fraction of the cookies did Susie eat?

<p>Draw a picture</p>	<p>Write a number sentence</p> $\frac{3}{12} = \frac{1}{4}$
<p>Answer</p> $\frac{1}{4}$	<p>How did you solve the problem?</p> <p>I drew a picture of the 12 cookies and crossed off 3 that Susie ate. Then I reduced the fraction of $\frac{3}{12}$ to $\frac{1}{4}$.</p>

Fractions on a Number Line
3.NF.2 I can recognize, draw and identify shapes and understand they may share attributes.

There are 5 parts of a whole on the number line. The dot is on the second line as a part.

$\frac{2}{5}$

Number lines can be used to show parts of a whole.

Equivalent Fractions
3.NF.3 I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

$\frac{2}{3} = \frac{4}{6}$	$\frac{2}{5} = \frac{4}{10}$	$\frac{1}{3} = \frac{3}{9}$
	$\frac{8}{e} = \frac{17}{3}$	
$\frac{3}{5} = \frac{6}{10}$		$\frac{4}{5} = \frac{8}{10}$

Equivalent fractions: have the same value even though they may look different.

Example pictures of Number & Operations- Fractions

Reducing Fractions

3.NF.3 I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

$\frac{4}{6} = \frac{2}{3}$ $\frac{6}{10} = \frac{3}{5}$ $\frac{2}{8} = \frac{1}{4}$

$\frac{d}{e} = \frac{\square}{\square}$

I divided my numerator & denominator by 3 because it goes into both numbers.

$\frac{6}{8} = \frac{3}{4}$ $\frac{2}{7} = \frac{2}{7}$

Reducing fractions means to show the fraction in the smallest terms possible.

Ordering Fractions

3.NF.3 I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

$\frac{1}{7}$ $\frac{3}{7}$ $\frac{5}{7}$ $\frac{3}{11}$ $\frac{5}{11}$ $\frac{2}{11}$

$\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{6}$ $\frac{1}{2}$ $\frac{1}{8}$ $\frac{1}{4}$

$\frac{3}{6}$ $\frac{5}{6}$ $\frac{4}{6}$ $\frac{5}{9}$ $\frac{4}{9}$ $\frac{6}{9}$

$\frac{1}{3}$ $\frac{1}{2}$ $\frac{1}{12}$ $\frac{4}{17} < \frac{8}{17} < \frac{13}{17}$ $\frac{4}{17}$ $\frac{8}{17}$

Whole Numbers & Fractions

3.NF.3 I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

$\frac{9}{9} = 1$ $\frac{10}{10} = 1$ $\frac{8}{8} = 1$

$\frac{4}{4} = 1$ $\frac{2}{2} = 1$ $\frac{12}{12} = 1$

All the shaded parts = 1 whole

Fractions can represent whole numbers.

$\frac{3}{3} = 1$

Mixed Numbers

3.NF.3 I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

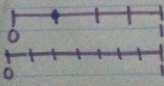
$1\frac{3}{4}$

A mixed fraction is a whole number and a fraction combined into one "mixed" number.
Example $1\frac{1}{2}$

Example pictures of Number & Operations- Fractions

comparing fractions

3.NF.3 I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

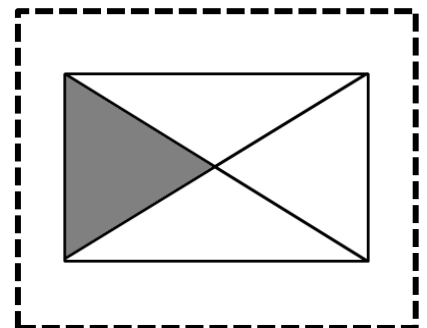
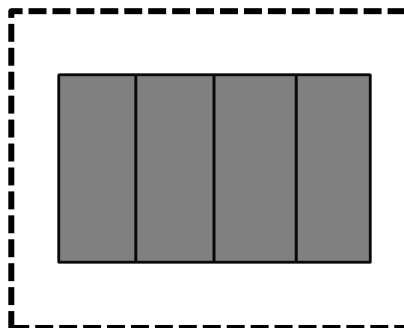
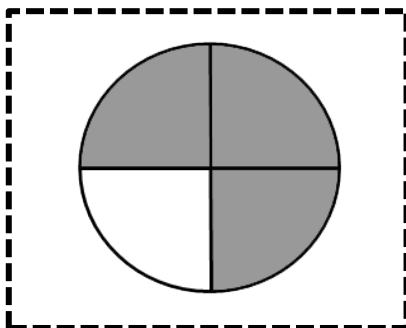
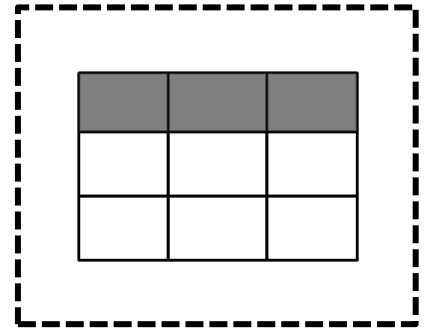
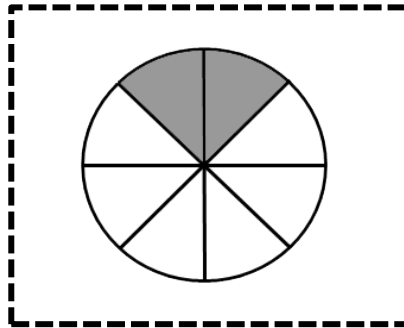
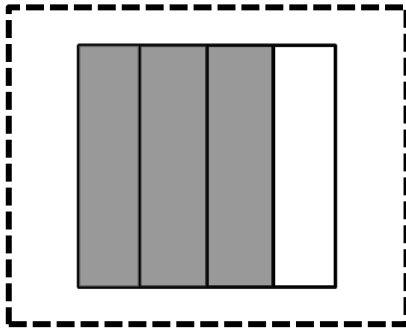
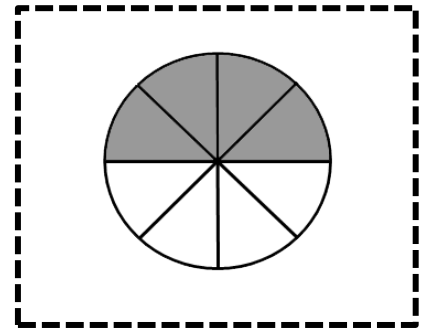
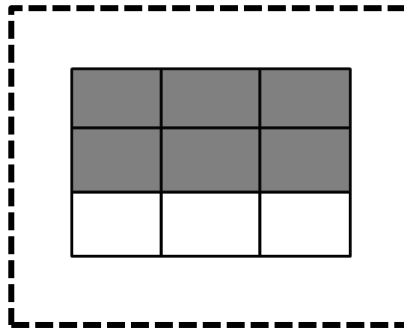
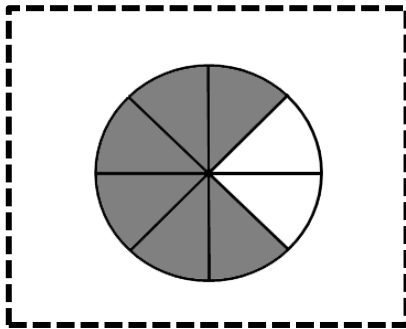
$\frac{3}{4} > \frac{2}{4}$	$\frac{1}{2} > \frac{1}{6}$
$\frac{1}{3} < \frac{2}{3}$	$\frac{1}{5} < \frac{1}{4}$
$\frac{1}{2} > \frac{1}{10}$	$\frac{5}{12} > \frac{1}{12}$
	$\frac{1}{3} > \frac{3}{12}$

Identifying Fractions

3.NF.1

I can understand, identify, and write fractions.

Directions: Cut out and glue each rectangle. Write the shaded fraction next to each shape.



Numerator: the top number in a fraction. It shows how many parts you have.

Denominator: the bottom number in a fraction. It shows how many equal parts the shape is divided into.

3.NF.1

Identifying Fractions

Susie's mom baked 12 cookies. Susie ate 3 for a snack. What fraction of the cookies did she eat?

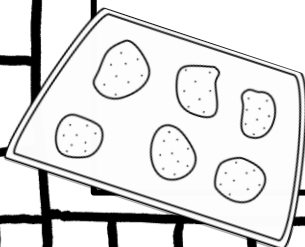
What is the problem asking?

Draw a picture

Write a number sentence

Answer

How did you solve the problem?

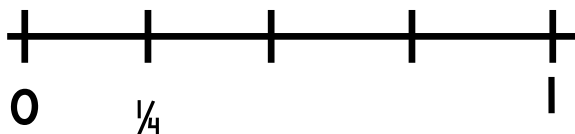
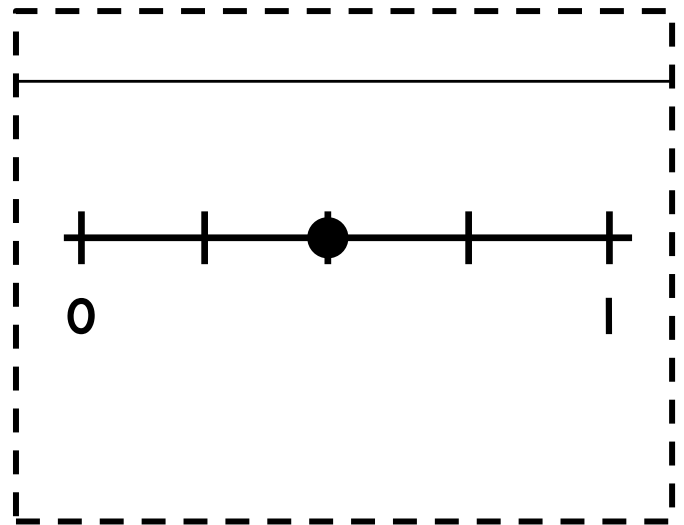
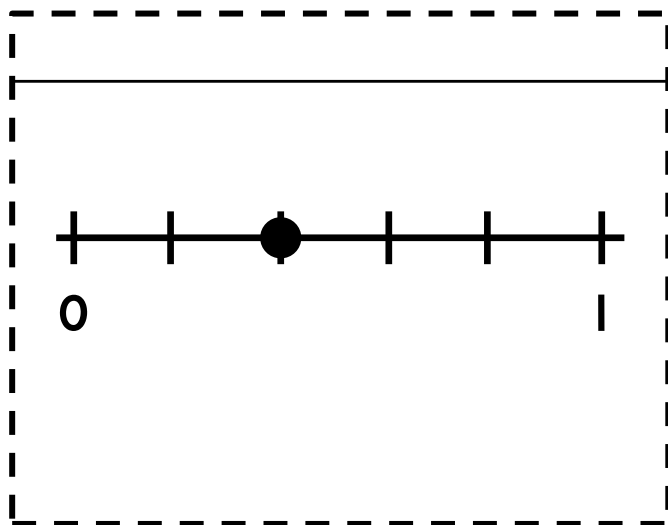
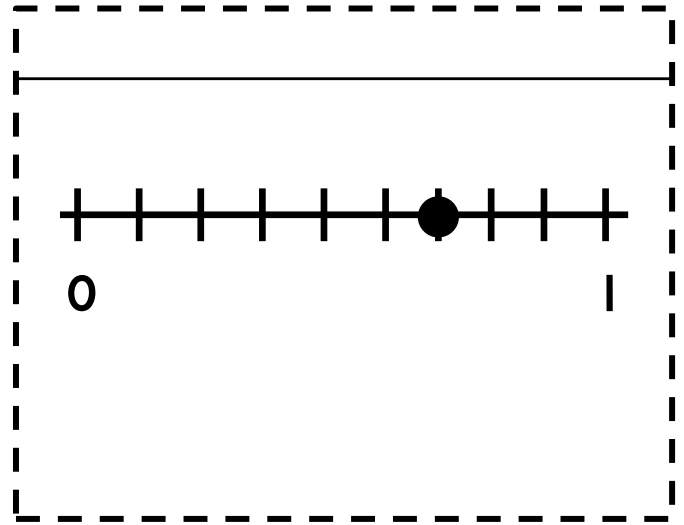
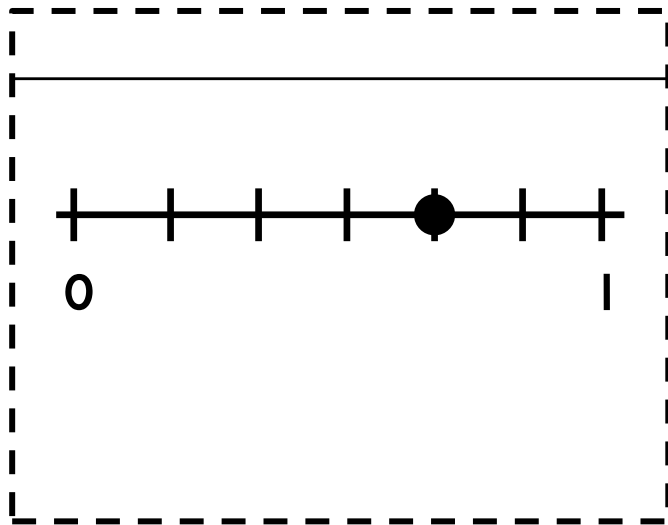


Fractions on a Number Line

3.NF.2

I can understand and place fractions on a number line.

Directions: Look at the number lines. Cut on the dotted lines and glue the flap only. Identify each fraction. Write the fraction under each flap and explain your answer.



Number lines can be used to show parts of a whole.

Equivalent Fractions

3.NF.3

I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

Directions: Look at each set of fractions below. Cut on the dotted lines and glue the flap only. Identify the missing number that makes the fractions equivalent. Draw a picture and explain your answer under each flap.

$$\frac{2}{3} = \frac{4}{\square}$$

$$\frac{2}{\square} = \frac{4}{10}$$

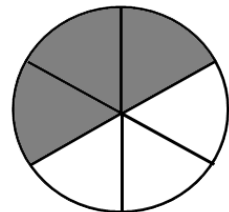
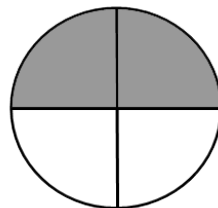
$$\frac{1}{3} = \frac{\square}{9}$$

$$\frac{3}{5} = \frac{6}{\square}$$

$$\frac{6}{8} = \frac{3}{\square}$$

$$\frac{\square}{5} = \frac{8}{10}$$

Equivalent fractions: have the same value even though they may look different



Reducing Fractions

3.NF.3

I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

Directions: Look at each set of fractions below. Cut on the dotted lines and glue the flap only. Reduce the fraction into lowest terms. Draw a picture and explain your answer under each flap.

$$\frac{4}{6} = \frac{\square}{\square}$$

$$\frac{6}{10} = \frac{\square}{\square}$$

$$\frac{2}{8} = \frac{\square}{\square}$$

$$\frac{6}{9} = \frac{\square}{\square}$$

$$\frac{6}{8} = \frac{\square}{\square}$$

$$\frac{2}{7} = \frac{\square}{\square}$$

Reducing fractions: means to show the fraction in the smallest terms possible

Ordering Fractions

3.NF.3

I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

Directions: Look at each set of fractions below. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Write the fractions in order from least to greatest under each tab. Use the $>$ and $<$ symbols when writing your answers.

	$\frac{1}{7}$	$\frac{3}{7}$	$\frac{5}{7}$	
--	---------------	---------------	---------------	--

	$\frac{3}{11}$	$\frac{5}{11}$	$\frac{2}{11}$	
--	----------------	----------------	----------------	--

	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{6}$	
--	---------------	---------------	---------------	--

	$\frac{1}{2}$	$\frac{1}{8}$	$\frac{1}{4}$	
--	---------------	---------------	---------------	--

	$\frac{3}{6}$	$\frac{5}{6}$	$\frac{4}{6}$	
--	---------------	---------------	---------------	--

	$\frac{5}{9}$	$\frac{4}{9}$	$\frac{6}{9}$	
--	---------------	---------------	---------------	--

	$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{12}$	
--	---------------	---------------	----------------	--

	$\frac{13}{17}$	$\frac{8}{17}$	$\frac{4}{17}$	
--	-----------------	----------------	----------------	--

Whole Numbers & Fractions

3.NF.3

I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

Directions: Look at each set of fractions below. Cut on the dotted lines and glue the flap only. Complete the fraction to show the whole. Draw a picture and explain your answer under each flap.

$$\frac{4}{\square} = 1$$

$$\frac{\square}{10} = 1$$

$$\frac{2}{\square} = 1$$

$$\frac{\square}{9} = 1$$

$$\frac{\square}{8} = 1$$

$$\frac{12}{\square} = 1$$

Fractions can represent whole numbers.

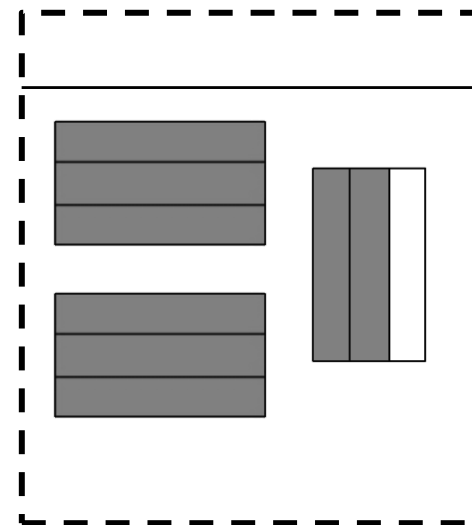
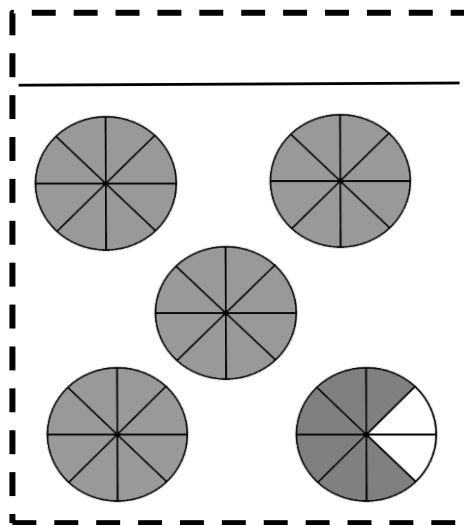
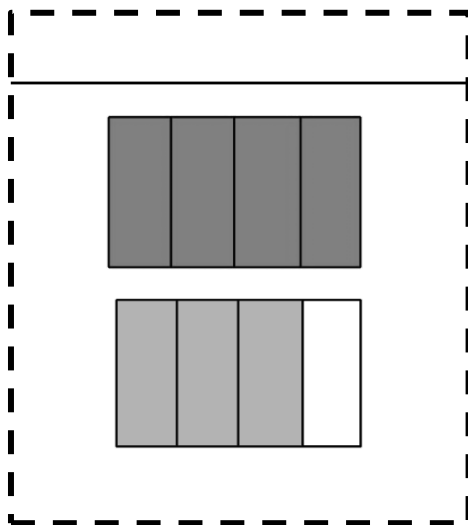
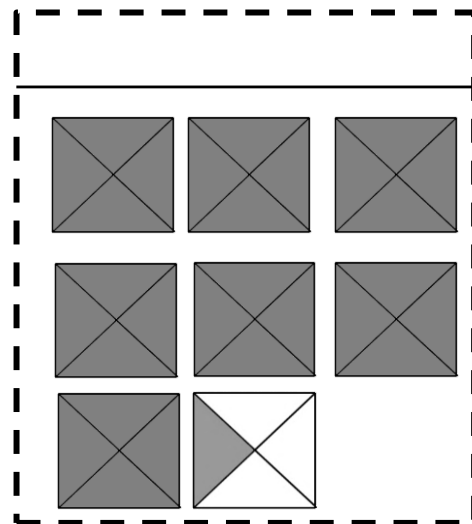
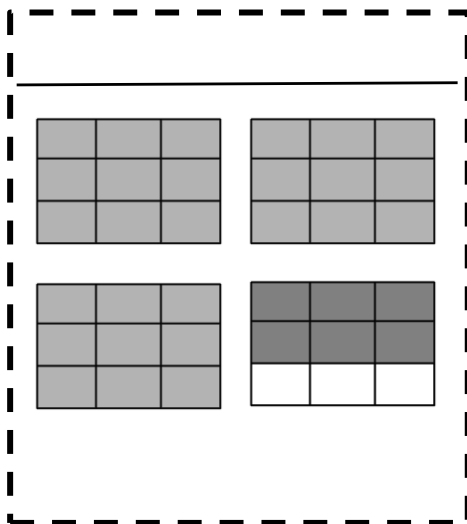
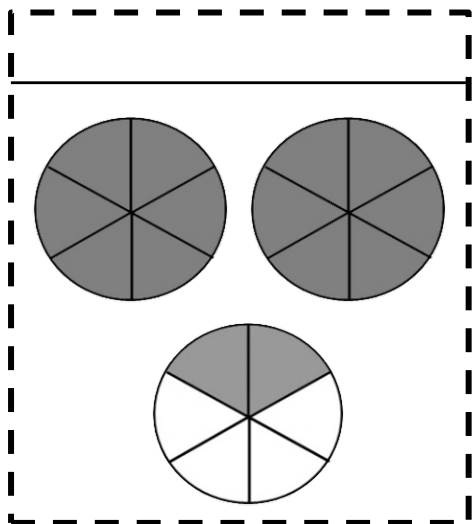
$$\frac{3}{3} = 1$$

Mixed Numbers

3.NF.3

I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

Directions: Look at each picture below. Cut on the dotted lines and glue the flap only. Write the mixed number under each flap.



A mixed fraction is a whole number and a fraction combined into one "mixed" number.

Example: $1 \frac{1}{2}$

Comparing Fractions

3.NF.3

I can explain equivalent fractions, compare fractions and use reasoning to explain my answers.

Directions: Look at each set of fractions below. Cut and glue the rectangles by folding on the line and gluing the tab on your paper. Use the $>$, $<$, $=$ symbols to make the number sentence true. Under each flap, draw a number line to show the fractions and prove your answer.

	$\frac{3}{4} \bigcirc \frac{2}{4}$	
--	------------------------------------	--

	$\frac{1}{2} \bigcirc \frac{1}{6}$	
--	------------------------------------	--

	$\frac{1}{3} \bigcirc \frac{2}{3}$	
--	------------------------------------	--

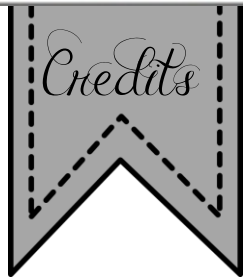
	$\frac{1}{5} \bigcirc \frac{1}{4}$	
--	------------------------------------	--

	$\frac{1}{2} \bigcirc \frac{1}{10}$	
--	-------------------------------------	--

	$\frac{5}{12} \bigcirc \frac{1}{12}$	
--	--------------------------------------	--

	$\frac{1}{4} \bigcirc \frac{1}{9}$	
--	------------------------------------	--

	$\frac{1}{3} \bigcirc \frac{3}{12}$	
--	-------------------------------------	--



Thank you

FOR YOUR PURCHASE

A Note From the Seller

Thank you so much for your purchase! I am so glad you took the time to visit my store and purchase a product, I am sure you will love. I hope this product meets your expectations and I welcome your feedback on it. Please contact me via email at brightconcepts4teachers@gmail.com with any questions or suggestions. Stay up to date on my latest products and classroom ideas by following my blog, TpT Store, FB page and more!

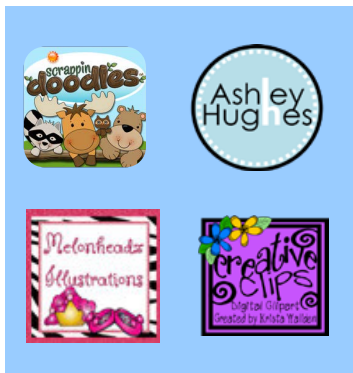


[My Blog: Bright Concepts 4 Teachers](#)
[My TpT Store](#)
[My Facebook Page](#)
[My Instagram](#)

Jaime

What Can I Do With This Product?

TERMS OF USE: ©Jaime Pink 2014 All rights reserved. The original purchaser of this document is hereby granted permission to reproduce this document specifically for teaching purposes in a SINGLE classroom. If you are NOT the original purchaser, please download the item from my Teachers Pay Teachers store before making any copies. Redistributing, editing, selling, or posting this item in any part thereof on the Internet is strictly prohibited without first gaining permission from the author. Violations are subject to the penalties of the Digital Millennium Copyright Act. Please contact me at brightconcepts4teachers@gmail.com if you wish to be granted special permission or if you have a question about the usage of this product.



YOU CAN	YOU CANNOT
<ul style="list-style-type: none"> • Use this item for personal use. • Reproduce and use this item in your classroom and/or with your students. • Purchase unlimited licenses for other to use at 50% off the original price. • Review this item online provided you include a link back to my online store. 	<ul style="list-style-type: none"> • Give this item away. • Reproduce this item or any part thereof for use by others. • Copy or modify any part of this item to offer others for free or for sale. • Post this item or any portion of this item online, including a personal, classroom, or district website.