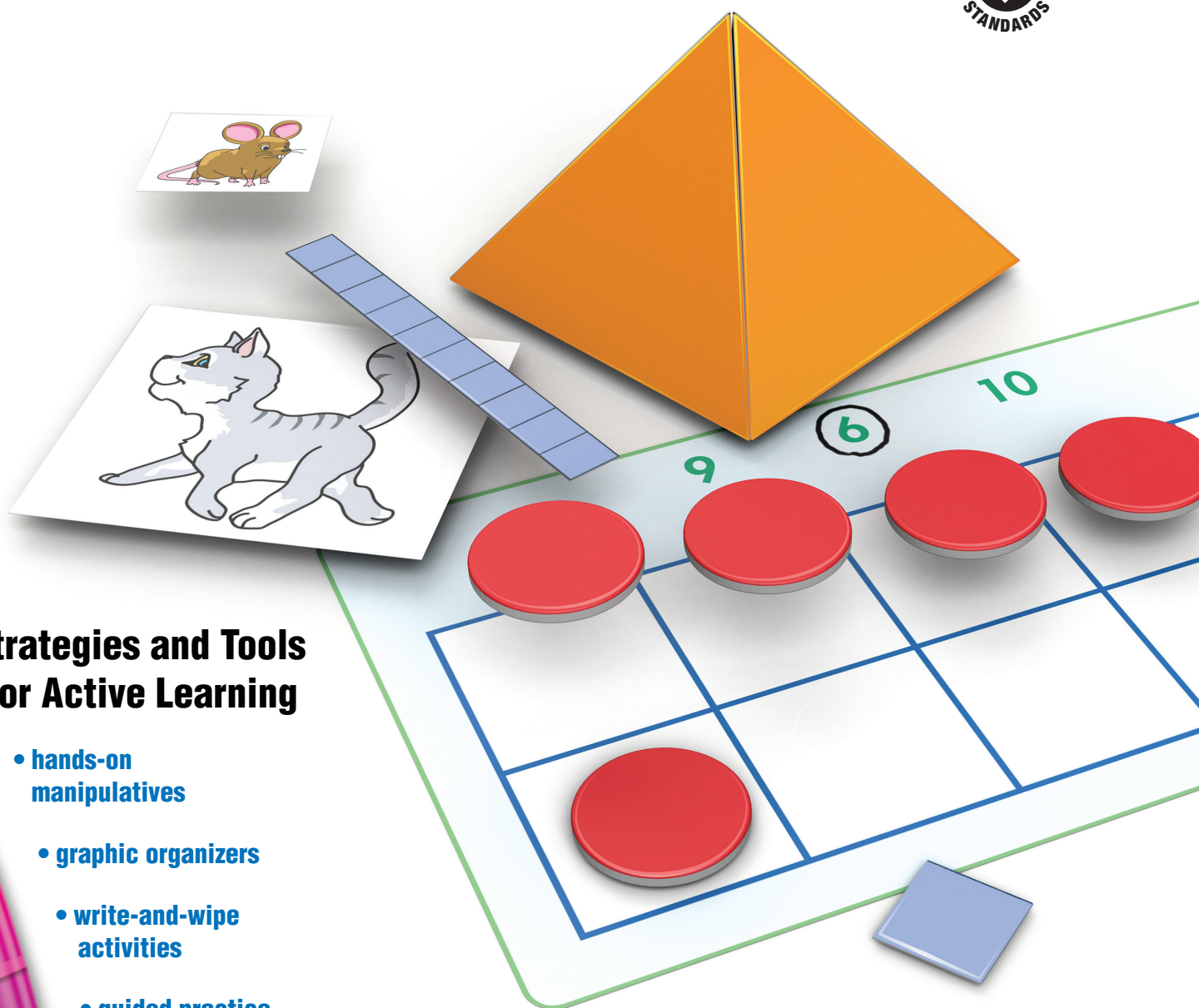


# SPECTRUM<sup>®</sup> Hands-On<sup>🖐️</sup> Math

Includes  
dry-erase  
pen

GRADE  
**K**



## Strategies and Tools for Active Learning

- hands-on manipulatives
- graphic organizers
- write-and-wipe activities
- guided practice

Bring Counting, Addition, Subtraction, Place Value,  
Measurement, and Shapes to Life!



1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100





# Hands-On Math

## Kindergarten

Spectrum®

An imprint of Carson Dellosa Education  
Greensboro, North Carolina

Spectrum®  
An imprint of Carson Dellosa Education  
P.O. Box 35665  
Greensboro, NC 27425 USA

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## Hands-On Manipulatives

# Introduction

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## About *Spectrum Hands-On Math*

Hands-on learning is an important aspect of educational development. Research shows that learning by doing leads to an easier understanding and a lasting comprehension of topics.

This is why *Spectrum Hands-On Math* was created—to give children the multisensory tools needed to master math. *Spectrum Hands-On Math* allows your child to roll up their sleeves and get involved in the concepts they are learning. Presented in manageable, bite-sized pieces, *Spectrum Hands-On Math* teaches all of the major topics in the math curriculum for your child's grade level. Let *Spectrum Hands-On Math* help you help your child master math standards!

Inside this kit you will find:

- Over 150 hands-on manipulatives. Cut out these manipulatives along the dashed lines to use within the lessons.
- Dry-erase pen and panels. Find four dry-erase panels full of math aids and activities. Use the dry-erase pen to complete the **Dry-Erase** activities within the lessons.
- A storage pouch for the cut-out hands-on manipulatives.

## Features of *Spectrum Hands-On Math* in Every Lesson

In each two-page lesson, find the following features:

- **Lesson Introduction:** This feature is at the start of every lesson. It walks through the skill being taught step-by-step. These worked-out problems are presented with easy-to-follow visuals. As your child moves through the lesson, they can return to this point as needed to review the steps.



## Introduction, continued

---

- **Hands-On How To** This feature is the heart of every lesson. The hands-on activities use the cut-out manipulatives from the back of the book, along with a math mat directly on the page, to get your child having fun with active involvement in the math lesson. Each hands-on activity provides a direction for open-ended practice to ensure your child will be able to keep up the practice until they master the topic!
- **Practice Mode** This feature guides your child in practicing the skills they learned in the lesson. It provides guided questions that will help your child work from the visual and hands-on examples to the type of standard exercises they are likely to see in school.

### Additional Features in *Spectrum Hands-On Math*

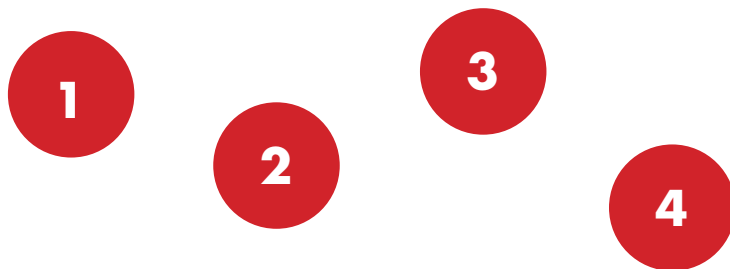
- **Dry-Erase** This feature offers practice activities that use the dry-erase panels and pen. These exciting activities can be done over and over again to master the strategies taught in each lesson.
- **A Closer Look** This is a feature just for you! Often, parents and caretakers struggle to help their child with math. With ever-changing teaching methods, new vocabulary and tools, and new ways of explaining familiar concepts, it can be frustrating to not know how to help your child learn. This feature is here to help. **A Closer Look** defines potentially unfamiliar terms and explains their importance, offers additional ways to teach your child, and explains what skills are needed as building blocks for future math learning.
- **Answer Key:** The **Answer Key** provides the answers to the **Practice Mode** exercises.

*Spectrum Hands-On Math* provides everything you need to help your child be successful in kindergarten math and help them enjoy math now and into the future!

## One to One

You can count objects in a group by saying numbers in order as you touch those objects. You have to be careful not to touch the same object more than once.

Touch each dot and say your numbers in order to count the dots. How many dots?



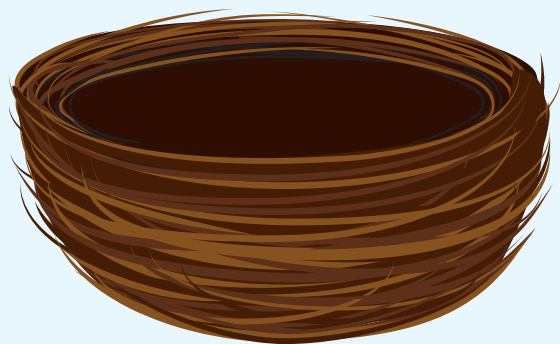
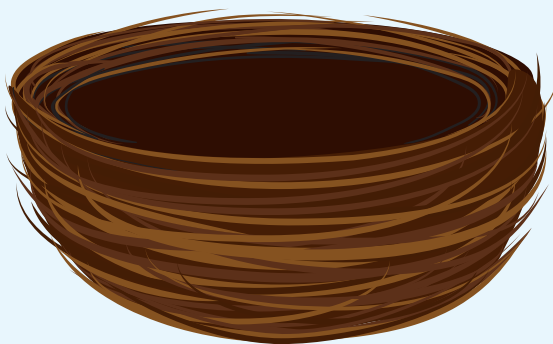
There are 4 dots.

### Hands-On How To

**You will need: 5 goose cut-outs**

Place a goose in each nest. Count how many.

Place a couple of geese in each nest. Count how many. Keep placing and counting geese.



# One to One

## Dry-Erase

Color 5 dry-erase smiley faces, counting one number in order as you fill in each one.

### Practice Mode

Draw a line from each object to a number.



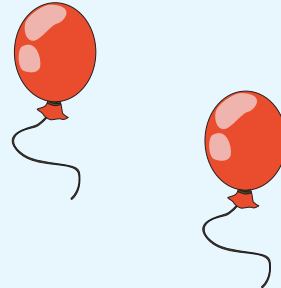
1 2 3



1



1 2 3 4 5



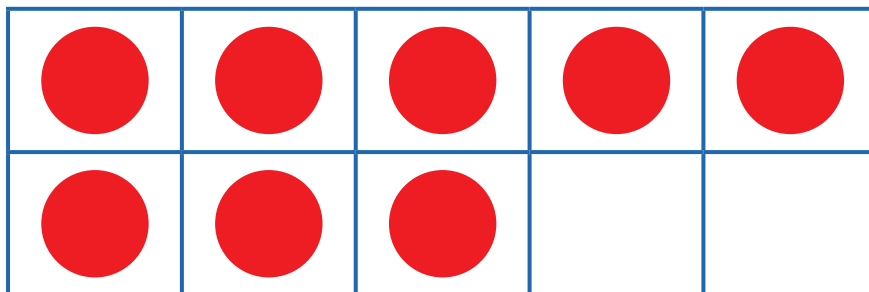
1 2

### A Closer Look

It is important for your child to understand that when they are counting objects, they count one number for each object being counted. This is called **one-to-one correspondence**. Use numbers to count things all around. Count toys, food items, fingers, and other things. Help your child say one number in order for each thing counted.

## Use a Ten Frame

A **ten frame** helps you count. It has 10 spaces: 5 on the top and 5 on the bottom. This ten frame shows 8. It has 8 full spaces and 2 empty spaces.



### Hands-On How To

**You will need: 10 counters**

Use the ten frame to show the numbers. For each number, ask: How many spaces are full? How many spaces are empty? Then, practice showing more numbers.

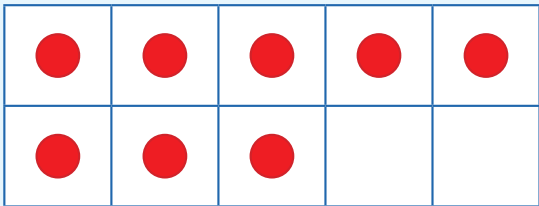
9      6      10


# Use a Ten Frame

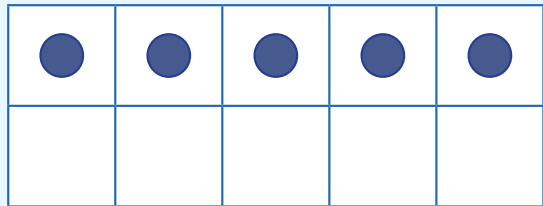


## Practice Mode

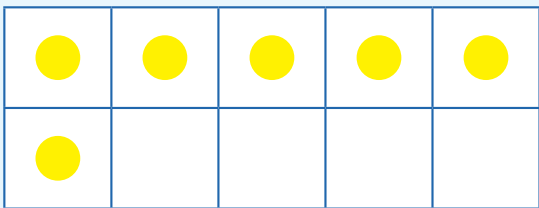
In each ten frame, how many spaces are full? Circle the number.



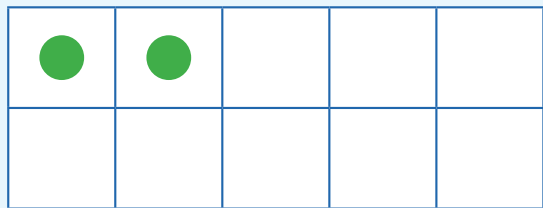
8 7 5



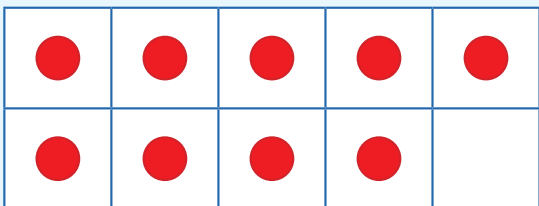
3 5 4



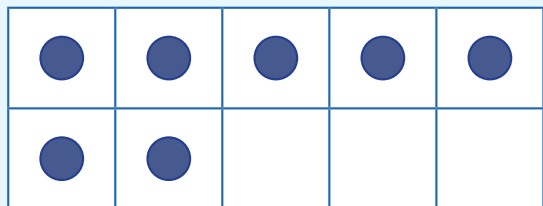
9 6 8



0 1 2



10 9 7



7 8 5

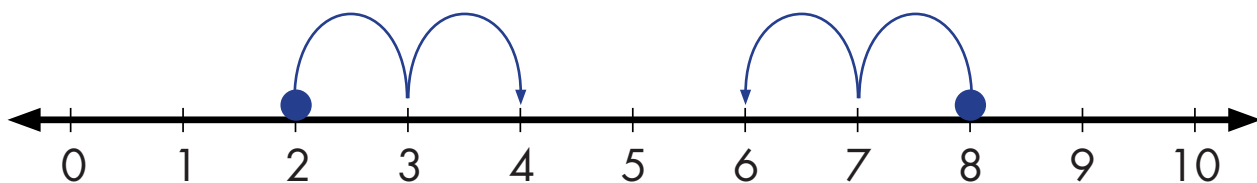
## A Closer Look

A **ten frame** is a two-by-five rectangular grid in which counters can be placed and moved around. This tool helps your child create a sense of "how many." It develops mental math skills and an understanding of how close or far away a number is from 10.



## Use a Number Line

A **number line** can help with counting. This number line starts at 0 and counts by ones up to 10. You can use a number line to count forward and back.



### Hands-On How To

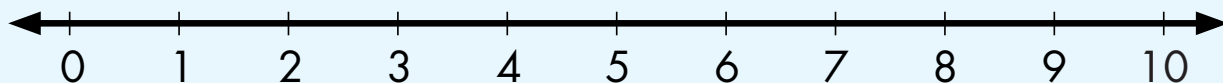
**You will need: frog hopper**

Hop the frog along the number line to count to each number. Begin at 0. Then, practice counting other numbers.

4

7

10







## Use a Number Line

### Practice Mode

Write the number on the number line that is above each shape.



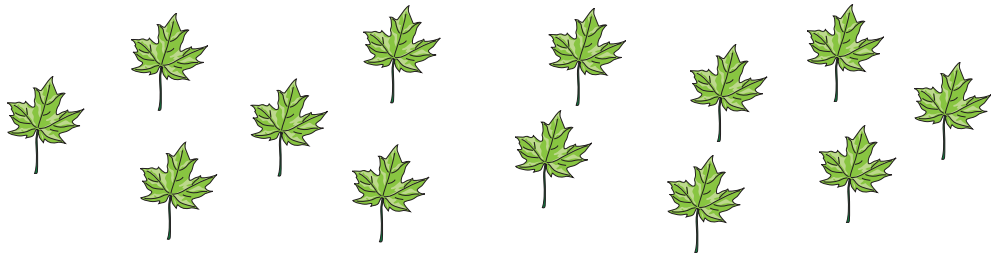
 _____	 _____
 _____	 _____

### A Closer Look

A **number line** is a line on which numbers are marked at equal intervals. Number lines are important tools for practicing counting, but they also help your child develop skills they will use as they learn to add, subtract, and measure. Counting on and counting back is how number lines help support these skills.

## How Many in All?

You can count to find out how many objects are in a group. The last number you say tells how many are in the whole group.



There are 13 leaves.

### Hands-On How To

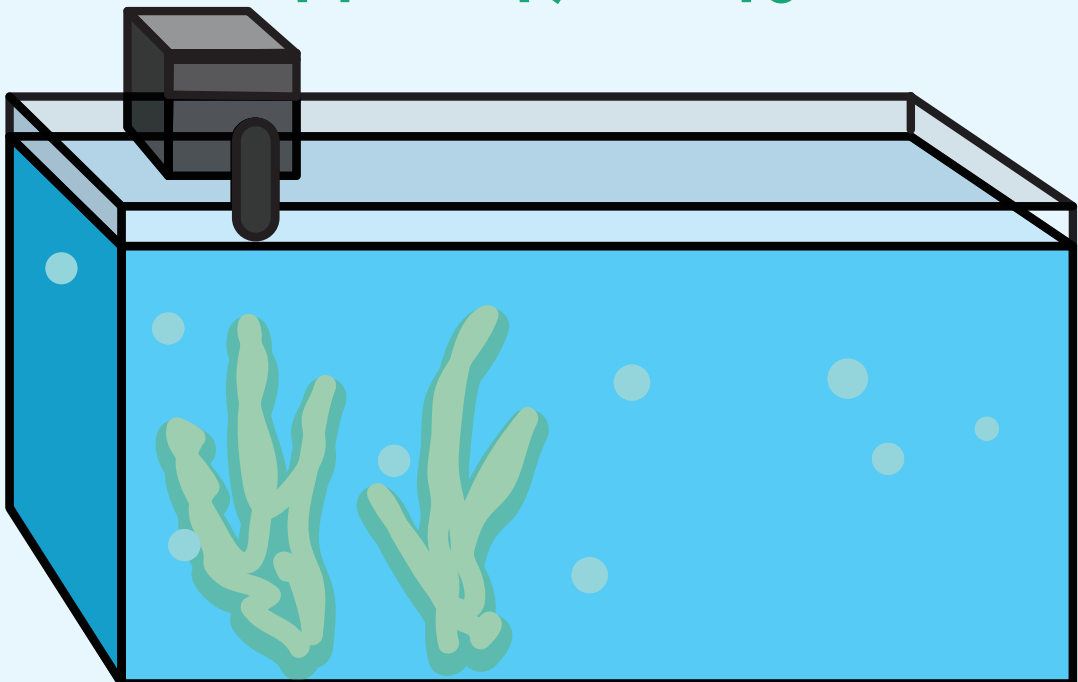
**You will need: 20 fish cut-outs**

Use the fish cut-outs to show the numbers below. Then, choose another number and count out that many fish in the tank.

14

19

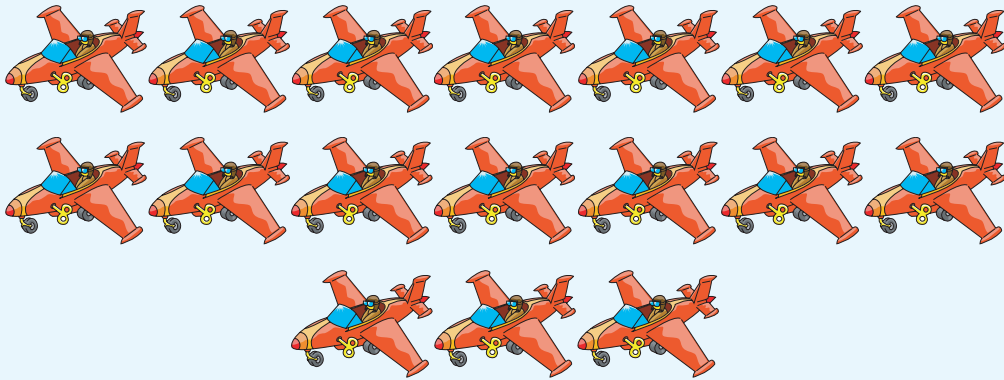
13



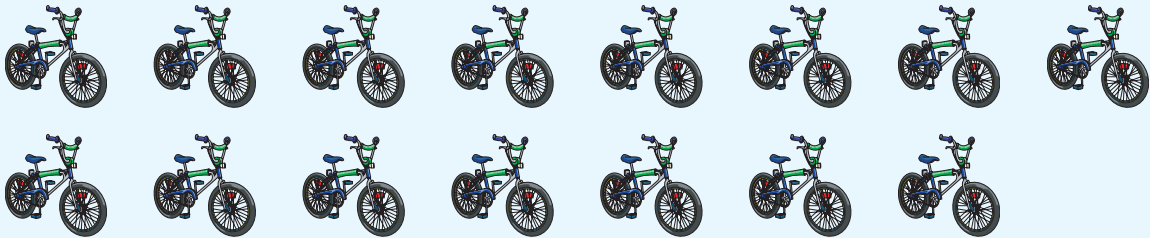
# How Many in All?

## Practice Mode

Circle the number of objects in each group.



14      16      17



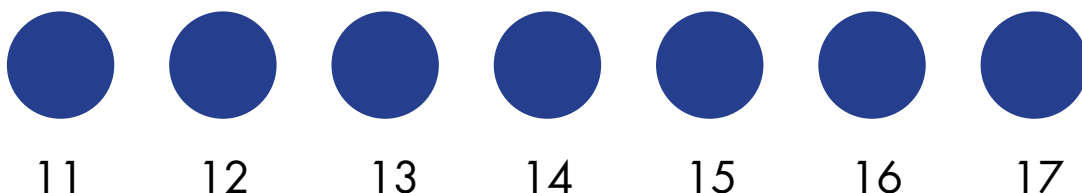
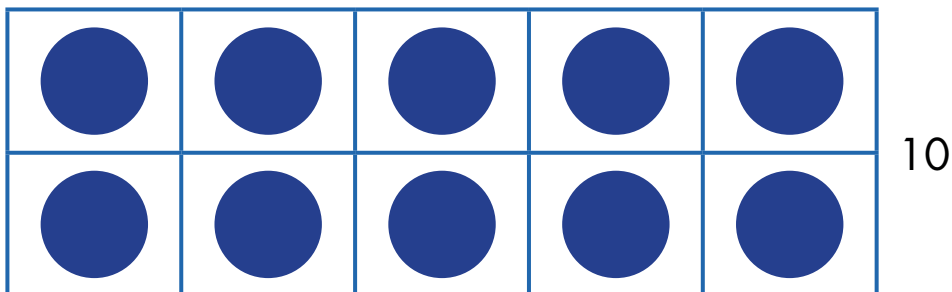
18      14      15

## A Closer Look

You may notice that even though your child counts well, they may not show an understanding of **cardinality**, or the idea that the last number counted represents the quantity of the items in an entire group. This concept takes practice and maturity to develop. Be patient! In time, your child will understand that the number 10 represents all the fingers counted on two hands.

## Use a Ten Frame Past 10

Ten frames can help you count past 10. If a ten frame is full, start counting at 10 and count on for the rest.



### Hands-On How To

**You will need: 20 counters**

Use the ten frame to show the numbers. Then, practice showing more numbers in the ten frame.

**13      18      19**



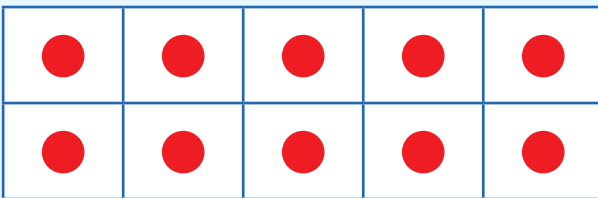

# Use a Ten Frame Past 10

## Dry-Erase

Use the dry-erase ten frame to show 12. Then, use the ten frame to show other numbers up to 19.

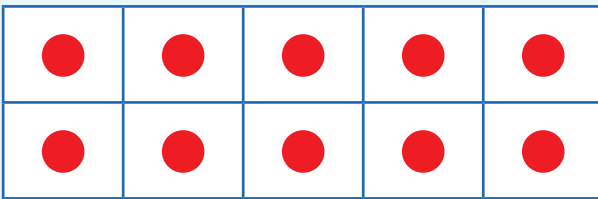
## Practice Mode

How many in all? Write the number.



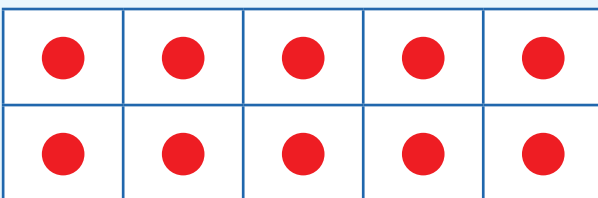
● ● ● ● ● ●

\_\_\_\_\_



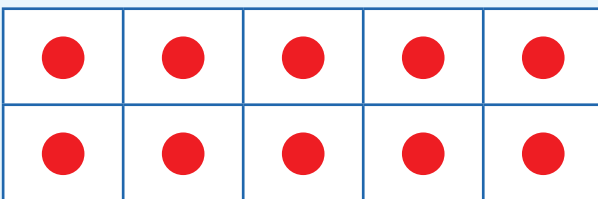
● ● ● ●

\_\_\_\_\_



● ● ● ● ● ● ●

\_\_\_\_\_



● ● ● ● ●

\_\_\_\_\_

## Count to 100 by Ones

A hundred chart helps show how numbers between 1 and 100 work. Each line on a hundred chart has 10 numbers. Each column on a hundred chart also has 10 numbers.

### Hands-On How To

#### You will need: rabbit hopper

Practice counting to 100. Start by counting to 30. Hop your rabbit from one number to the next as you go. Then, practice counting to 50, to 70, and all the way to 100.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

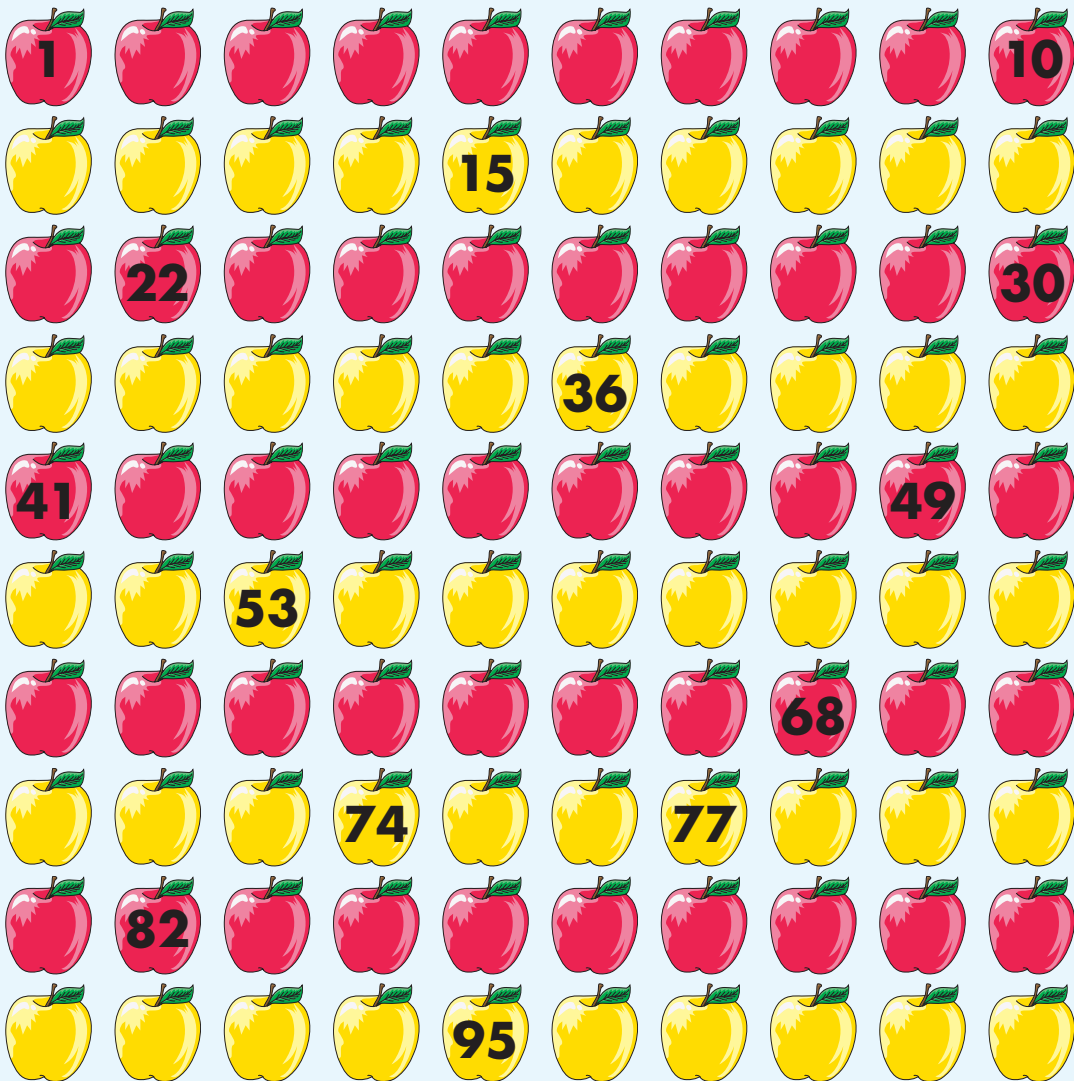
# Count to 100 by Ones

## Dry-Erase

Use the dry-erase hundred chart. Practice counting to 100 and crossing off the numbers as you go.

### Practice Mode

Count the number of objects out loud. Write how many.



## Start at Any Number

A hundred chart can help you count to 100 starting at any number.

### Hands-On How To

**You will need: 1 counter**

Flip the counter onto the hundreds chart. Count up to 100 from the number you land on. Try to get to 100 without looking at the chart. Flip your counter and try again.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

## Start at Any Number

### Dry-Erase

Use the dry-erase hundred chart. Circle 30. Now count up by ones to 100. Circle 60. Now count up by ones to 100. Keep circling numbers and counting up by ones to 100.

### Practice Mode

Write the numbers that come next.

29

\_\_\_\_\_

54

\_\_\_\_\_

91

\_\_\_\_\_

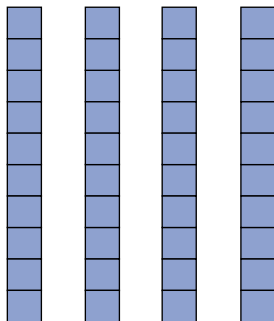
47

\_\_\_\_\_



## Count to 100 by Tens

Base-ten blocks can help you count by tens to 100. Each block shows one group of ten.



Count the 4 blocks as 10, 20, 30, 40. This picture shows 40.

### Hands-On How To

**You will need: base-ten blocks (10 tens blocks)**

Use ten blocks to show the numbers. Then, practice showing other multiples of 10.

**20**

**50**

**80**

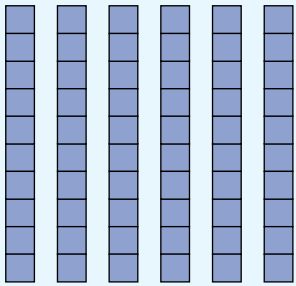

## Count to 100 by Tens

### Dry-Erase

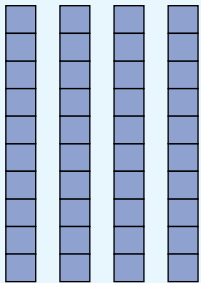
Color the dry-erase base-ten blocks to show these numbers: 90, 30, 40. Count by tens and ones to help you.

### Practice Mode

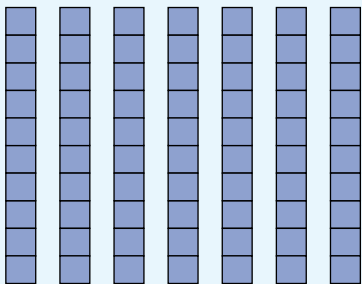
Count by tens and write how many.



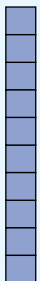
\_\_\_\_\_



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\_\_\_\_\_



\_\_\_\_\_

## Compare Numbers

You can use the words **greater than** or **less than** to compare groups.



4 dolls



8 dolls

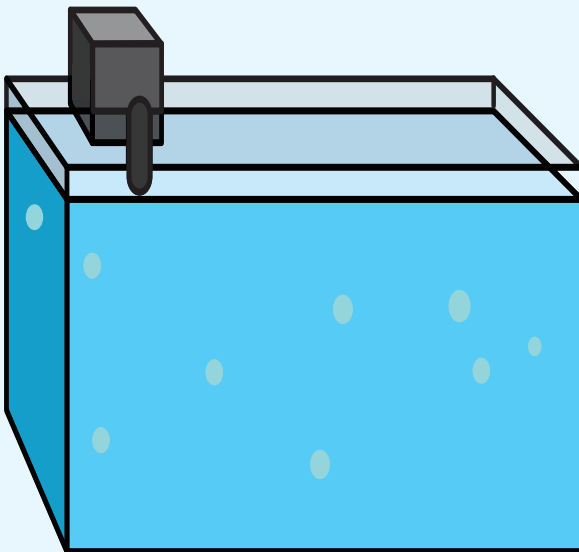
4 is **less than** 8.

8 is **greater than** 4.

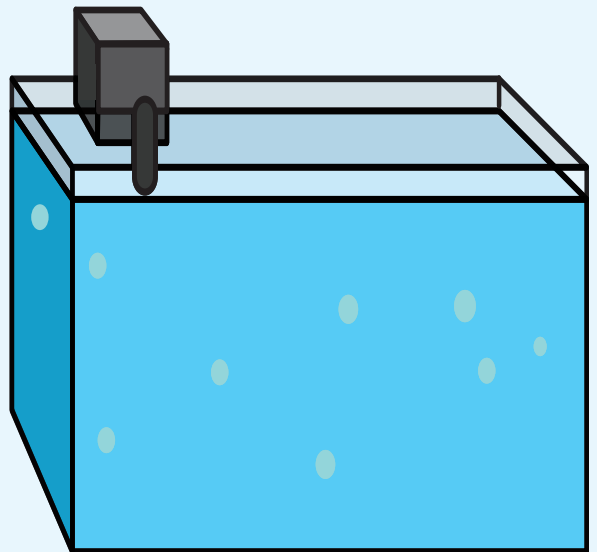
### Hands-On How To

**You will need: 20 fish cut-outs**

Count out a group of 7 fish and a group of 5 fish. Place each group in the correct fish tank below. Then, try it with a group of 3 fish and a group of 8 fish. Keep making groups of fish and comparing them with the fish tanks.



**greater than**



**less than**

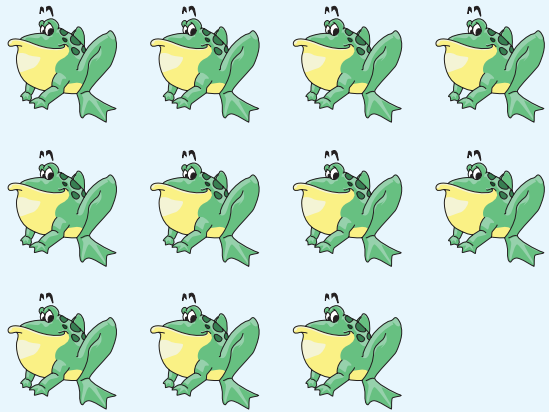
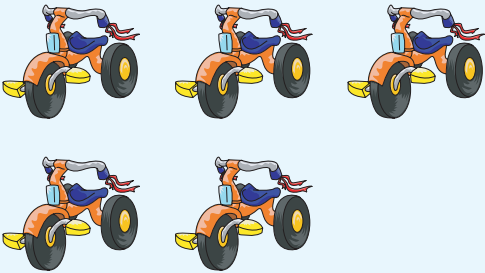
# Compare Numbers

## Dry-Erase

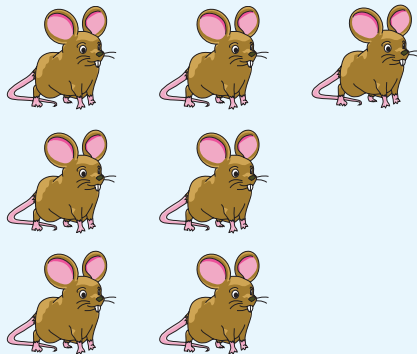
Use the dry-erase circles. Draw 4 squares in one circle and 5 squares in the other circle. Use the words **greater than**, **less than**, or **equal to** to describe the groups. Keep drawing groups and comparing them using the words **greater than**, **less than**, or **equal to**.

## Practice Mode

Circle the group that is greater.



Circle the group that is less.



## Add in 5

Do you know the answers to addition problems without counting to find the sums? You can get faster by practicing math facts.

$1 + 0 = 1$       $1 + 3 = 4$       $2 + 1 = 3$       $3 + 0 = 3$       $4 + 0 = 4$

$1 + 1 = 2$       $1 + 4 = 5$       $2 + 2 = 4$       $3 + 1 = 4$       $4 + 1 = 5$

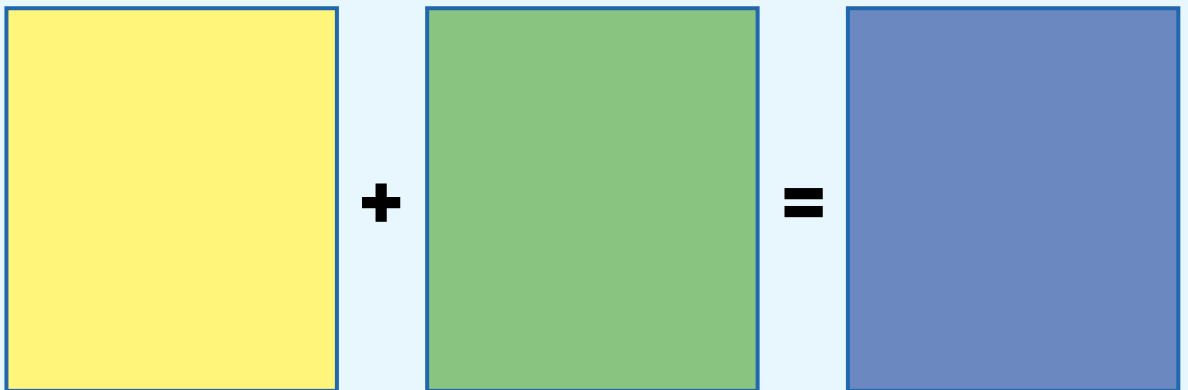
$1 + 2 = 3$       $2 + 0 = 2$       $2 + 3 = 5$       $3 + 2 = 5$       $5 + 0 = 5$

### Hands-On How To

#### You will need: number cards

Use the number cards to show and solve the addition problems. Then, draw two number cards, put them in the boxes, and solve. Keep practicing adding number cards.

$4 + 1$       $3 + 2$       $2 + 2$



## Add in 5

### Practice Mode

Solve the math problems.

$1 + 2 = \underline{\quad}$

$1 + 4 = \underline{\quad}$

$4 + 0 = \underline{\quad}$

$5 + 0 = \underline{\quad}$

$2 + 3 = \underline{\quad}$

$2 + 1 = \underline{\quad}$

$3 + 1 = \underline{\quad}$

$2 + 2 = \underline{\quad}$

### A Closer Look

While it is important for your child to understand how addition works, it is also important for them to learn to solve addition problems quickly and correctly in their heads. When your child is able to add quickly and correctly, they have developed **fluency** with this skill.

## Word Problems in 5

Addition can be used to help solve real-life problems.

There are **2** apples in the basket. Then, **1** more apple is put in the basket. How many apples are in the basket?



$$2 + 1 = 3$$

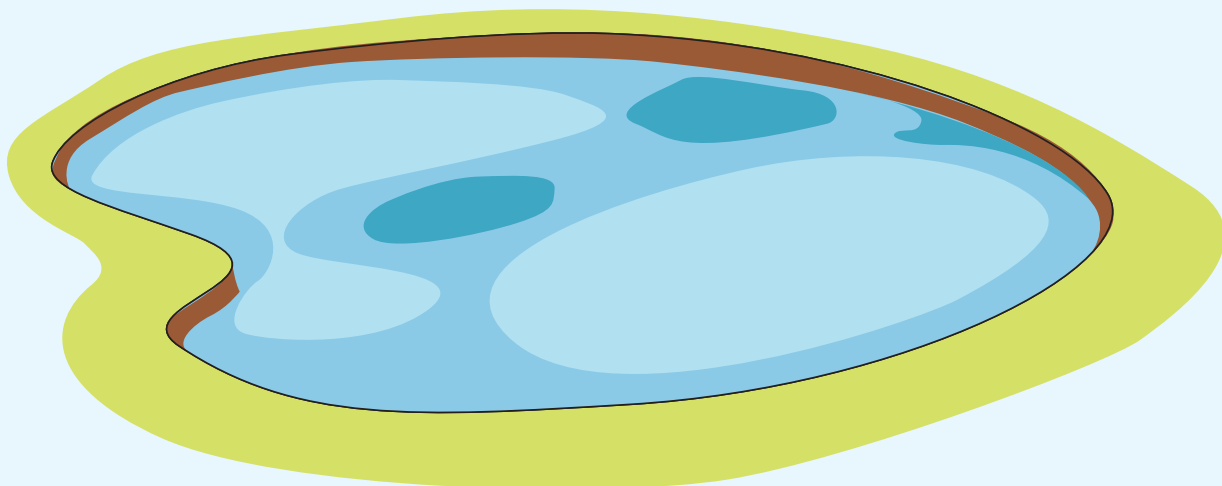
There are 3 apples in the basket.

### Hands-On How To

**You will need: 5 goose cut-outs**

Use the geese to help solve the problem. Then, imagine your own word problems and use the geese to help you solve.

3 geese are in the pond. Then, 2 more geese come to the pond. How many geese are there all together?



## Word Problems in 5

### Practice Mode

Solve these real-world problems.

Melanie had **1** sandwich for lunch. She ate **1** more sandwich for dinner. How many sandwiches did she eat all together?

$$\square + \square = \square$$

Ricky caught **2** fish. Then, he caught **3** more. How many fish did Ricky catch in all?

$$\square + \square = \square$$

Nakia has **1** doll. Then, she gets **2** more. How many dolls does she have all together?

$$\square + \square = \square$$

### A Closer Look

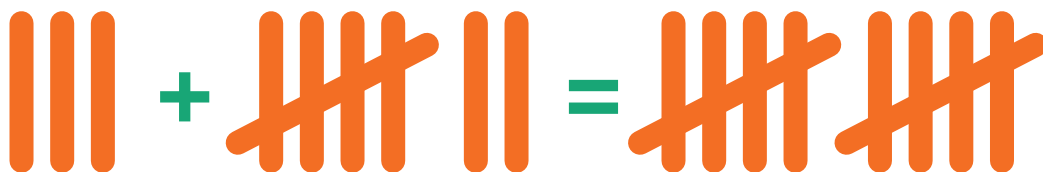
If your child is struggling with this introduction to word problems, here are some tips you can use to help:

- Read the problem out loud.
- Circle all the numbers in the problem.
- Underline what you're being asked to find.
- Draw a picture of the problem.
- Use objects such as toys to act out the problem.



## Use Tally Marks to Add

Tally marks can help you add numbers together.



$$3 + 7 = 10$$

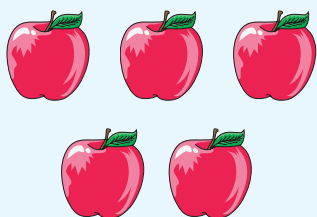
This problem shows that  $3 + 7 = 10$ .

### Hands-On How To

**You will need: tally mark cut-outs**

Count the apples. Use tally marks to show the numbers and solve the problem. Then, solve your own addition problems using tally marks.

5 apples



2 apples



+

=

Tally Marks

+

=

## Use Tally Marks to Add

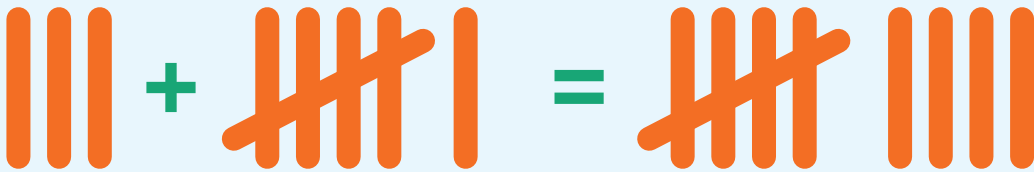
### Dry-Erase

Use the dry-erase pad. Make tally marks for each number in the addition problems:  $2 + 6$ ,  $3 + 4$ ,  $7 + 1$ . Count the total.

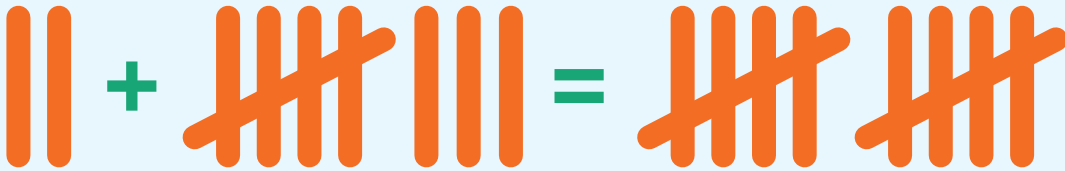
### Practice Mode

Count or draw tally marks to solve each problem.

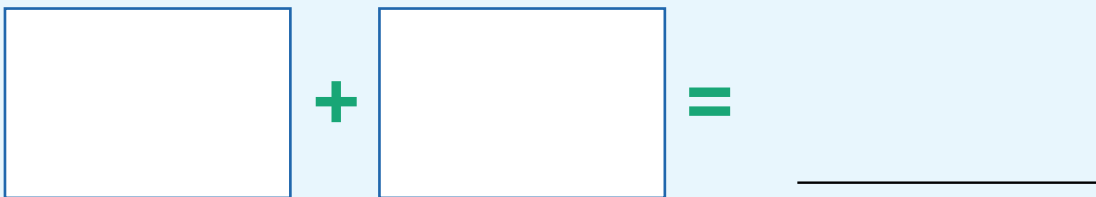
$3 + 6 =$



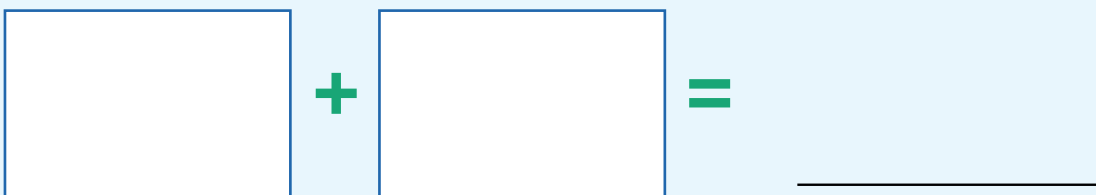
$2 + 8 =$



$1 + 6 =$



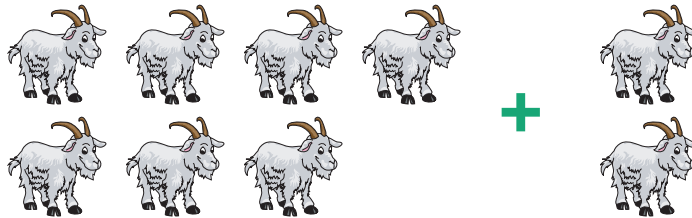
$5 + 3 =$



## Use Objects or Pictures to Add

You can use objects or pictures to help you add.

$$7 + 2 = 9$$

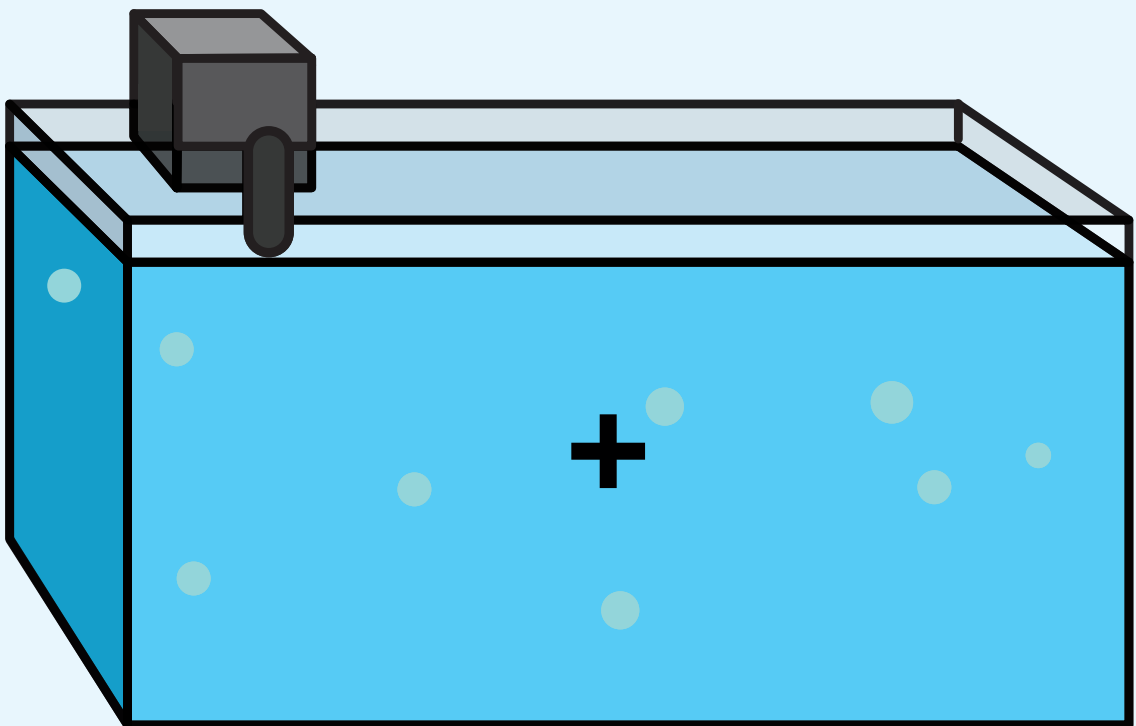


### Hands-On How To

**You will need: 10 fish cut-outs**

Solve the addition problems by placing fish in the fish tank. Then, come up with your own addition problems to solve.

$$3 + 4 \quad 6 + 2 \quad 8 + 1$$



# Use Objects or Pictures to Add

## Dry-Erase

Draw mustaches on 4 dry-erase smiley faces. Then, draw hats on 4. How many in all? Draw bows on 5 smiley faces. Then, draw hats on 3. How many in all?

## Practice Mode

Solve the addition problems. Count the pictures to help you.

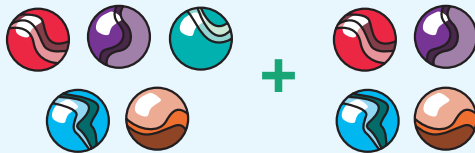
$8 + 2 = \underline{\quad}$



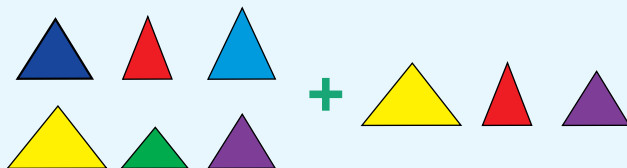
$3 + 3 = \underline{\quad}$



$5 + 4 = \underline{\quad}$

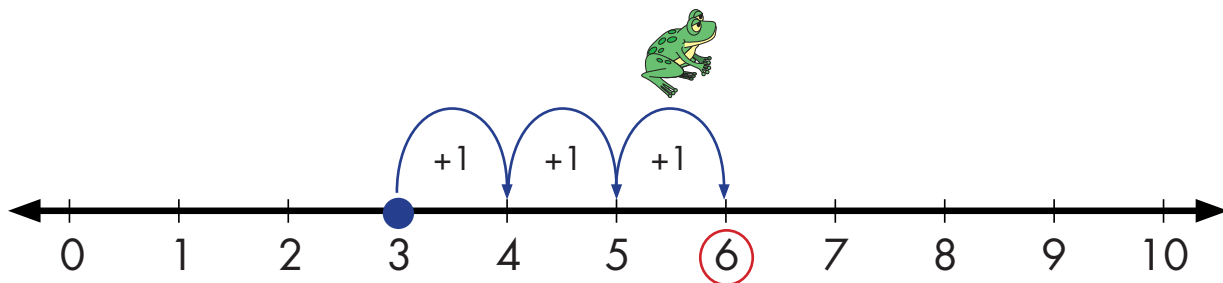


$6 + 3 = \underline{\quad}$



## Use a Number Line to Add

A number line can help you add. Find  $3 + 3$ .



$$3 + 3 = 6.$$

Start at 3 and jump up 3. The answer is 6.

### Hands-On How To

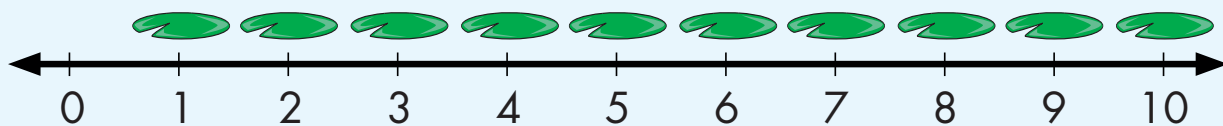
**You will need: frog hopper**

Hop the frog forward on the number line to solve the problems.  
Then, get hopping and make your own problems to solve!

$$2 + 4$$

$$3 + 6$$

$$5 + 2$$



## Use a Number Line to Add

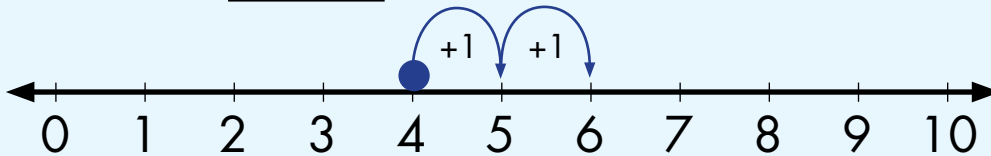
### Dry-Erase

Use the dry-erase number line. Draw hops to help you solve these problems:  $1 + 5$ ,  $2 + 6$ ,  $7 + 2$ .

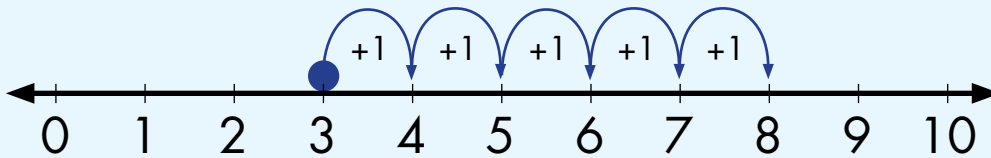
### Practice Mode

Use the number lines to solve the problems.

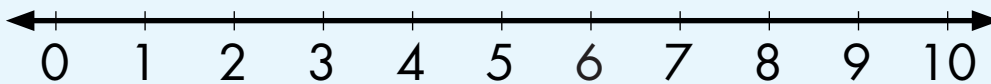
$4 + 2 = \underline{\hspace{2cm}}$



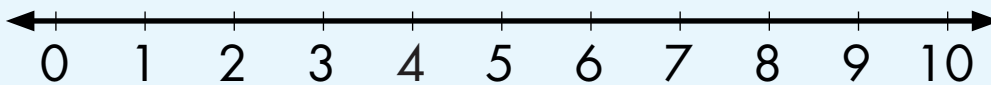
$3 + 5 = \underline{\hspace{2cm}}$



$5 + 5 = \underline{\hspace{2cm}}$

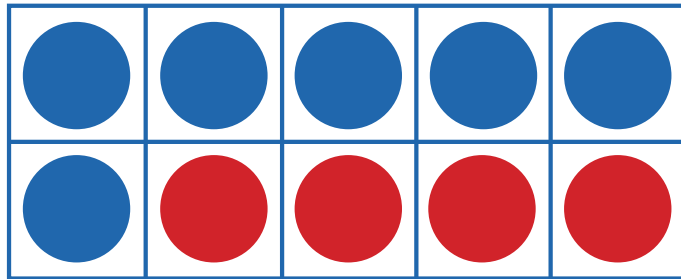


$8 + 1 = \underline{\hspace{2cm}}$



## Make 10

Practice adding numbers together to make 10. What number can you add to 6 to get 10?



$$6 + 4 = 10$$

### Hands-On How To

**You will need: 10 counters (blue and red)**

Put **blue** counters in the ten frame to show each number. Then, fill the rest of the ten frame with **red** counters. How many red counters were needed to fill the ten frame? Try it with your own numbers.

4

7

5



# Make 10



## Practice Mode

Add to solve.

●	●	●		

$$\underline{\quad\quad} + 3 = 10$$

●	●			

$$\underline{\quad\quad} + 2 = 10$$

$$\underline{\quad\quad} + 9 = 10$$

$$\underline{\quad\quad} + 5 = 10$$

## A Closer Look

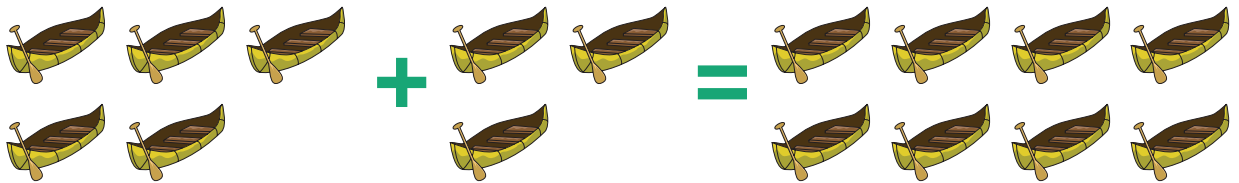
Learning what numbers add up to 10 is an important math strategy that your child will revisit in first grade. This strategy allows for the quick addition of numbers in order to create easily solvable equations. Practice will sharpen mental math skills and assist with math fluency.



## Word Problems in 10

Addition can be used to help solve real-life problems.

There are **5** boats by a dock. Then, **3** more boats come. How many boats are there in all?



There are 8 boats.

### Hands-On How To

**You will need: 10 flower cut-outs**

Use the flowers to help solve these problems. Then, imagine your own word problems and use the flowers to solve them.

Kiara planted 2 flowers in her garden yesterday. Today, she planted 3 more. How many flowers did she plant in all?

Marcus picks 7 flowers and then picks 1 more flower. How many flowers does he pick in all?



## Word Problems in 10

### Dry-Erase

Use the dry-erase pad. Draw pictures to illustrate each word problem below.

### Practice Mode

Solve these real-world problems.

Shana has 3 pencils. Then, she finds 4 more. How many pencils does Shana have all together?

2 squirrels are in a tree. Then, 6 more climb the tree. How many squirrels are in the tree?

4 books are on the table. Hector puts 2 more books on the table. How many books are on the table all together?

Kaitlin saw 2 bunnies on her way to the playground. Then, she saw 7 bunnies on the walk home. How many bunnies did she see all together?

## Subtract in 5

Do you know the answers to subtraction problems without counting backward to find the difference? You can get faster by practicing math facts.

$5 - 5 = 0 \quad 5 - 2 = 3 \quad 4 - 3 = 1 \quad 3 - 3 = 0 \quad 2 - 2 = 0$

$5 - 4 = 1 \quad 5 - 1 = 4 \quad 4 - 2 = 2 \quad 3 - 2 = 1 \quad 2 - 1 = 1$

$5 - 3 = 2 \quad 4 - 4 = 0 \quad 4 - 1 = 3 \quad 3 - 1 = 2 \quad 1 - 1 = 0$

### Hands-On How To

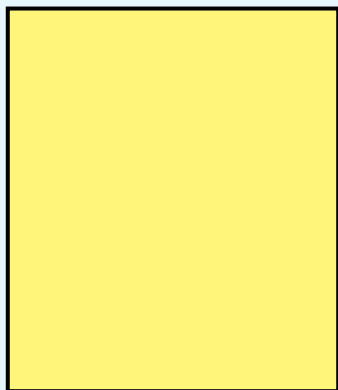
#### You will need: number cards

Use the number cards to show and solve the subtraction problems. Then, draw two number cards, put them in the boxes, and solve. Remember to always put the bigger number in the first box. Keep practicing subtracting number cards.

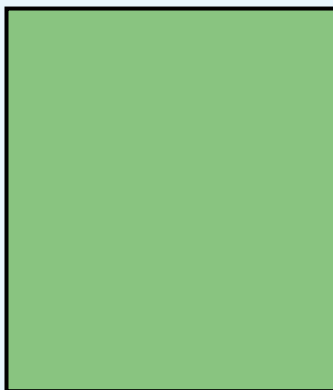
$4 - 0$

$3 - 2$

$5 - 3$



−



=



## Subtract in 5

### Dry-Erase

Use the dry-erase equation frame to write these problems and solve them:  $5 - 5$ ,  $2 - 1$ ,  $4 - 3$ .

### Practice Mode

Subtract to solve.

$5 - 4 = \underline{\quad\quad}$

$4 - 3 = \underline{\quad\quad}$

$3 - 2 = \underline{\quad\quad}$

$2 - 2 = \underline{\quad\quad}$

$4 - 2 = \underline{\quad\quad}$

$5 - 3 = \underline{\quad\quad}$

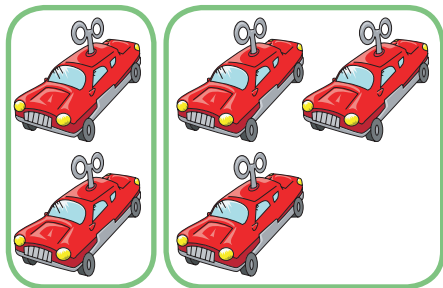
$1 - 1 = \underline{\quad\quad}$

$3 - 1 = \underline{\quad\quad}$

## Decompose Numbers

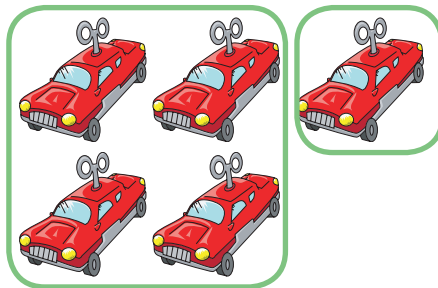
Some numbers can be broken apart in different ways.  
5 can be broken apart into:

2 and 3



or

4 and 1



### Hands-On How To

**You will need: 10 counters**

Put 7 counters in the top box. Break apart 7 into two groups in the bottom boxes. Is there a different way to break apart 7? Keep breaking apart numbers in different ways.

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# Decompose Numbers

## Practice Mode

Circle two different ways each number can be broken apart.

8



6 and 2

3 and 5

4 and 3

10



2 and 9

3 and 7

5 and 5

6



1 and 5

3 and 4

3 and 3

4



3 and 3

1 and 3

2 and 2

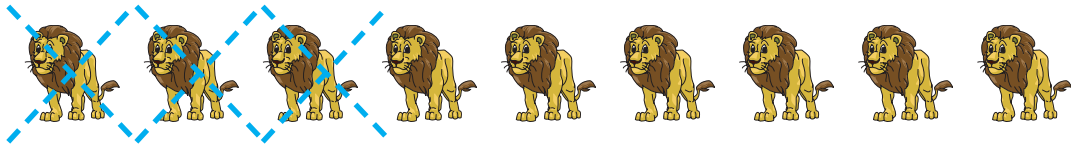
## A Closer Look

Breaking numbers apart in different ways is one way for your child to begin to understand subtraction. This is called **decomposing numbers**. Help your child practice by asking them to show the same number by holding up a different number of fingers on each hand.

## Use Objects or Pictures to Subtract

You can use objects or pictures to help you subtract.

$$9 - 3 = 6$$



### Hands-On How To

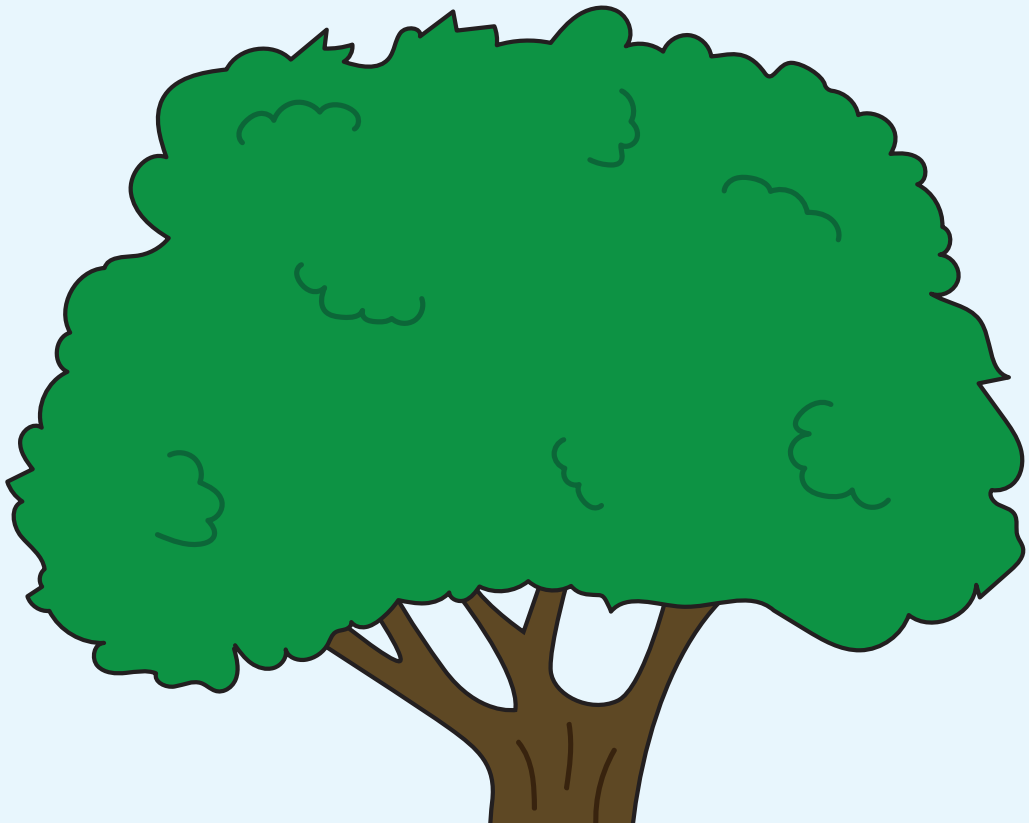
**You will need: 10 apple counters**

Solve the subtraction problems by placing and taking apples on and off the tree. Then, come up with your own subtraction problems to solve.

$$10 - 9$$

$$7 - 5$$

$$4 - 4$$



# Use Objects or Pictures to Subtract

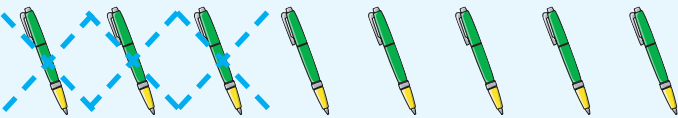
## Dry-Erase

Color 8 dry-erase smiley faces. Erase 4. How many are left?  
Color 9 dry-erase smiley faces. Erase 5. How many are left?

## Practice Mode

Use the pictures to help you solve the problems.

$$8 - 3 = \underline{\hspace{2cm}}$$



$$9 - 2 = \underline{\hspace{2cm}}$$



$$5 - 4 = \underline{\hspace{2cm}}$$



$$6 - 1 = \underline{\hspace{2cm}}$$

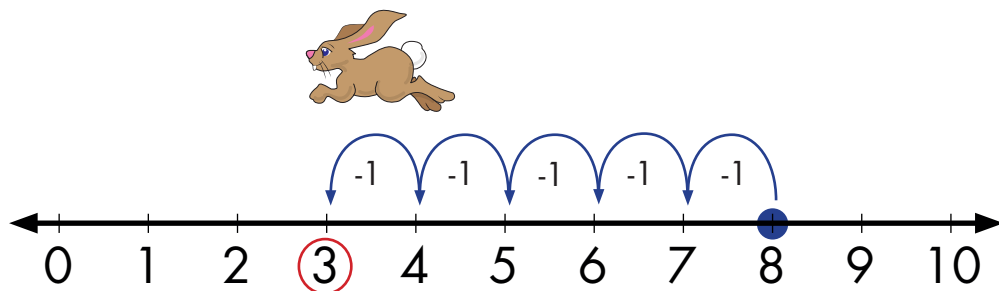




## Use a Number Line to Subtract

You can subtract by using a number line to count back.

Find  $8 - 5$ .



$$8 - 5 = 3$$

Start at 8 and jump back 5. The answer is 3.

### Hands-On How To

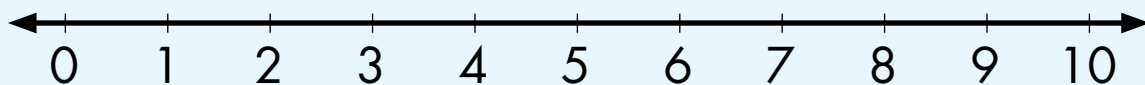
**You will need: rabbit hopper**

Hop the rabbit back on the number line to subtract and solve the problems. Then, solve your own subtraction problems with the number line.

$$7 - 3$$

$$10 - 2$$

$$9 - 6$$



## Use a Number Line to Subtract

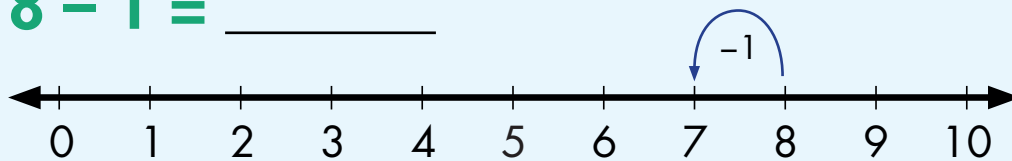
### Dry-Erase

Draw hops back on the dry-erase number line to help you solve these problems:  $9 - 4$ ,  $6 - 3$ ,  $10 - 7$ .

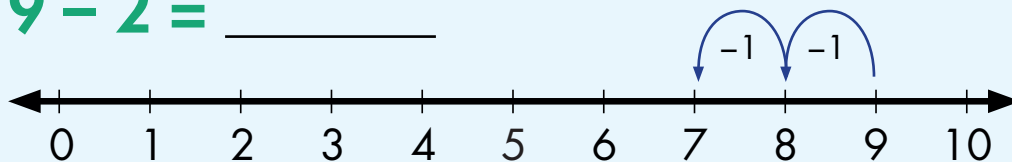
### Practice Mode

Use the number line to count back to subtract.

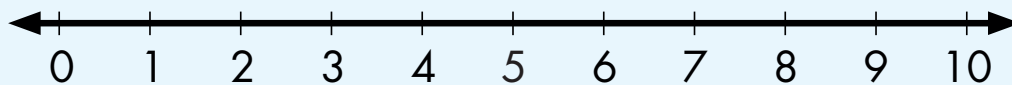
$8 - 1 = \underline{\hspace{2cm}}$



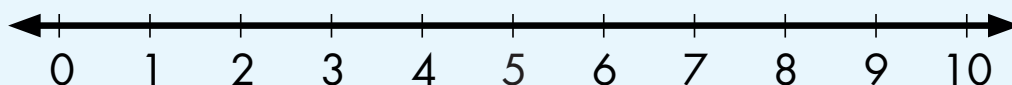
$9 - 2 = \underline{\hspace{2cm}}$



$6 - 4 = \underline{\hspace{2cm}}$



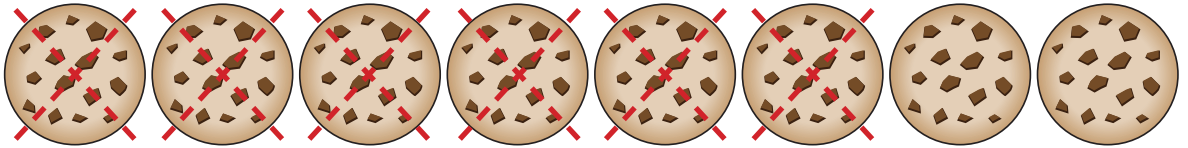
$10 - 5 = \underline{\hspace{2cm}}$



## Word Problems in 10

Subtraction can be used to help you solve real-life problems.

8 cookies are on a plate. Yara eats 6 cookies.



$$8 - 6 = 2$$

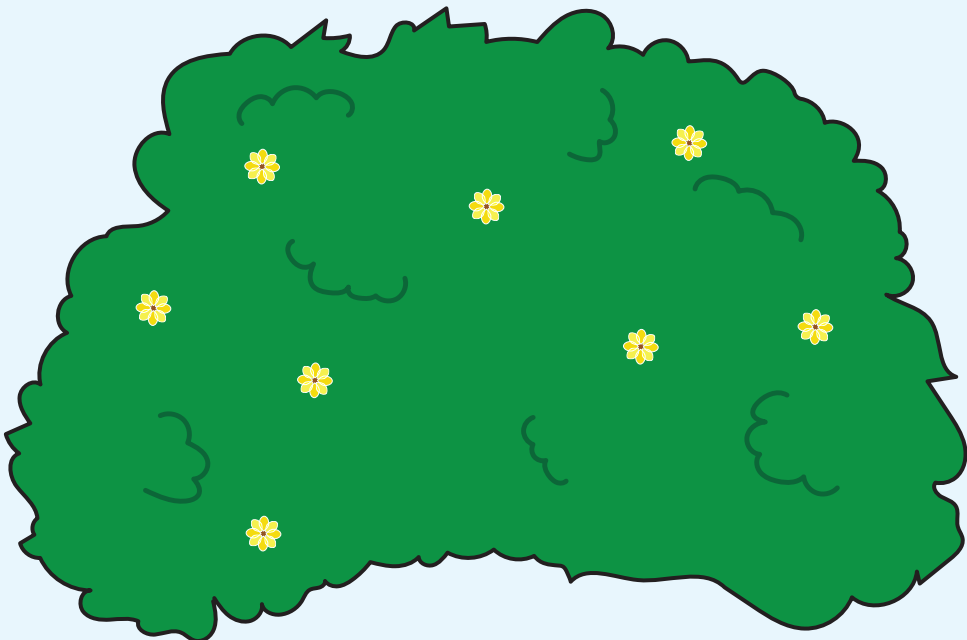
There are 2 cookies left.

### Hands-On How To

**You will need: 10 butterfly cut-outs**

Use the butterflies to help you solve the problem. Then, try it with your own butterfly word problems.

10 butterflies are on the bush. 5 fly away. How many butterflies are left on the bush?



# Word Problems in 10

## Practice Mode

Draw pictures or use counters to solve these real-life problems.



Carlos has **8** pairs of shoes. **3** pairs of shoes are too small, so he gives them away. How many pairs of shoes does Carlos have left?

There are 9 fish in the tank. 6 fish get moved to a new tank. How many fish are left in the first tank?

There are 5 bushes in front of the house. Harper cuts down 1 bush. How many bushes are left in front of the house?

## A Closer Look

Your child has been introduced to both addition and subtraction word problems. In the future, your child will need to identify what math operation needs to be done to solve a word problem. To help your child, point out the clue words that make a word problem either addition or subtraction.

### Addition

in all	total	plus
sum	all together	add

### Subtraction

fewer	take away	difference
left	minus	remain

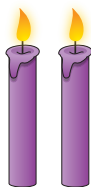
## Tens and Ones

The number 12 is made up of **tens** and **ones**.

**12** has **1 ten**  
and **2 ones**.



**1 ten**



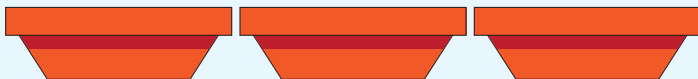
**2 ones**

### Hands-On How To

**You will need: flower cut-outs (9 flowers, 1 group of 10 flowers)**

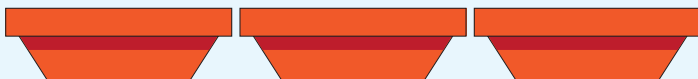
Show how the numbers are made up of **tens** and **ones** by putting flowers in the pots. Put the group of **ten** in the big flower pot. Put each **one** in a small flower pot. Show more numbers in the flower pots.

**11**



**15**

**18**



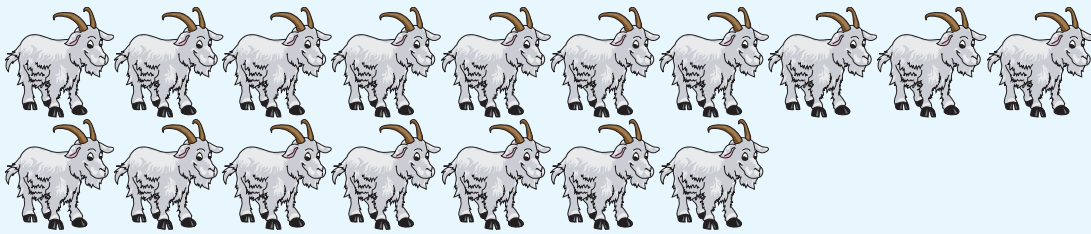
# Tens and Ones

## Dry-Erase

Circle 10 dry-erase smiley faces. Draw 9 more on the dry-erase pad. What number does 1 ten and 9 ones make?

## Practice Mode

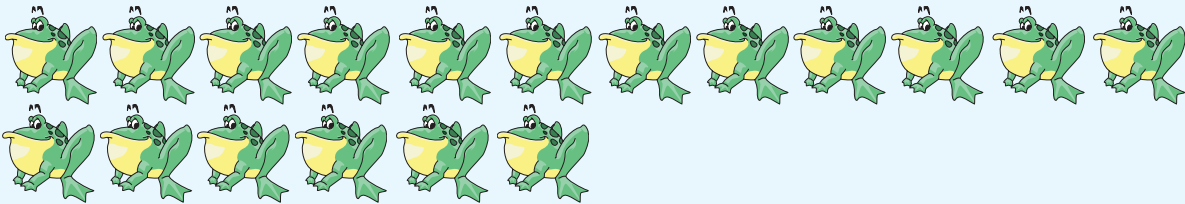
In each group, circle a ten. Count the ones. Write the sum.



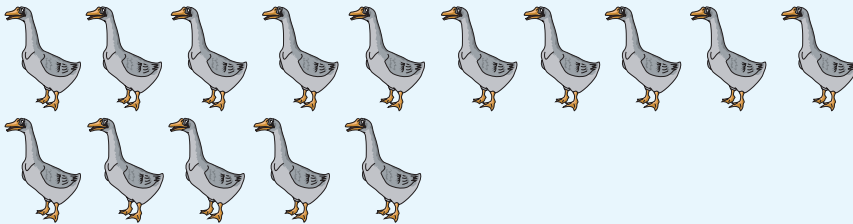
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

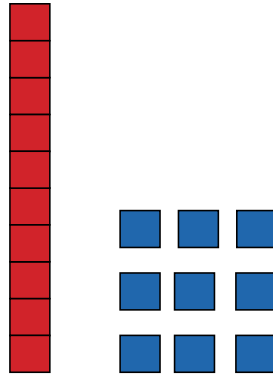


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## Base-Ten Blocks

You can use base-ten blocks to break down a number to see **tens** and **ones**.

**19** is made up of  
**1 ten** and **9 ones**.



### Hands-On How To

**You will need: base-ten blocks (1 tens block, 9 ones blocks)**

Show the numbers broken down into **tens** and **ones** blocks.  
Then, show more two-digit numbers with the base-ten blocks.

11	15	17
Tens		Ones



# Base-Ten Blocks

## Dry-Erase

Color the dry-erase base-ten blocks to show these numbers:  
14, 12, 16.

## Practice Mode

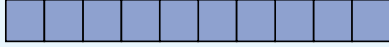

Write how many tens and ones are in each number.

**13**  


\_\_\_\_\_ **ten**, \_\_\_\_\_ **ones**

**18**  

\_\_\_\_\_ **ten**, \_\_\_\_\_ **ones**

**16**  

\_\_\_\_\_ **ten**, \_\_\_\_\_ **ones**

**19**  

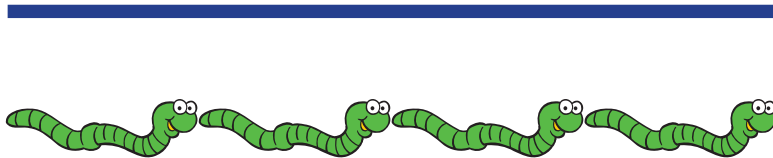
\_\_\_\_\_ **ten**, \_\_\_\_\_ **ones**



## Non-Standard Units

To find out how long something is, measure it!

Decide how many units fit alongside the object. Units must go end-to-end with no gaps or overlaps. A picture of a worm can be a unit. This line is 4 units long.



### Hands-On How To

**You will need: animal cut-outs (mouse, goat, hippo, snail, cat)**

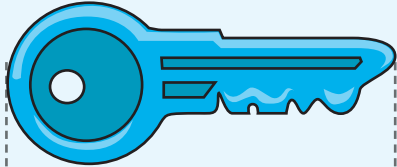
Use the worm-units below to measure the animals. Line up the animals starting at one end of the worm-units. Then, find other things to measure with worm-units.



# Non-Standard Units

## Practice Mode

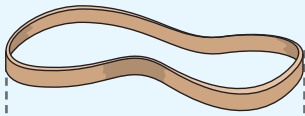
A paper clip can be a unit. Count the paper clips to measure the length of each object. Write the number.



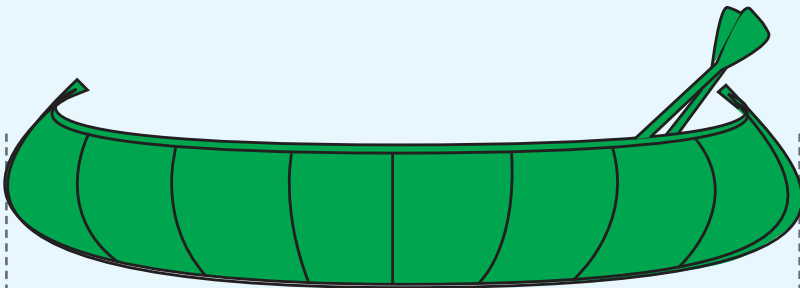
\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_



\_\_\_\_\_

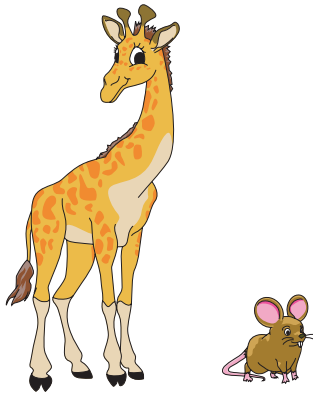
## A Closer Look

A **non-standard unit** is a unit of measurement that is not a standard unit (such as an inch or a centimeter) and that is not typically used for measuring. A non-standard unit could be a pencil, a penny, a finger, or something else. Measuring with non-standard units helps your child understand the concept of measurement before they are introduced to standard units.

## Compare Height

You can describe objects by comparing them to other objects.

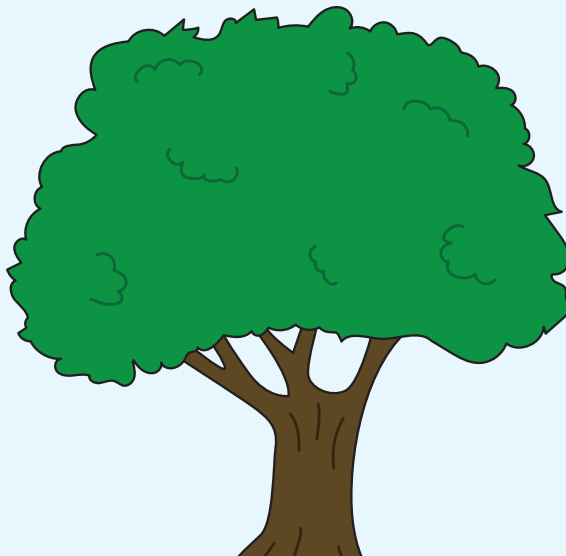
The giraffe is **taller** than the mouse. The mouse is **shorter** than the giraffe.



### Hands-On How To

**You will need: object cut-outs (shovel, key, house, pool, bike, envelope)**

Set the object cut-outs next to the tree. Use the words **taller** or **shorter** to compare. Then, find other objects to compare to the tree.



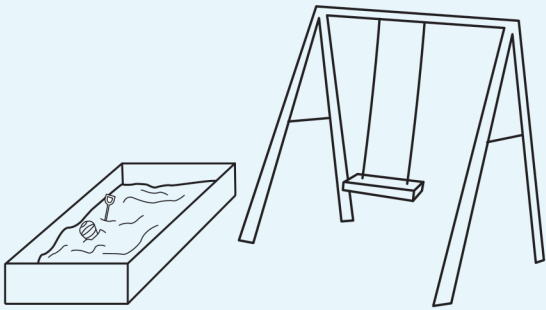
# Compare Height

## Dry-Erase

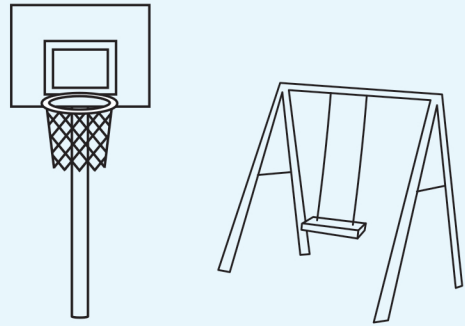
Use the dry-erase pad. Draw a tree. Draw something taller than the tree. Draw something shorter than the tree.

## Practice Mode

Circle the word that describes how each object compares to the swing set.

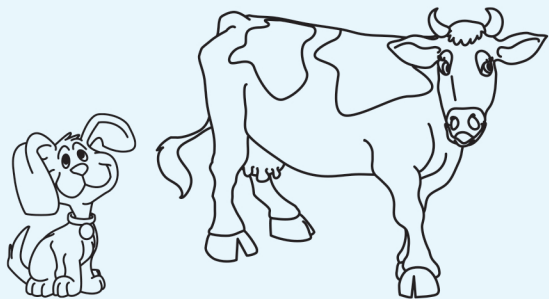
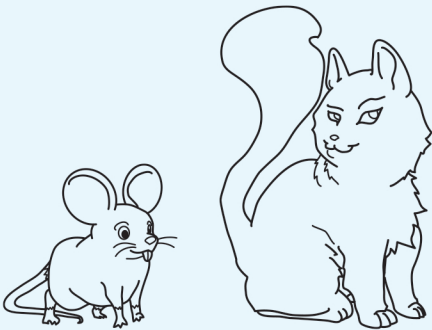


**taller**      **shorter**



**taller**      **shorter**

Color the taller object in each pair.

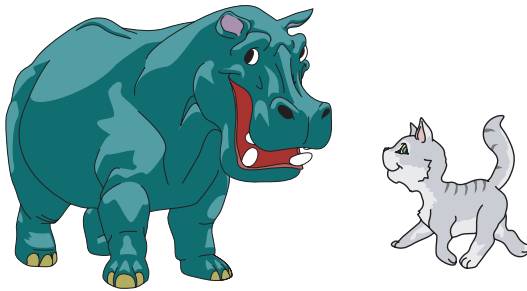


## Compare Weight

You can get an idea of how heavy an object is by comparing it to other objects.

The hippo is **heavier** than the cat.

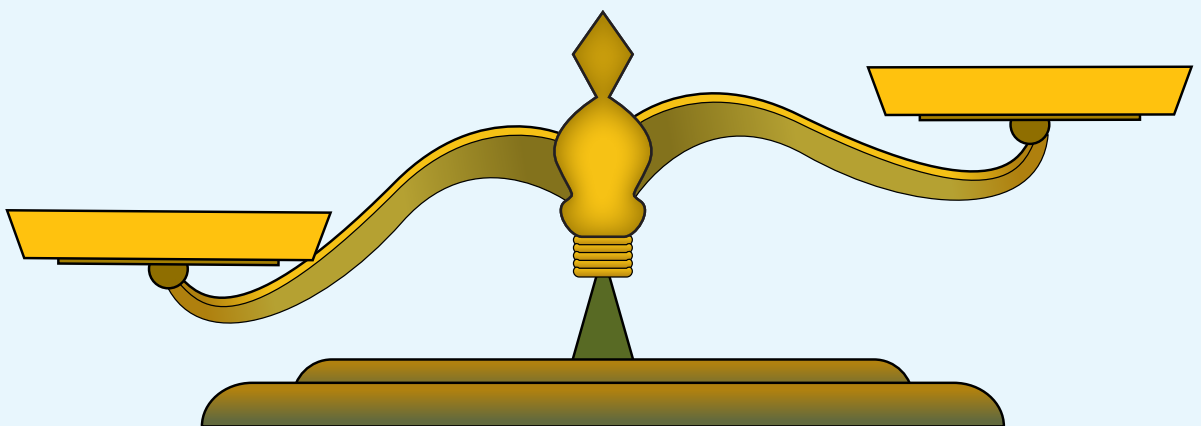
The cat is **lighter** than the hippo.



### Hands-On How To

**You will need: object cut-outs (shovel, cat, bike) apple counter, fish cut-out**

Choose two objects. Place the heavier one on the lower side of the scale and the lighter one on the higher side. Keep comparing objects.



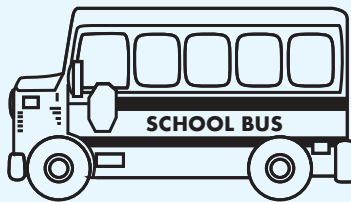
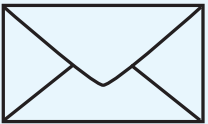
# Compare Weight

## Dry-Erase

Use the dry-erase T-chart. Draw something that is heavier on one side of the chart. Draw something that is lighter on the other side of the chart. Keep drawing and comparing objects.

## Practice Mode

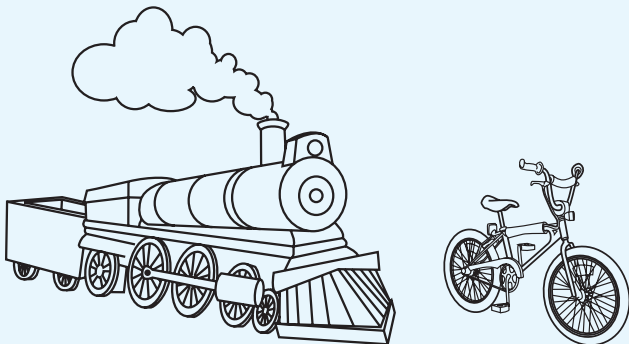
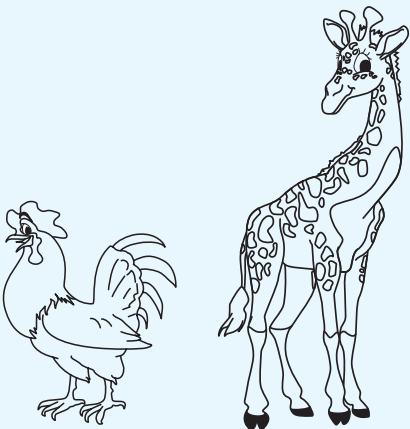
Circle the word that describes how each object compares to the bookshelf.



**heavier**   **lighter**

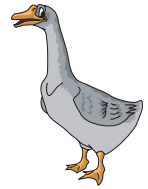
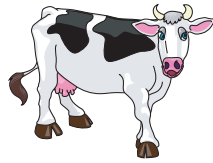
**heavier**   **lighter**

Color the heavier object in each pair.



## Sort and Classify Objects

You can sort objects in different ways.



There are 2 animals with 0 legs.

There are 2 animals with 2 legs.

There are 2 animals with 4 legs.

There are 2 fish.

There are 2 birds.

There are 2 mammals.

### Hands-On How To

**You will need: object cut-outs (house, pool, bike, envelope), animal cut-outs (mouse, snail, cat, goat, hippo)**

Sort the objects into the groups. How many are in each group?  
What else can you find that is living and nonliving?

Living	Nonliving

## Sort and Classify Objects

### Dry-Erase

Use the dry-erase pad. Draw different kinds of fruit. Draw different kinds of vegetables. How many groups did you create? How many are in each group?

### Practice Mode



How many hats? \_\_\_\_\_

How many pairs of shoes? \_\_\_\_\_

How many pieces of fruit? \_\_\_\_\_



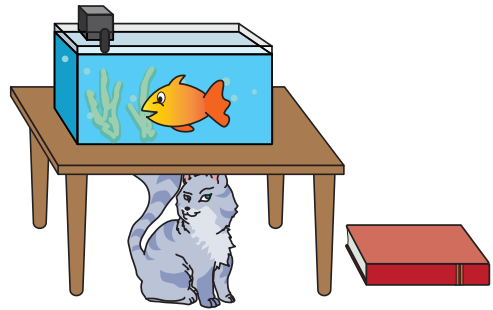
## Position Words

Place words can be used to describe where items are in comparison to other items.

The fish tank is **above** the cat.

The cat is **below** the fish tank.

The book is **next to** the table.



## Hands-On How To

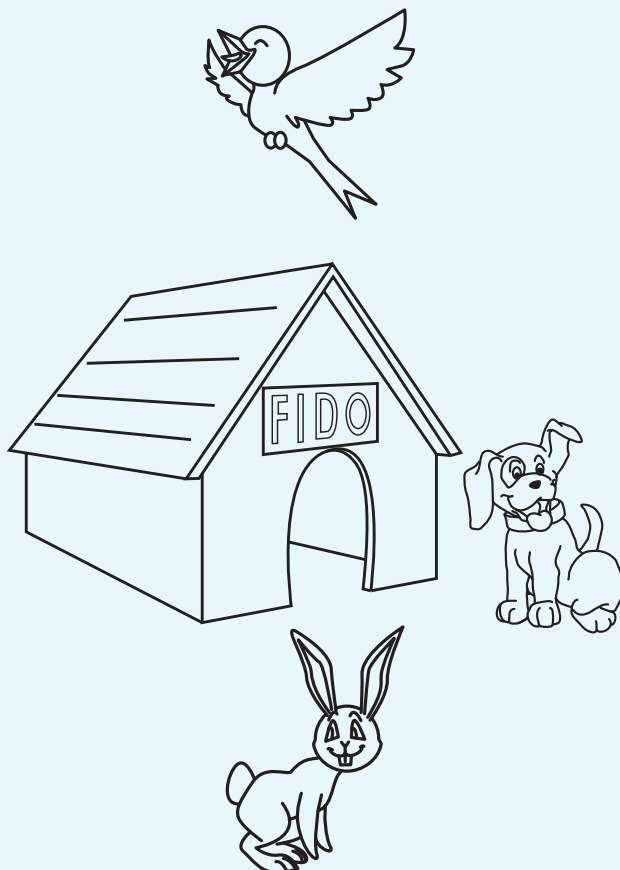
**You will need: any 3 object cut-outs (examples: goose, butterfly, mouse)**

Put an item **above** the house. Put an item **below** the house. Put an item **next to** the house. Continue to put items **above**, **below**, and **next to** the house.



## Position Words

### Practice Mode



Color the thing that is above the doghouse **blue**.

Color the thing that is next to the doghouse **brown**.

Color the thing that is below the doghouse **gray**.

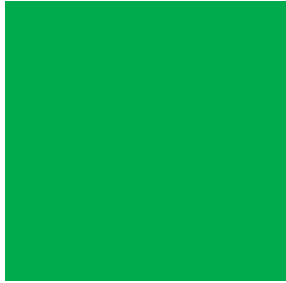
### A Closer Look

Learning position words helps your child develop **spatial awareness**, an important early math skill. You can help by talking with your child about where things are. Choose an item in the room. Give your child clues about whether it is *above*, *below*, or *next to*. Can your child find the item? Have your child give you clues, too.

## Squares

Squares have 4 equal sides.

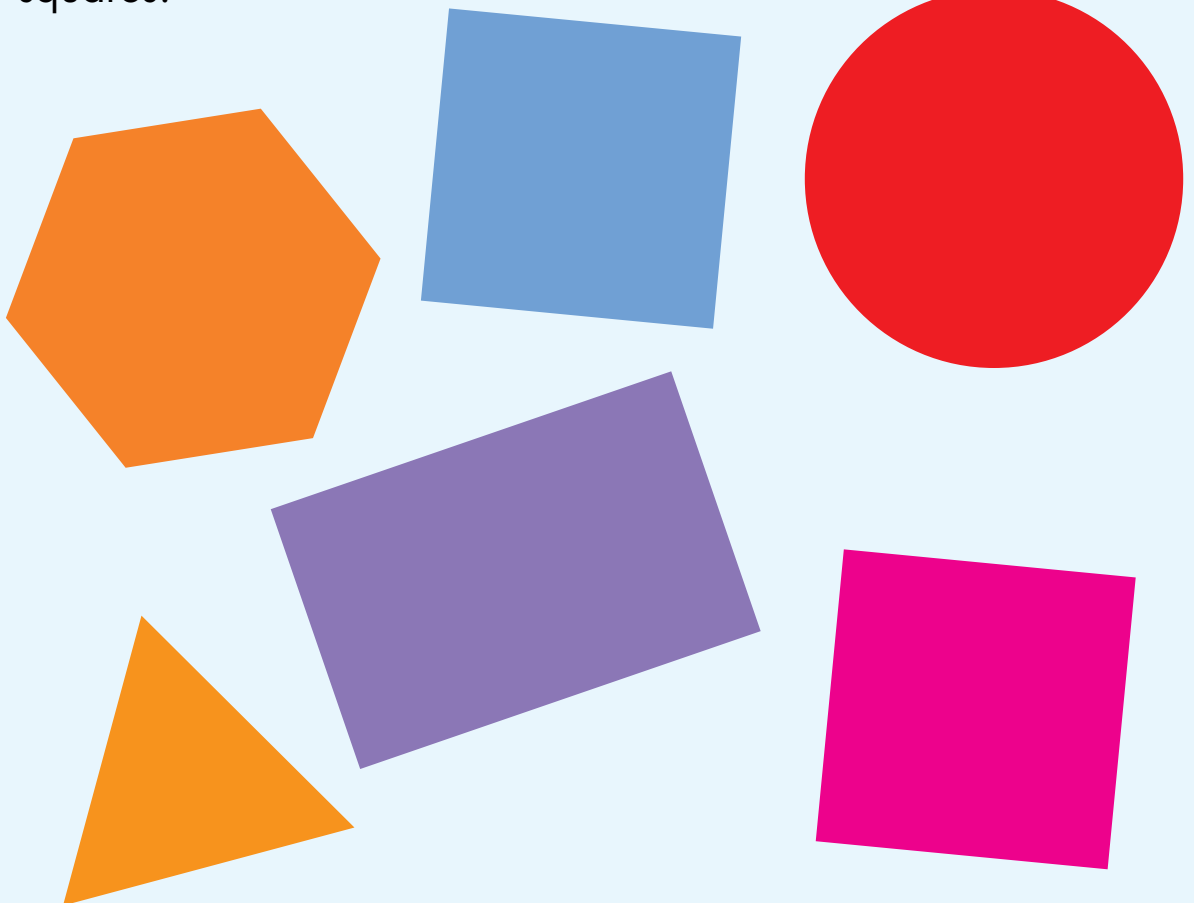
This is a square.



### Hands-On How To

**You will need: square cut-outs**

Can you find the squares? Place the square cut-outs inside the squares.



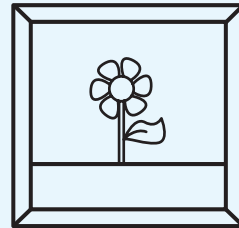
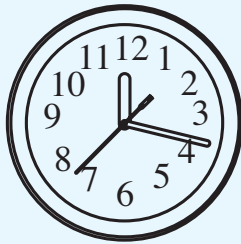
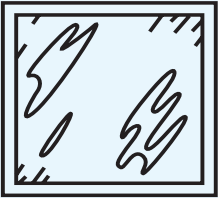
# Squares

## Dry-Erase

Use the dry-erase pad. Draw a square. Then, make it into a gift, a picture frame, a checkerboard, or something else.

## Practice Mode

Color the squares.



Draw and label a square.

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## Rectangles

Rectangles have 4 sides.

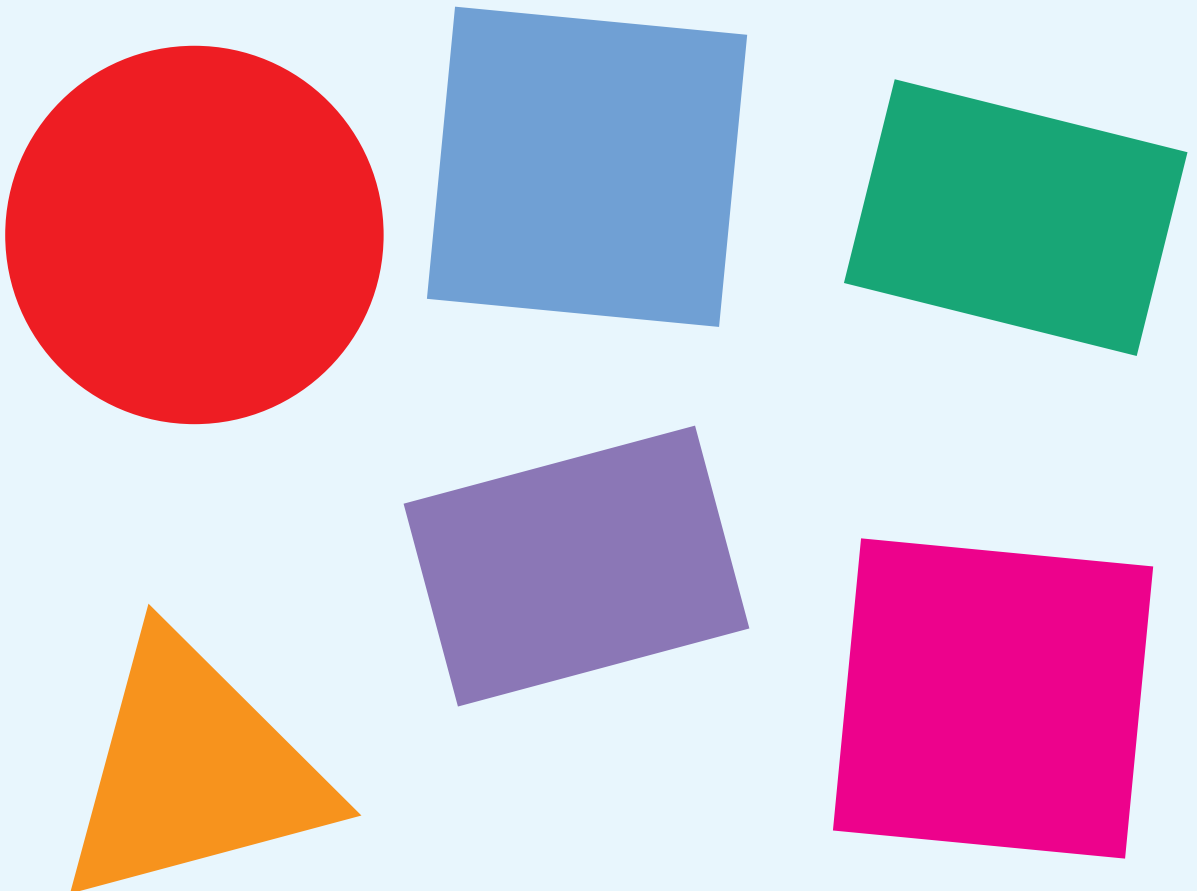
This is a rectangle.



### Hands-On How To

**You will need: rectangle cut-outs**

Can you find the rectangles? Place the rectangle cut-outs inside the rectangles.



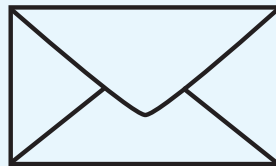
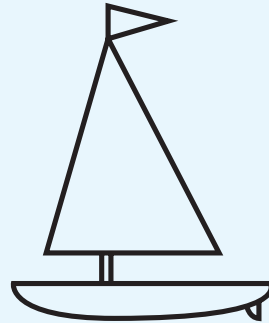
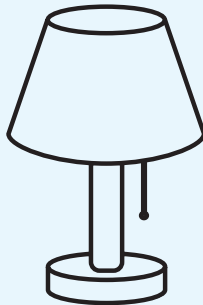
# Rectangles

## Dry-Erase

Use the dry-erase pad. Draw a rectangle. Then, make it into a flag, a window, an envelope, or something else.

## Practice Mode

Color the rectangles.



Draw and label a rectangle.

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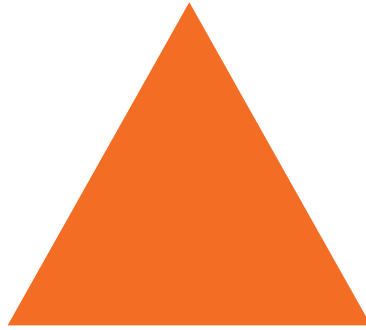
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## Triangles

Triangles have 3 sides.

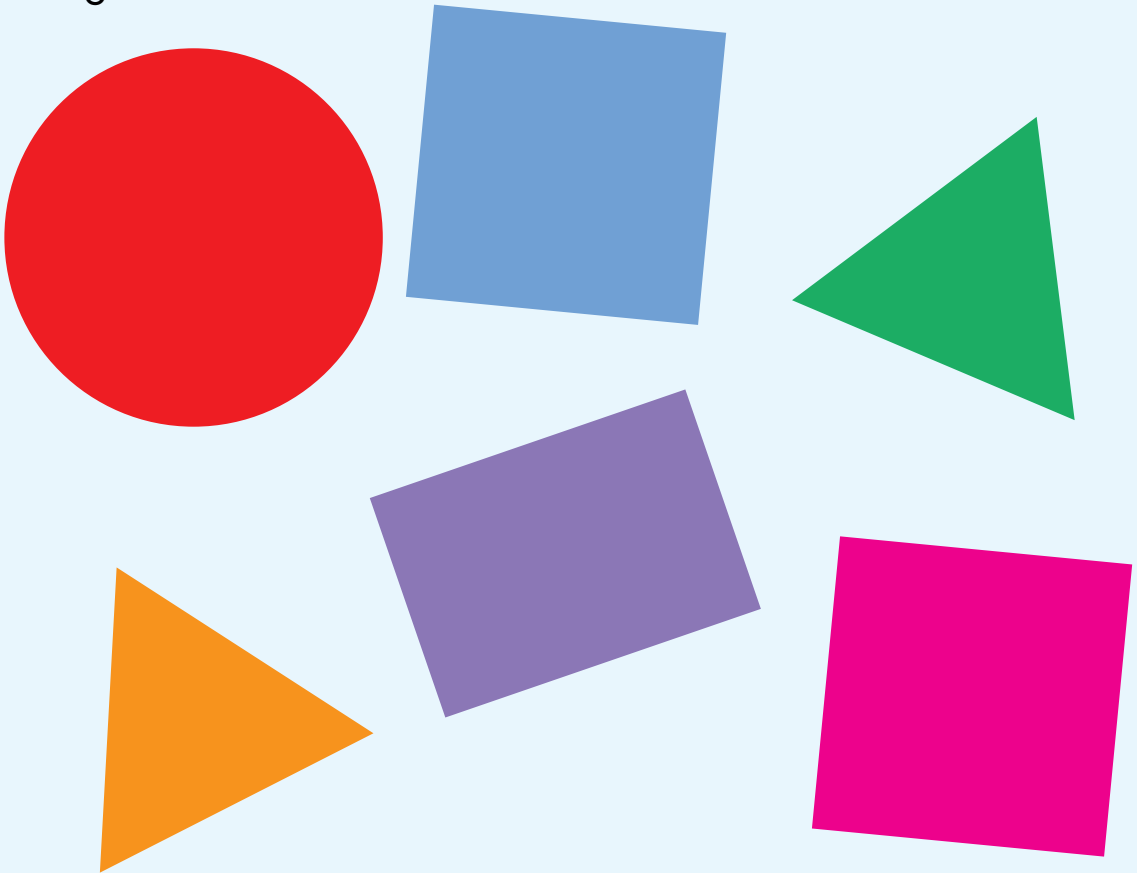
This is a triangle.



### Hands-On How To

**You will need: triangle cut-outs**

Can you find the triangles? Place the triangle cut-outs inside the triangles.



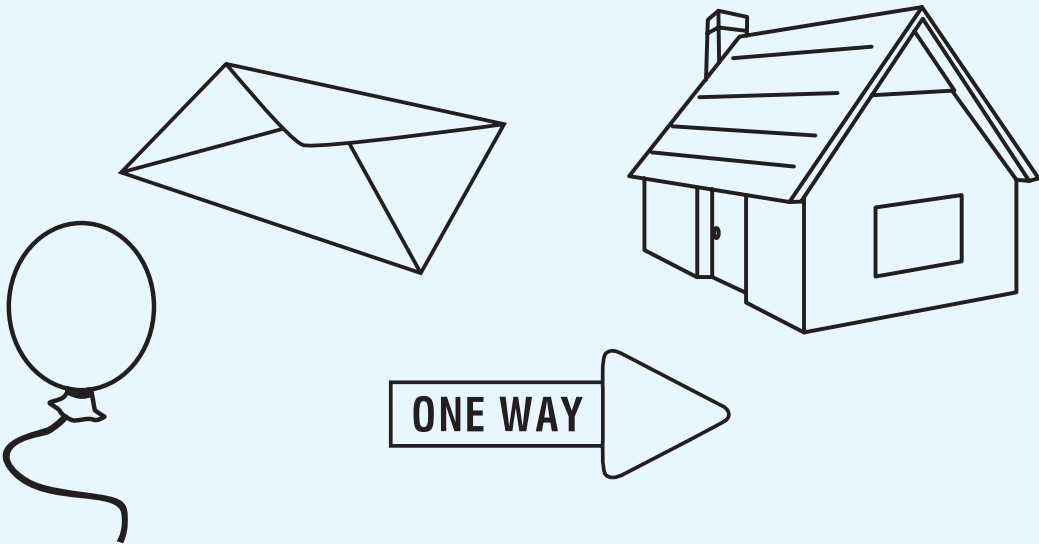
# Triangles

## Dry-Erase

Use the dry-erase pad. Draw a triangle. Then, make it into a slice of pizza, a birthday hat, a sign, or something else.

## Practice Mode

Color the triangles.



Draw and label a triangle.

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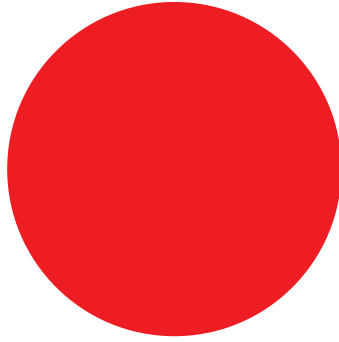
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## Circles

Circles are round.

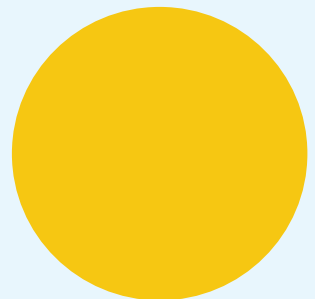
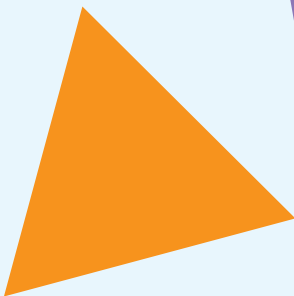
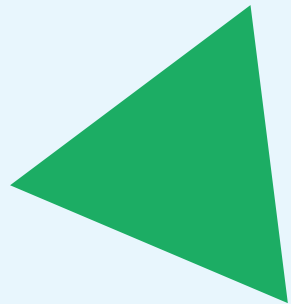
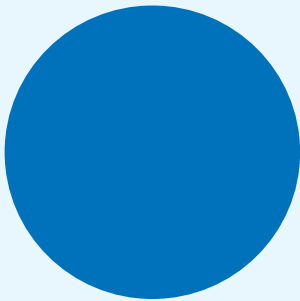
This is a circle.



### Hands-On How To

**You will need: circle cut-outs**

Can you find the circles? Place the circle cut-outs inside the circles.



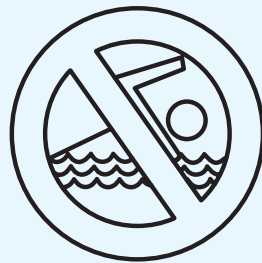
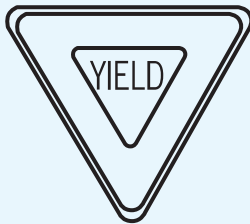
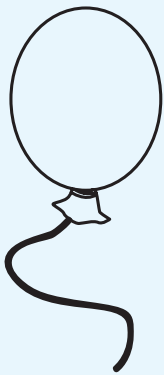
# Circles

## Dry-Erase

Use the dry-erase pad. Draw a circle. Then, make it into a sun, a cookie, a face, or something else.

## Practice Mode

Color the circles.



Draw and label a circle.

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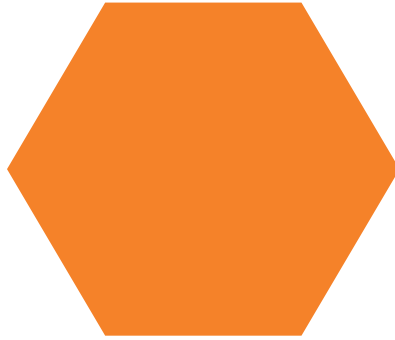
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## Hexagons

Hexagons have 6 sides.

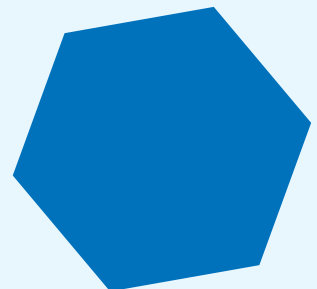
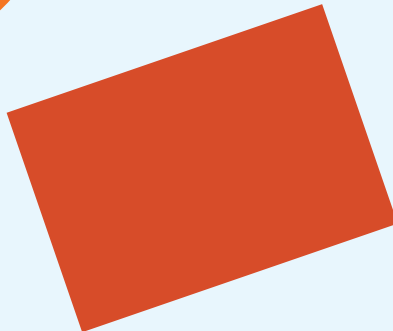
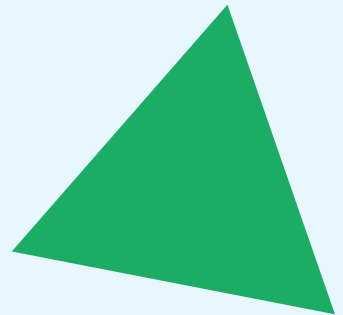
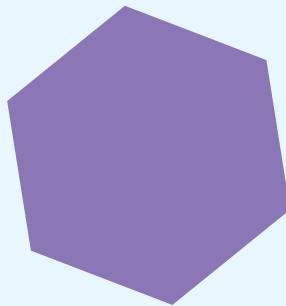
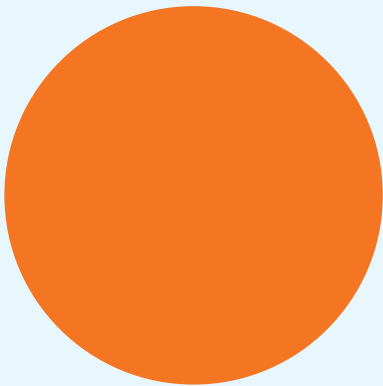
This is a hexagon.



### Hands-On How To

**You will need: hexagon cut-outs**

Can you find the hexagons? Place the hexagon cut-outs inside the hexagons.



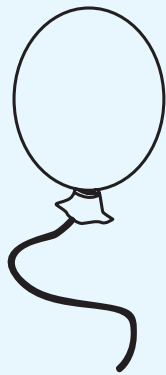
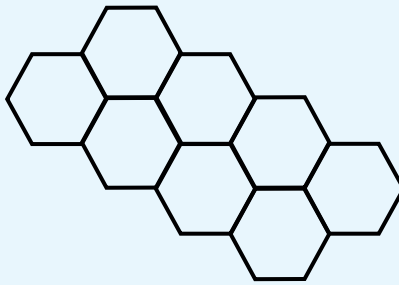
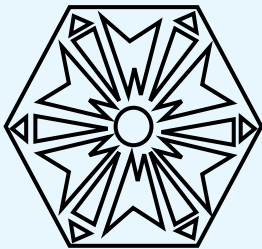
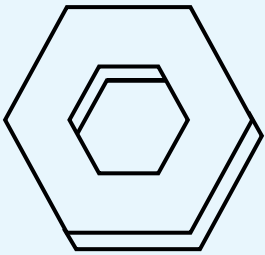
# Hexagons

## Dry-Erase

Use the dry-erase pad. Draw a hexagon. Then, make it into a sign, a nut, or something else.

## Practice Mode

Color the hexagons.



Draw and label a hexagon.

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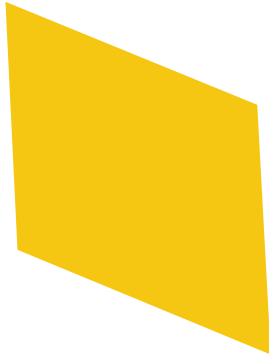
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## Rhombuses

Rhombuses have 4 equal sides.

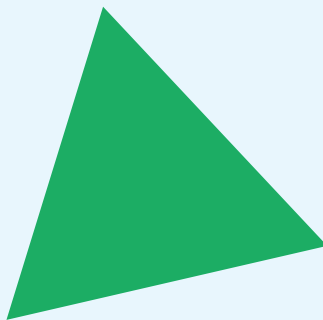
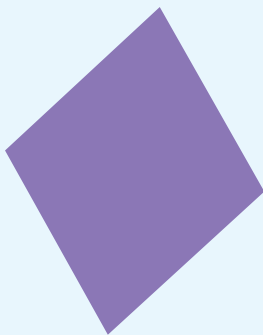
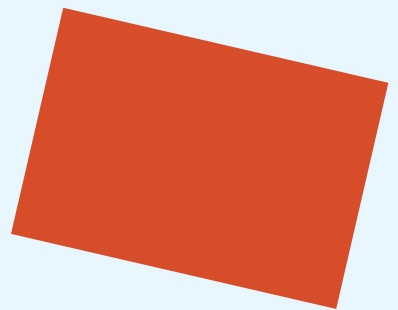
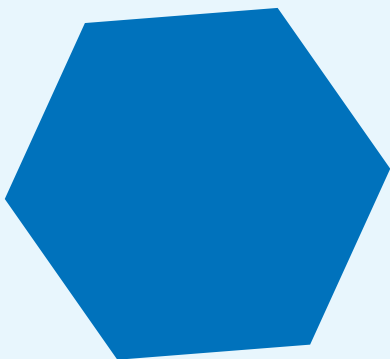
This is a rhombus.



### Hands-On How To

**You will need: rhombus cut-outs**

Can you find the rhombuses? Place the rhombus cut-outs inside the rhombuses.



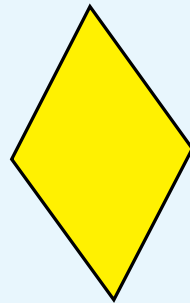
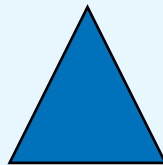
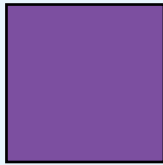
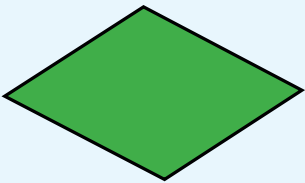
# Rhombuses

## Dry-Erase

Use the dry-erase pad. Draw a rhombus. Then, make it into a kite, a sign, a diamond ring, or something else.

## Practice Mode

Circle the rhombuses.



Draw and label a rhombus.

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## Real-World Shapes

Things in your everyday life are made up of shapes.

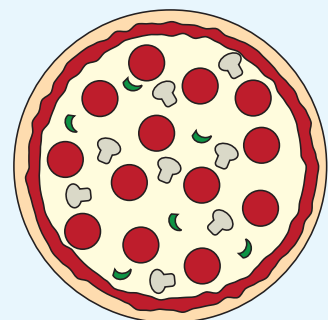
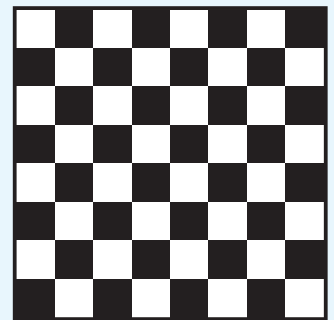
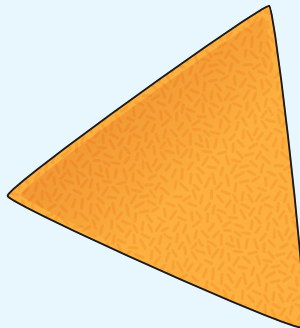
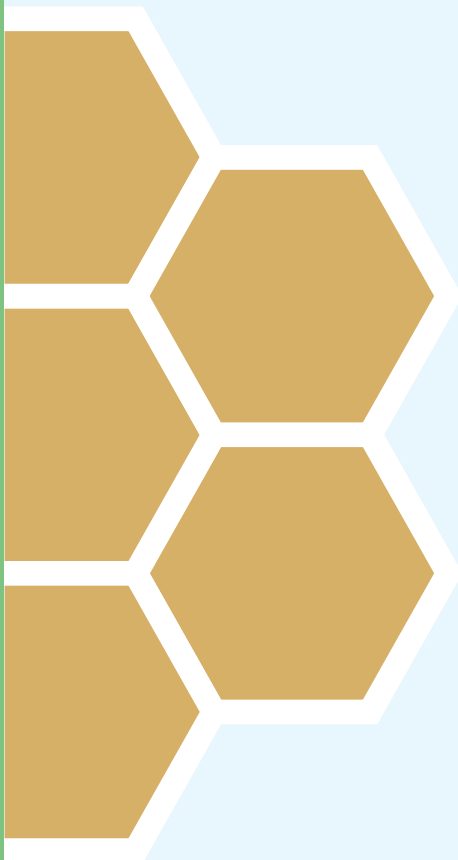
A yield sign is  
a triangle.



### Hands-On How To

You will need: shape cut-outs (square, circle, triangle, rectangle, hexagon)

Match the shape to the object.



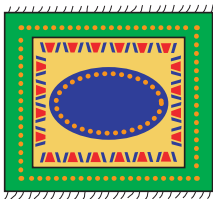
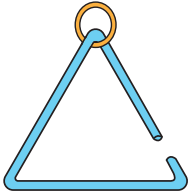
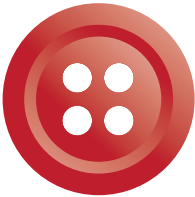
## Real-World Shapes

### Dry-Erase

Use the dry-erase shapes. Draw on the shapes to turn them into things you see around you.

### Practice Mode

Write the name of the shape next to the real-life object.





## Combine Shapes

You can put together shapes to make a different shape.

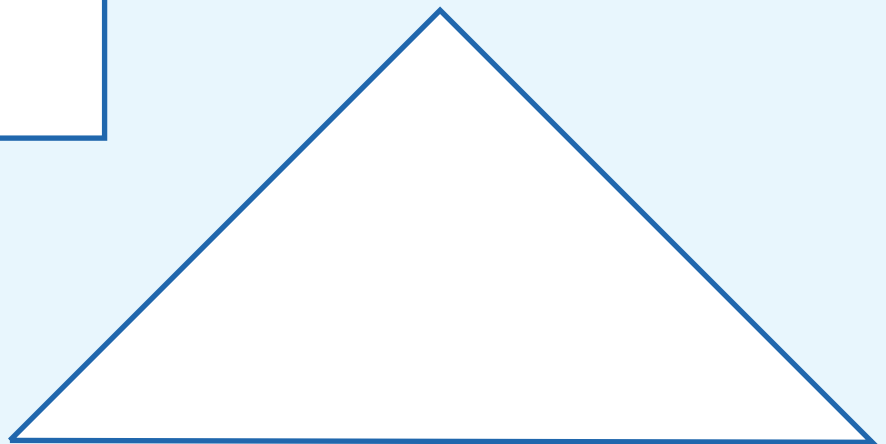
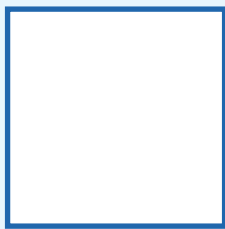
All of these shapes can be put together to create a square.



### Hands-On How To

**You will need: tangram cut-outs**

Use the tangrams to build these shapes. What other shapes can you make?



## Combine Shapes

### Dry-Erase

Look at the shapes on the dry-erase board. Draw lines inside each shape to divide it into more shapes.



### Practice Mode

Draw lines inside the rectangle to show how it can be made from different shapes.



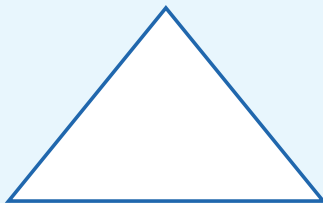
Draw lines inside the hexagon to show how it can be made from different shapes.



Draw lines inside the square to show how it can be made from different shapes.

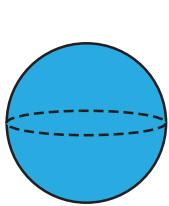


Draw lines inside the triangle to show how it can be made from different shapes.



## 3-D Shapes

Some shapes are not flat. These shapes are **3-D shapes**.



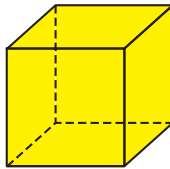
sphere



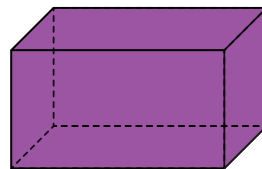
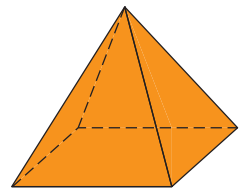
cone



cylinder



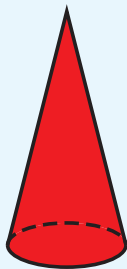
cube

rectangular  
prismsquare  
pyramid

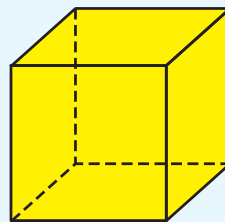
### Hands-On How To

**You will need: cone, cube, square pyramid, and cylinder nets**

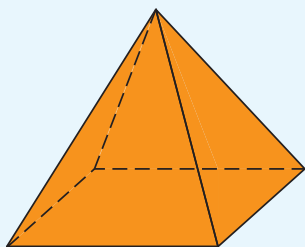
Look at these shapes. Create the shapes from your shape nets. Fold shapes at the dotted lines and use tape to put them together.



cone



cube

square  
pyramid

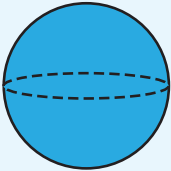
cylinder

## 3-D Shapes



### Practice Mode

Write the names of the shapes.



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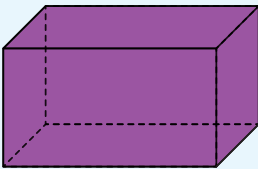
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### A Closer Look

Recognizing **3-D shapes**, or solid shapes, is an important skill. Help your child identify 3-D shapes in the real world (balls, cans of food, cereal boxes, etc.) and tell how they are different from 2-D, or flat, shapes. Encourage your child to form solid shapes from modeling clay.

## Real-World 3-D Shapes

Things in your everyday life are made up of 3-D shapes.

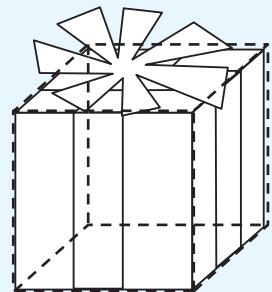
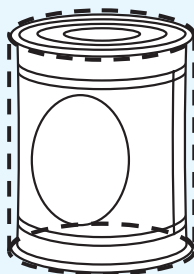
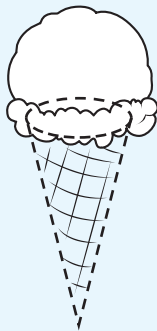
An ice-cream cone is a cone.



### Hands-On How To

**You will need: the 3-D shapes built from nets (cone, cube, square pyramid, cylinder)**

Match the 3-D shapes with the pictures. Then, take the shapes and find more real-world objects that are made up of the 3-D shapes.



## Real-World 3-D Shapes

### Dry-Erase

Take a look around the room. Find things that are 3-D shapes. Then, draw each shape on the dry-erase pad.

### Practice Mode

Write the name of the shape next to the real-life object.



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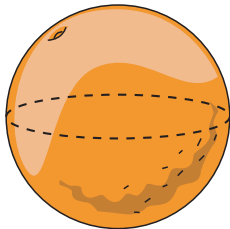
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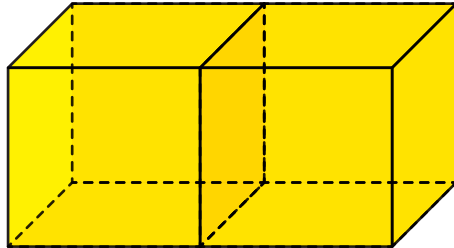
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## Combine 3-D Shapes

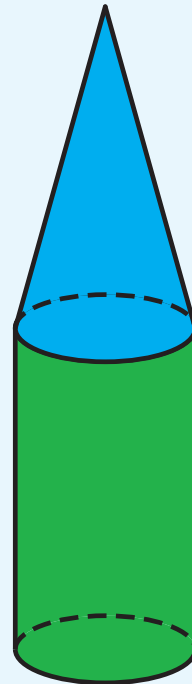
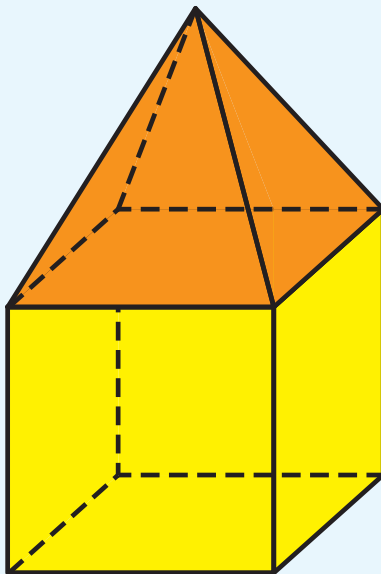
You can put together 3-D shapes to make a different shape.



### Hands-On How To

**You will need: the 3-D shapes built from nets (cone, cube, square pyramid, cylinder)**

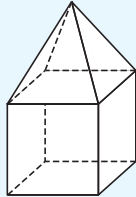
Stack the 3-D shapes to create the shapes below. Then, make your own 3-D shape combinations.



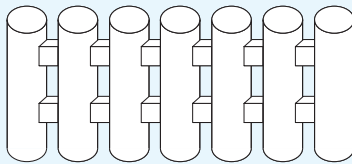
## Combine 3-D Shapes

### Practice Mode

Circle the names of the shapes you see in the pictures.



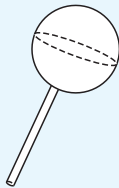
cube      cone      square pyramid



cylinder      cube      sphere



cube      cylinder      cone



rectangular prism      cylinder      sphere

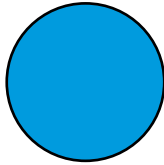
### A Closer Look

Stack and build with blocks to practice combining 3-D shapes. Or, stack and build with soup cans, food boxes, small balls, etc. Which shapes have flat surfaces and which do not? Ask your child to explain why some shapes stack easily and some do not.

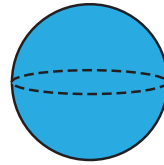


## 2-D and 3-D Shapes

Some shapes are flat or 2-D. Shapes such as circles, triangles, squares, rectangles, and hexagons are 2-D. Other shapes are solid or 3-D. Shapes such as spheres, cubes, cylinders, and cones are not flat.



A circle is a 2-D shape.



A sphere is a 3-D shape.

### Hands-On How To

**You will need: 2-D shape cut-outs (circle, square, rectangle, hexagon, triangle) put-together 3-D nets (square pyramid, cylinder, cone, cube)**

Sort the shapes into the correct column.

2-D	3-D

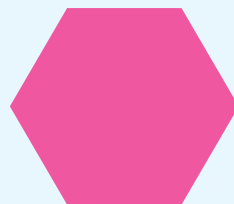
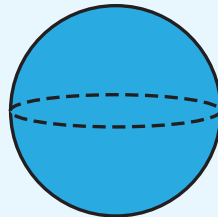
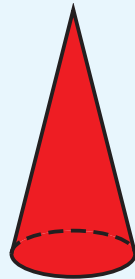
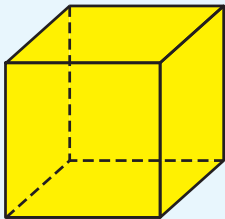
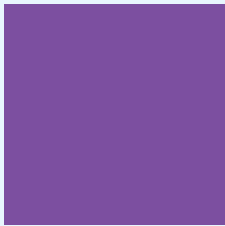
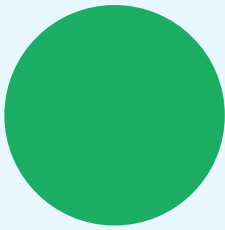
## 2-D and 3-D Shapes

### Dry-Erase

Turn some of the 2-D shapes on the dry-erase board into 3-D shapes. Hint: You can make a cube and a rectangular prism.

### Practice Mode

Circle the shapes that are 3-D.



NAME \_\_\_\_\_

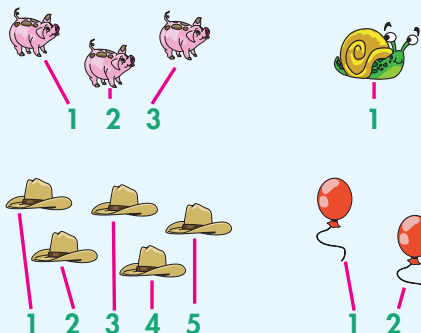
## One to One

### Dry-Erase

Color 5 dry-erase smiley faces, counting one number in order as you fill in each one.

### Practice Mode

Draw a line from each object to a number.



### A Closer Look

It is important for your child to understand that when they are counting objects, they count one number for each object being counted. This is called **one-to-one correspondence**. Use numbers to count things all around. Count toys, food items, fingers, and other things. Help your child say one number in order for each thing counted.

Spectrum Hands-On Math  
Grade K

Counting

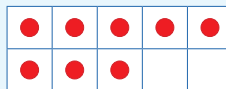
8

NAME \_\_\_\_\_

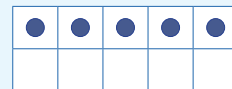
## Use a Ten Frame

### Practice Mode

In each ten frame, how many spaces are full? Circle the number.



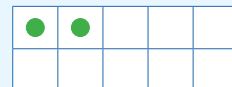
8 7 5



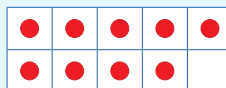
3 5 4



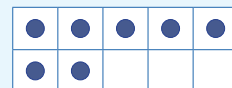
9 6 8



0 1 2



10 9 7



7 8 5

### A Closer Look

A **ten frame** is a two-by-five rectangular grid in which counters can be placed and moved around. This tool helps your child create a sense of "how many." It develops mental math skills and an understanding of how close or far away a number is from 10.

Spectrum Hands-On Math  
Grade K

Counting

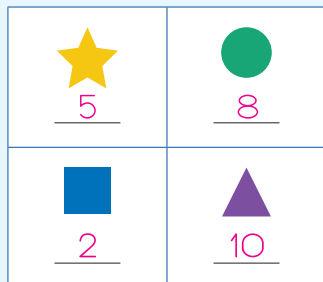
10

NAME \_\_\_\_\_

## Use a Number Line

### Practice Mode

Write the number on the number line that is above each shape.



### A Closer Look

A **number line** is a line on which numbers are marked at equal intervals. Number lines are important tools for practicing counting, but they also help your child develop skills they will use as they learn to add, subtract, and measure. Counting on and counting back is how number lines help support these skills.

Spectrum Hands-On Math  
Grade K

Counting

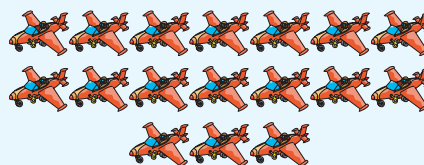
12

NAME \_\_\_\_\_

## How Many in All?

### Practice Mode

Circle the number of objects in each group.



14 16 17



18 14 15

### A Closer Look

You may notice that even though your child counts well, they may not show an understanding of **cardinality**, or the idea that the last number counted represents the quantity of the items in an entire group. This concept takes practice and maturity to develop. Be patient! In time, your child will understand that the number 10 represents all the fingers counted on two hands.

Spectrum Hands-On Math  
Grade K

Counting

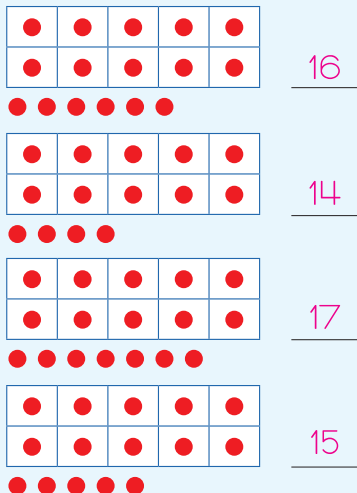
NAME \_\_\_\_\_

**Use a Ten Frame Past 10****Dry-Erase**

Use the dry-erase ten frame to show 12. Then, use the ten frame to show other numbers up to 19.

**Practice Mode**

How many in all? Write the number.

Spectrum Hands-On Math  
Grade K

Counting

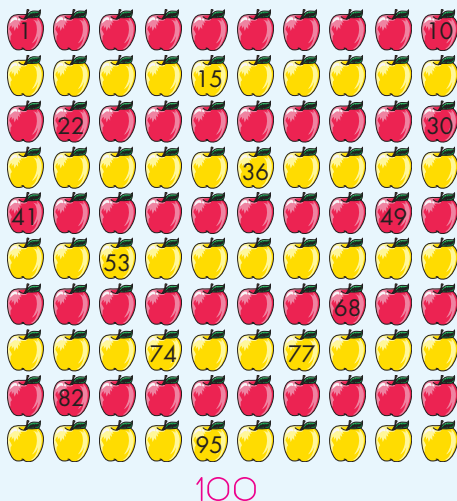
NAME \_\_\_\_\_

**Count to 100 by Ones****Dry-Erase**

Use the dry-erase hundred chart. Practice counting to 100 and crossing off the numbers as you go.

**Practice Mode**

Count the number of objects out loud. Write how many.

Spectrum Hands-On Math  
Grade K

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Counting

NAME \_\_\_\_\_

**Start at Any Number****Dry-Erase**

Use the dry-erase hundred chart. Circle 30. Now count up by ones to 100. Circle 60. Now count up by ones to 100. Keep circling numbers and counting up by ones to 100.

**Practice Mode**

Write the numbers that come next.

29    30    31    32    33

54    55    56    57    58

91    92    93    94    95

47    48    49    50    51

Spectrum Hands-On Math  
Grade K

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Counting

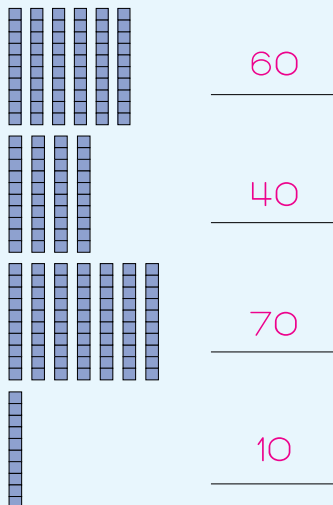
NAME \_\_\_\_\_

**Count to 100 by Tens****Dry-Erase**

Color the dry-erase base-ten blocks to show these numbers: 90, 30, 40. Count by tens and ones to help you.

**Practice Mode**

Count by tens and write how many.

Spectrum Hands-On Math  
Grade K

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Counting

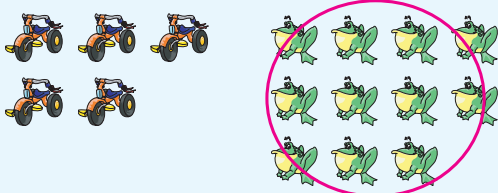
## Compare Numbers

### Dry-Erase

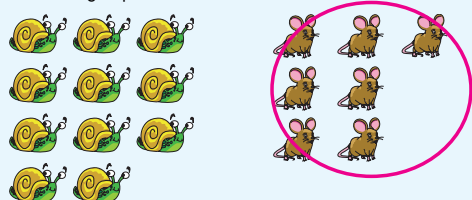
Use the dry-erase circles. Draw 4 squares in one circle and 5 squares in the other circle. Use the words **greater than**, **less than**, or **equal to** to describe the groups. Keep drawing groups and comparing them using the words **greater than**, **less than**, or **equal to**.

### Practice Mode

Circle the group that is greater.



Circle the group that is less.



## Add in 5

### Practice Mode

Solve the math problems.

$$1 + 2 = 3 \quad 1 + 4 = 5$$

$$4 + 0 = 4 \quad 5 + 0 = 5$$

$$2 + 3 = 5 \quad 2 + 1 = 3$$

$$3 + 1 = 4 \quad 2 + 2 = 4$$

### A Closer Look

While it is important for your child to understand how addition works, it is also important for them to learn to solve addition problems quickly and correctly in their heads. When your child is able to add quickly and correctly, they have developed **fluency** with this skill.

## Word Problems in 5

### Practice Mode

Solve these real-world problems.

Melanie had 1 sandwich for lunch. She ate 1 more sandwich for dinner. How many sandwiches did she eat all together?

$$1 + 1 = 2$$

Ricky caught 2 fish. Then, he caught 3 more. How many fish did Ricky catch in all?

$$2 + 3 = 5$$

Nakia has 1 doll. Then, she gets 2 more. How many dolls does she have all together?

$$1 + 2 = 3$$

### A Closer Look

If your child is struggling with this introduction to word problems, here are some tips you can use to help:

- Read the problem out loud.
- Circle all the numbers in the problem.
- Underline what you're being asked to find.
- Draw a picture of the problem.
- Use objects such as toys to act out the problem.

## Use Tally Marks to Add

### Dry-Erase

Use the dry-erase pad. Make tally marks for each number in the addition problems:  $2 + 6$ ,  $3 + 4$ ,  $7 + 1$ . Count the total.

### Practice Mode

Count or draw tally marks to solve each problem.

$$3 + 6 = 9$$



$$2 + 8 = 10$$



$$1 + 6 = 7$$



$$5 + 3 = 8$$



NAME \_\_\_\_\_

## Use Objects or Pictures to Add

### Dry-Erase

Draw mustaches on 4 dry-erase smiley faces. Then, draw hats on 4. How many in all? Draw bows on 5 smiley faces. Then, draw hats on 3. How many in all?

### Practice Mode

Solve the addition problems. Count the pictures to help you.

$$8 + 2 = \underline{10}$$


$$3 + 3 = \underline{6}$$


$$5 + 4 = \underline{9}$$


$$6 + 3 = \underline{9}$$


Spectrum Hands-On Math  
Grade K

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Addition and Subtraction in 10

NAME \_\_\_\_\_

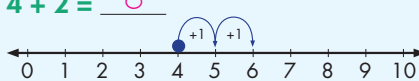
## Use a Number Line to Add

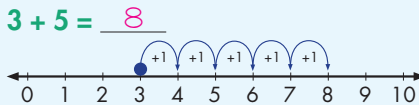
### Dry-Erase

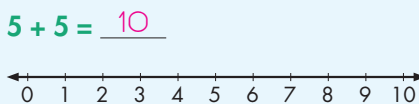
Use the dry-erase number line. Draw hops to help you solve these problems:  $1 + 5$ ,  $2 + 6$ ,  $7 + 2$ .

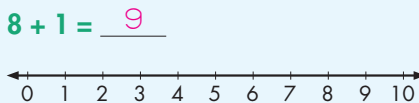
### Practice Mode

Use the number lines to solve the problems.

$$4 + 2 = \underline{6}$$


$$3 + 5 = \underline{8}$$


$$5 + 5 = \underline{10}$$


$$8 + 1 = \underline{9}$$


Spectrum Hands-On Math  
Grade K

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Addition and Subtraction in 10

NAME \_\_\_\_\_

## Make 10

### Practice Mode

Add to solve.

●	●	●		

$$\underline{7} + 3 = 10$$

●	●	●		

$$\underline{8} + 2 = 10$$

$$\underline{1} + 9 = 10$$

$$\underline{5} + 5 = 10$$

### A Closer Look

Learning what numbers add up to 10 is an important math strategy that your child will revisit in first grade. This strategy allows for the quick addition of numbers in order to create easily solvable equations. Practice will sharpen mental math skills and assist with math fluency.

Spectrum Hands-On Math  
Grade K

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Addition and Subtraction in 10

NAME \_\_\_\_\_

## Word Problems in 10

### Dry-Erase

Use the dry-erase pad. Draw pictures to illustrate each word problem below.

### Practice Mode

Solve these real-world problems.

Shana has 3 pencils. Then, she finds 4 more. How many pencils does Shana have all together?  $\underline{7}$

2 squirrels are in a tree. Then, 6 more climb the tree. How many squirrels are in the tree?  $\underline{8}$

4 books are on the table. Hector puts 2 more books on the table. How many books are on the table all together?  $\underline{6}$

Kaitlin saw 2 bunnies on her way to the playground. Then, she saw 7 bunnies on the walk home. How many bunnies did she see all together?  $\underline{9}$

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Grade K

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Addition and Subtraction in 10

**Subtract in 5****Dry-Erase**

Use the dry-erase equation frame to write these problems and solve them:  $5 - 5$ ,  $2 - 1$ ,  $4 - 3$ .

**Practice Mode**

Subtract to solve.

$$5 - 4 = \underline{1} \quad 4 - 3 = \underline{1}$$

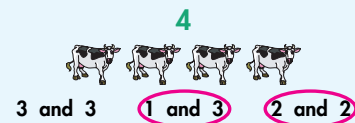
$$3 - 2 = \underline{1} \quad 2 - 2 = \underline{0}$$

$$4 - 2 = \underline{2} \quad 5 - 3 = \underline{2}$$

$$1 - 1 = \underline{0} \quad 3 - 1 = \underline{2}$$

**Decompose Numbers****Practice Mode**

Circle two different ways each number can be broken apart.

**A Closer Look**

Breaking numbers apart in different ways is one way for your child to begin to understand subtraction. This is called **decomposing numbers**. Help your child practice by asking them to show the same number by holding up a different number of fingers on each hand.

**Use Objects or Pictures to Subtract****Dry-Erase**

Color 8 dry-erase smiley faces. Erase 4. How many are left?  
Color 9 dry-erase smiley faces. Erase 5. How many are left?

**Practice Mode**

Use the pictures to help you solve the problems.

$$8 - 3 = \underline{5}$$



$$9 - 2 = \underline{7}$$



$$5 - 4 = \underline{1}$$



$$6 - 1 = \underline{5}$$

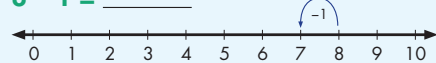
**Use a Number Line to Subtract****Dry-Erase**

Draw hops back on the dry-erase number line to help you solve these problems:  $9 - 4$ ,  $6 - 3$ ,  $10 - 7$ .

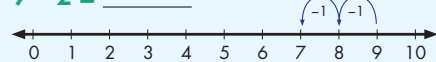
**Practice Mode**

Use the number line to count back to subtract.

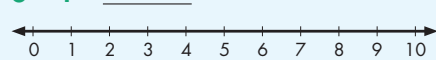
$$8 - 1 = \underline{7}$$



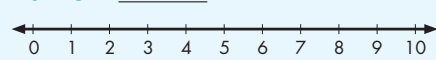
$$9 - 2 = \underline{7}$$



$$6 - 4 = \underline{2}$$



$$10 - 5 = \underline{5}$$



NAME \_\_\_\_\_

## Word Problems in 10

### Practice Mode

Draw pictures or use counters to solve these real-life problems.



Carlos has 8 pairs of shoes. 3 pairs of shoes are too small, so he gives them away. How many pairs of shoes does Carlos have left?

5

There are 9 fish in the tank. 6 fish get moved to a new tank. How many fish are left in the first tank?

3

There are 5 bushes in front of the house. Harper cuts down 1 bush. How many bushes are left in front of the house?

4

### A Closer Look

Your child has been introduced to both addition and subtraction word problems. In the future, your child will need to identify what math operation needs to be done to solve a word problem. To help your child, point out the clue words that make a word problem either addition or subtraction.

#### Addition

in all  
sum  
total  
all together  
plus  
add

#### Subtraction

fewer  
left  
take away  
minus  
difference  
remain

Spectrum Hands-On Math  
Grade K

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Addition and Subtraction in 10

NAME \_\_\_\_\_

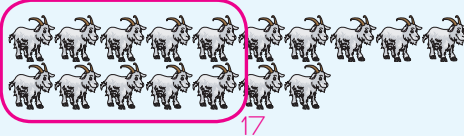
## Tens and Ones

### Dry-Erase

Circle 10 dry-erase smiley faces. Draw 9 more on the dry-erase pad. What number does 1 ten and 9 ones make?

### Practice Mode

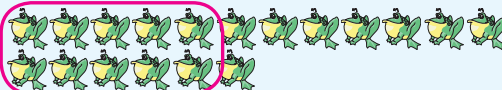
In each group, circle a ten. Count the ones. Write the sum.



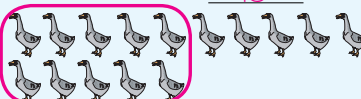
17



12



18



15

Spectrum Hands-On Math  
Grade K

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Place Value

NAME \_\_\_\_\_

## Base-Ten Blocks

### Dry-Erase

Color the dry-erase base-ten blocks to show these numbers: 14, 12, 16.

### Practice Mode

Write how many tens and ones are in each number.

13

1 ten, 3 ones

18

1 ten, 8 ones

16

1 ten, 6 ones

19

1 ten, 9 ones

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Grade K

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Place Value

NAME \_\_\_\_\_

## Non-Standard Units

### Practice Mode

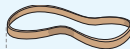
A paper clip can be a unit. Count the paper clips to measure the length of each object. Write the number.



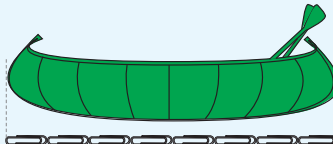
4



2



3



8

### A Closer Look

A **non-standard unit** is a unit of measurement that is not a standard unit (such as an inch or a centimeter) and that is not typically used for measuring. A non-standard unit could be a pencil, a penny, a finger, or something else. Measuring with non-standard units helps your child understand the concept of measurement before they are introduced to standard units.

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Measurement and Data



NAME \_\_\_\_\_

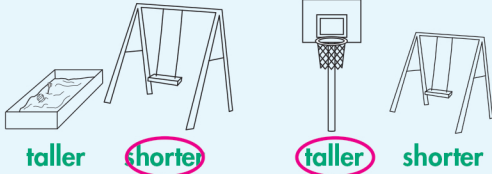
## Compare Height

### Dry-Erase

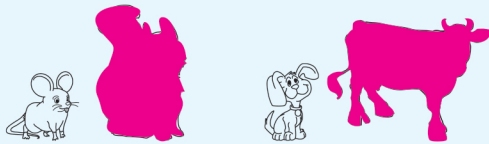
Use the dry-erase pad. Draw a tree. Draw something taller than the tree. Draw something shorter than the tree.

### Practice Mode

Circle the word that describes how each object compares to the swing set.



Color the taller object in each pair.

Spectrum Hands-On Math  
Grade K

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Measurement and Data

NAME \_\_\_\_\_

## Compare Weight

### Dry-Erase

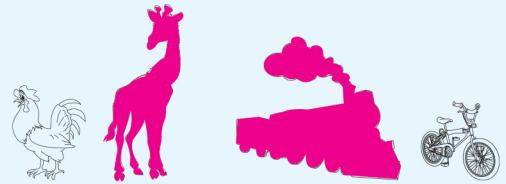
Use the dry-erase T-chart. Draw something that is heavier on one side of the chart. Draw something that is lighter on the other side of the chart. Keep drawing and comparing objects.

### Practice Mode

Circle the word that describes how each object compares to the bookshelf.



Color the heavier object in each pair.

Spectrum Hands-On Math  
Grade K

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Measurement and Data

NAME \_\_\_\_\_

## Sort and Classify Objects

### Dry-Erase

Use the dry-erase pad. Draw different kinds of fruit. Draw different kinds of vegetables. How many groups did you create? How many are in each group?

### Practice Mode



How many hats? 13

How many pairs of shoes? 8

How many pieces of fruit? 1

Spectrum Hands-On Math  
Grade K

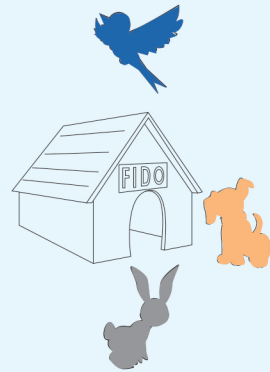
60

Measurement and Data

NAME \_\_\_\_\_

## Position Words

### Practice Mode



Color the thing that is above the doghouse **blue**.

Color the thing that is next to the doghouse **brown**.

Color the thing that is below the doghouse **gray**.

### A Closer Look

Learning position words helps your child develop **spatial awareness**, an important early math skill. You can help by talking with your child about where things are. Choose an item in the room. Give your child clues about whether it is *above*, *below*, or *next to*. Can your child find the item? Have your child give you clues, too.

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Measurement and Data

NAME \_\_\_\_\_

## Squares

### Dry-Erase

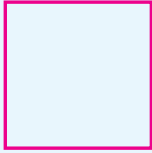
Use the dry-erase pad. Draw a square. Then, make it into a gift, a picture frame, a checkerboard, or something else.

### Practice Mode

Color the squares.



Draw and label a square.



square

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Grade K

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Geometry

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## Rectangles

### Dry-Erase

Use the dry-erase pad. Draw a rectangle. Then, make it into a flag, a window, an envelope, or something else.

### Practice Mode

Color the rectangles.



Draw and label a rectangle.



rectangle

Spectrum Hands-On Math  
Grade K

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Geometry

NAME \_\_\_\_\_

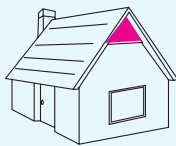
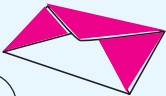
## Triangles

### Dry-Erase

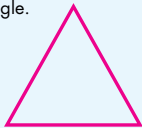
Use the dry-erase pad. Draw a triangle. Then, make it into a slice of pizza, a birthday hat, a sign, or something else.

### Practice Mode

Color the triangles.



Draw and label a triangle.



triangle

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Geometry

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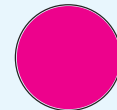
## Circles

### Dry-Erase

Use the dry-erase pad. Draw a circle. Then, make it into a sun, a cookie, a face, or something else.

### Practice Mode

Color the circles.



Draw and label a circle.



circle

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Geometry

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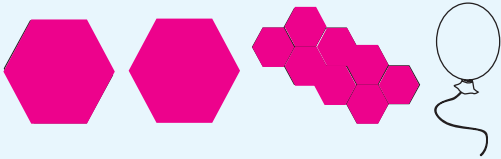
## Hexagons

### Dry-Erase

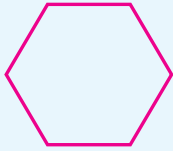
Use the dry-erase pad. Draw a hexagon. Then, make it into a sign, a nut, or something else.

### Practice Mode

Color the hexagons.



Draw and label a hexagon.



hexagon

Spectrum Hands-On Math  
Grade K

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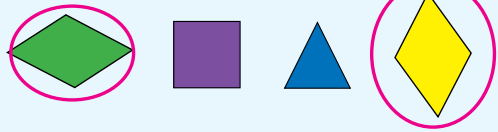
## Rhombuses

### Dry-Erase

Use the dry-erase pad. Draw a rhombus. Then, make it into a kite, a sign, a diamond ring, or something else.

### Practice Mode

Circle the rhombuses.



Draw and label a rhombus.



rhombus

Spectrum Hands-On Math  
Grade K

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## Real-World Shapes

### Dry-Erase

Use the dry-erase shapes. Draw on the shapes to turn them into things you see around you.

### Practice Mode

Write the name of the shape next to the real-life object.

	circle
	triangle
	rectangle
	circle
	square

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Grade K

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## Combine Shapes

### Dry-Erase

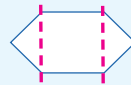
Look at the shapes on the dry-erase board. Draw lines inside each shape to divide it into more shapes.

### Practice Mode

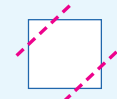
Draw lines inside the rectangle to show how it can be made from different shapes. *Answers may vary.*



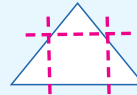
Draw lines inside the hexagon to show how it can be made from different shapes.



Draw lines inside the square to show how it can be made from different shapes.



Draw lines inside the triangle to show how it can be made from different shapes.



Spectrum Hands-On Math  
Grade K

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### 3-D Shapes

#### Practice Mode

Write the names of the shapes.



sphere



cylinder



rectangular

prism



cone

#### A Closer Look

Recognizing **3-D shapes**, or solid shapes, is an important skill. Help your child identify 3-D shapes in the real world (balls, cans of food, cereal boxes, etc.) and tell how they are different from 2-D, or flat, shapes. Encourage your child to form solid shapes from modeling clay.

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Geometry

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### Real-World 3-D Shapes

#### Dry-Erase

Take a look around the room. Find things that are 3-D shapes. Then, draw each shape on the dry-erase pad.

#### Practice Mode

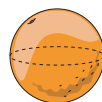
Write the name of the shape next to the real-life object.



cylinder



cone



sphere



cube

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Geometry

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### Combine 3-D Shapes

#### Practice Mode

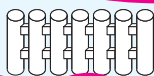
Circle the names of the shapes you see in the pictures.



cube

cone

square pyramid



cylinder

cube

sphere



cube

cylinder

cone



rectangular prism

cylinder

sphere

#### A Closer Look

Stack and build with blocks to practice combining 3-D shapes. Or, stack and build with soup cans, food boxes, small balls, etc. Which shapes have flat surfaces and which do not? Ask your child to explain why some shapes stack easily and some do not.

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Geometry

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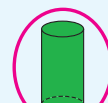
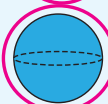
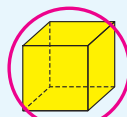
### 2-D and 3-D Shapes

#### Dry-Erase

Turn some of the 2-D shapes on the dry erase board into 3-D shapes. Hint: You can make a cube and a rectangular prism.

#### Practice Mode

Circle the shapes that are 3-D.

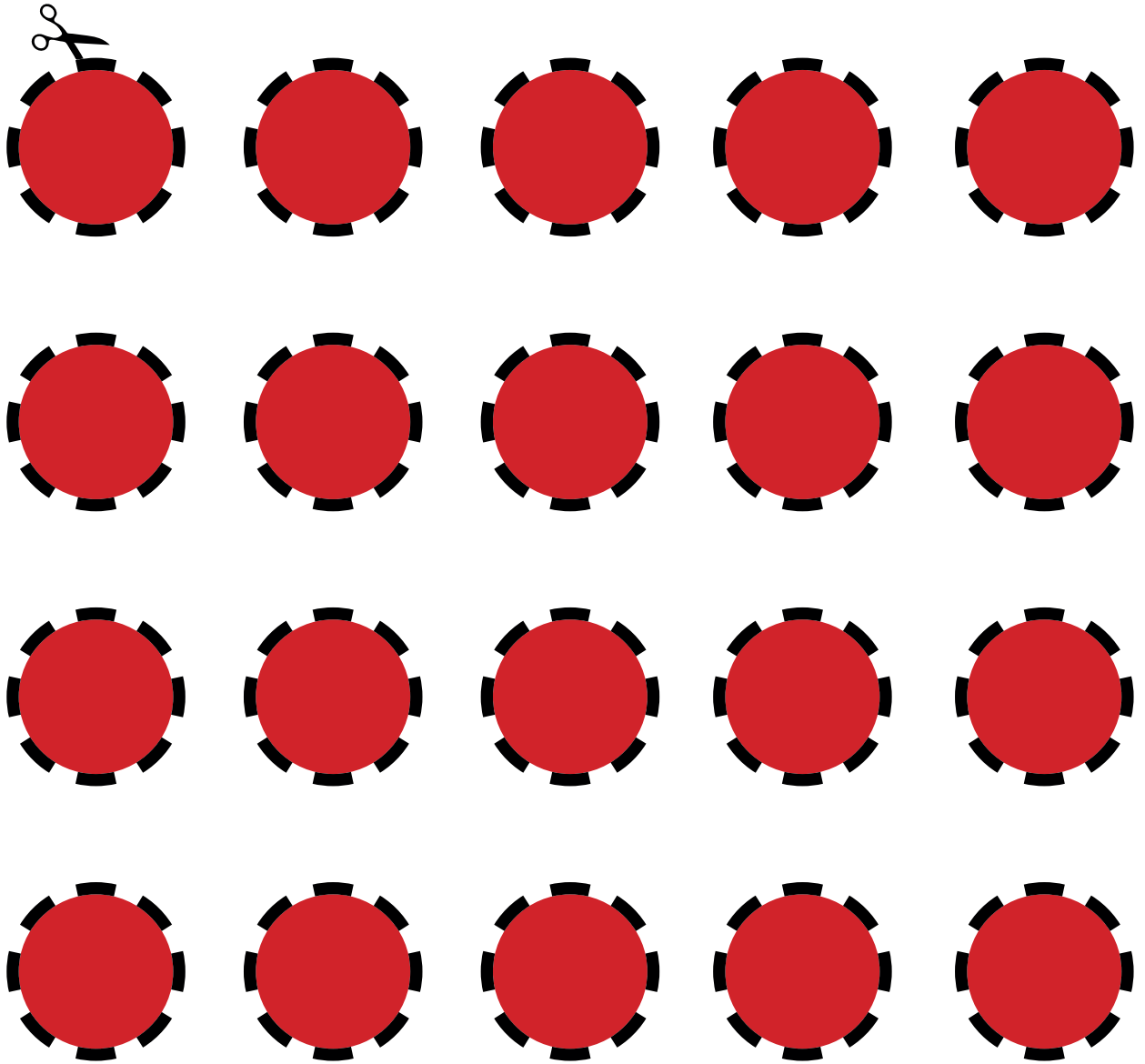


Spectrum Hands-On Math  
Grade K

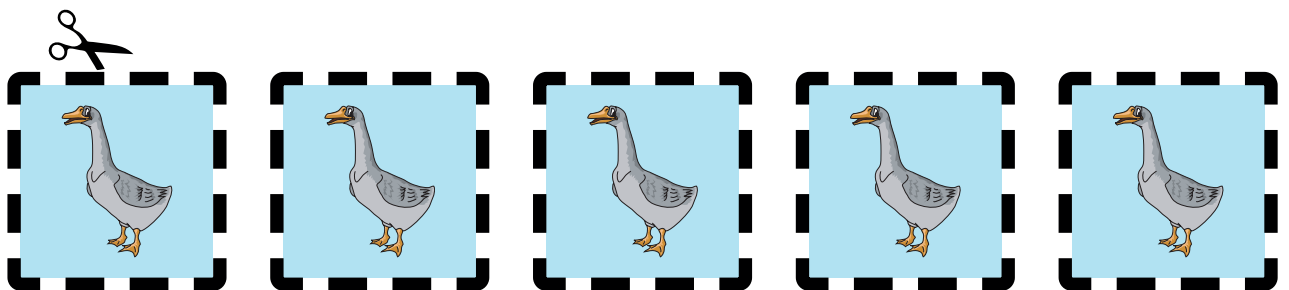
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Geometry

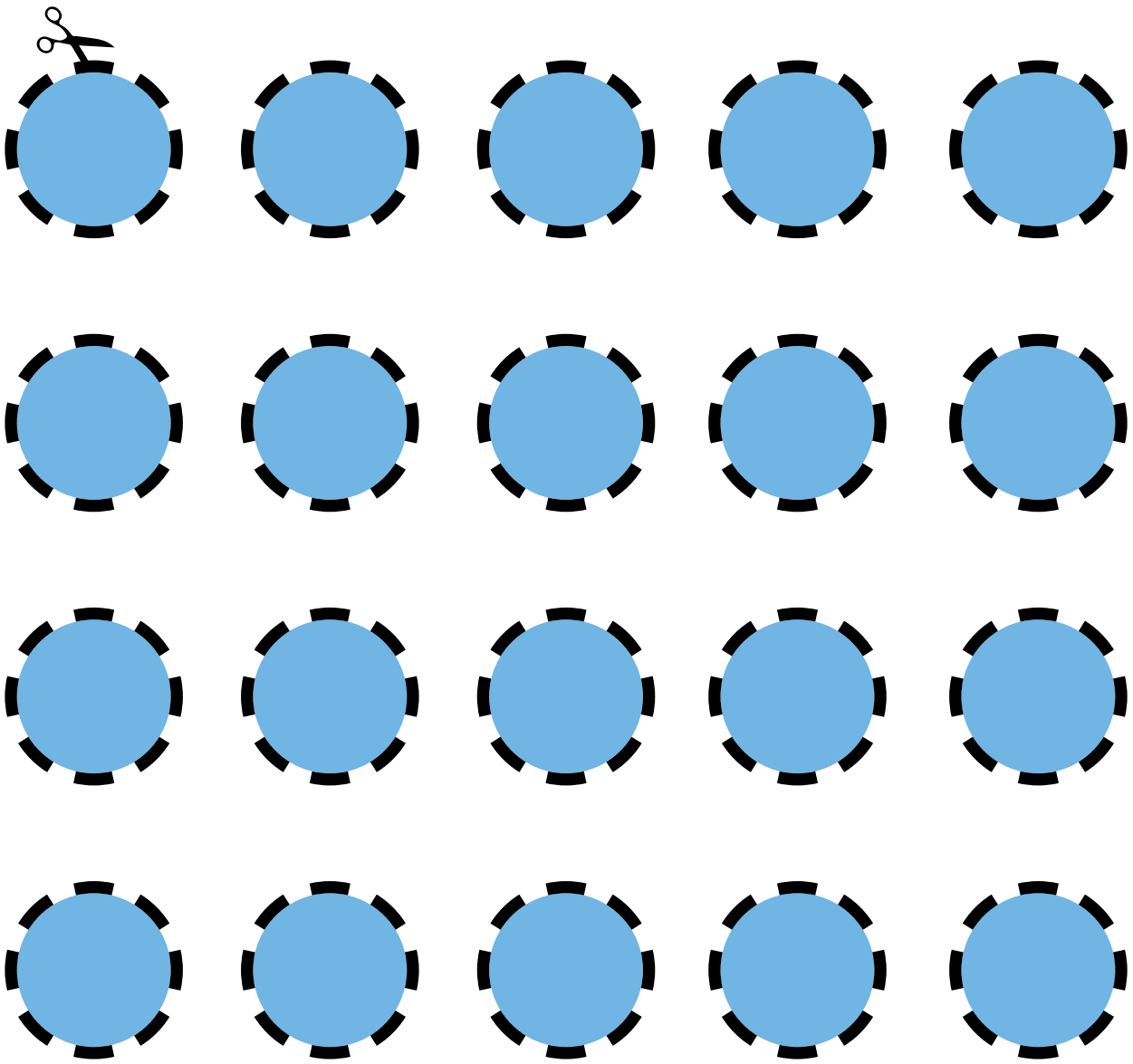
## Counters



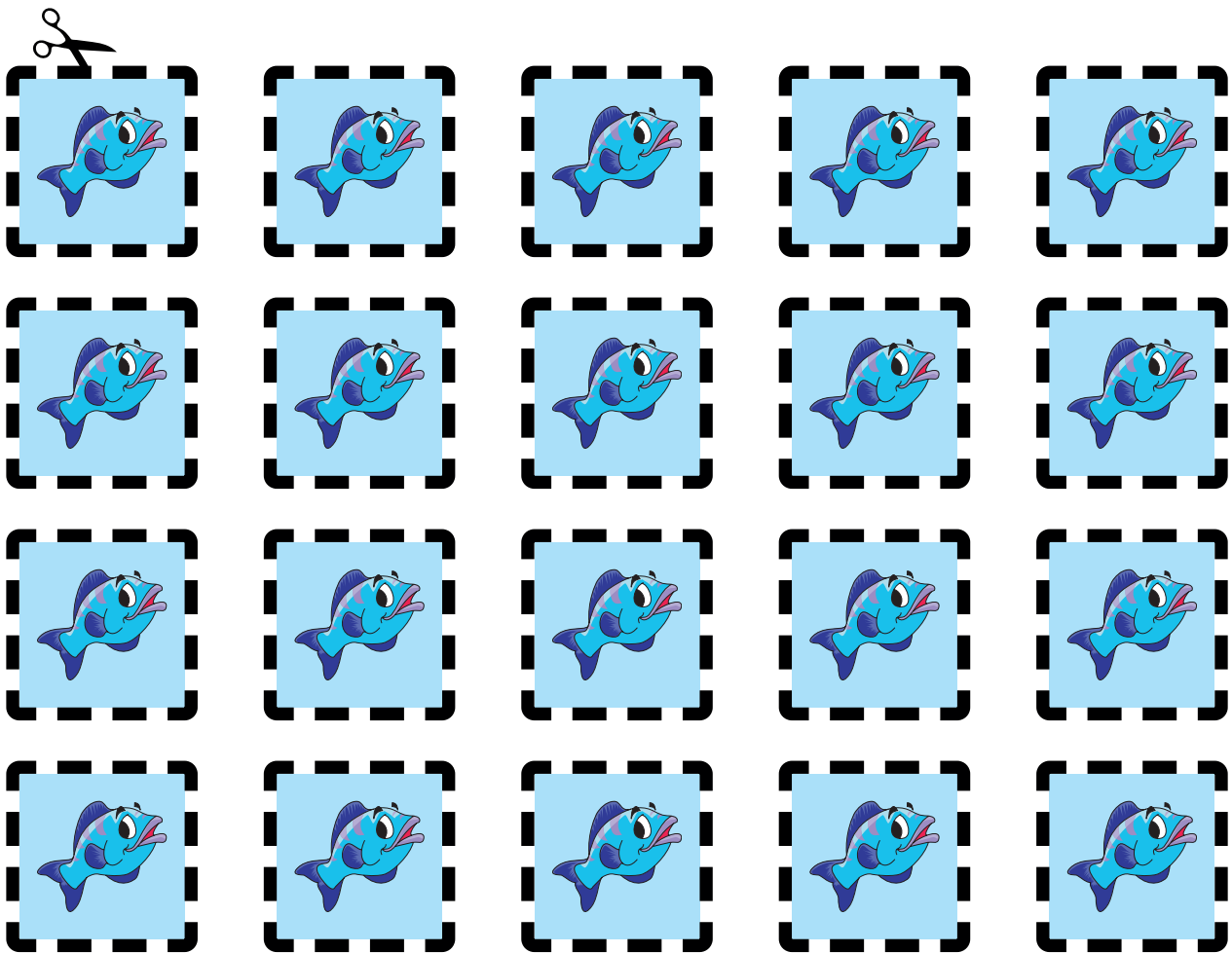
## Goose Cut-Outs



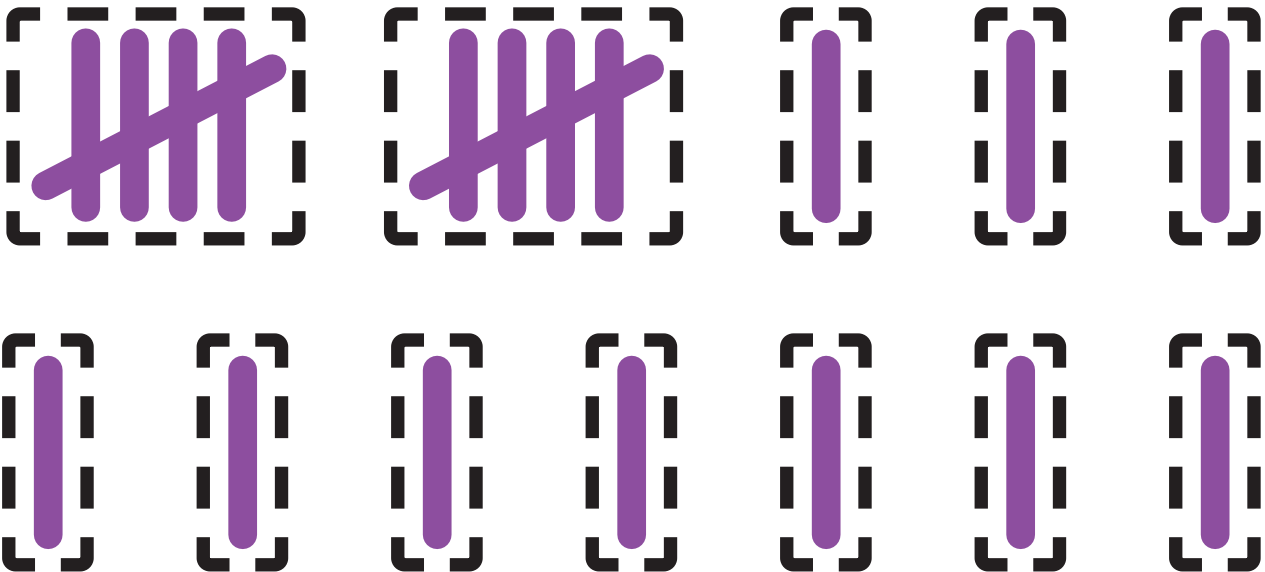
Counters



Fish Cut-Outs



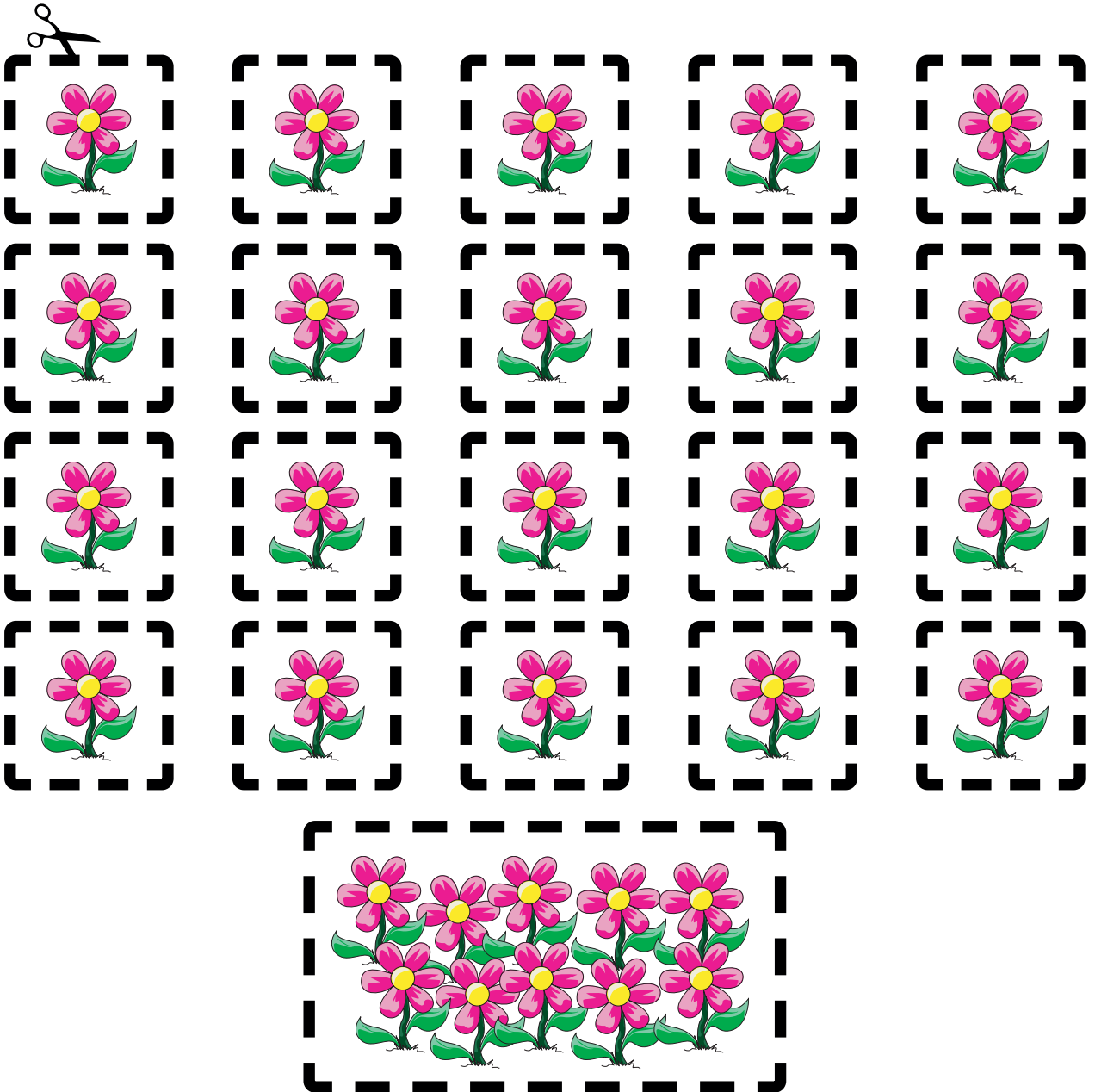
Tally Mark Cut-Outs



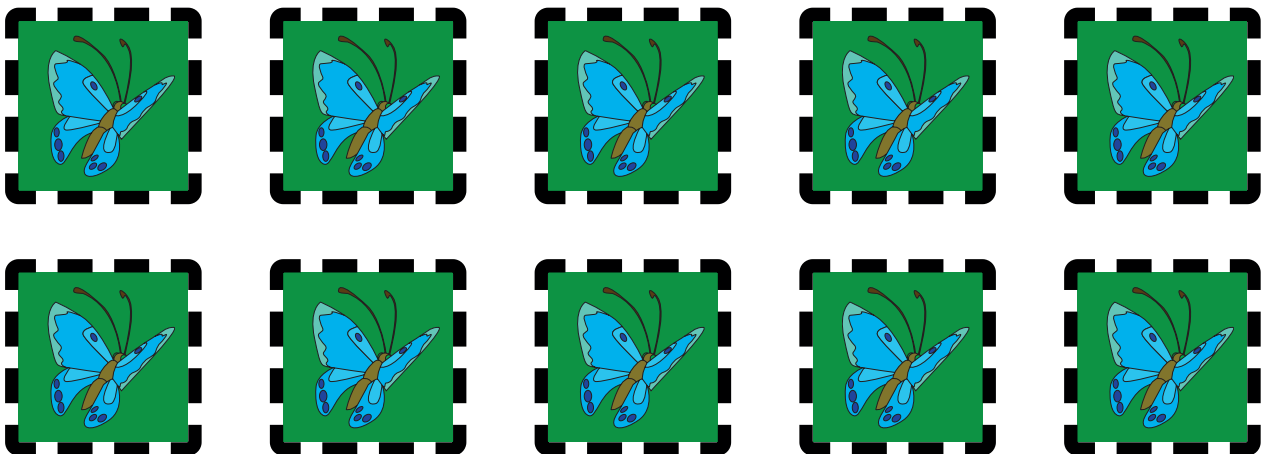




## Flower Cut-Outs

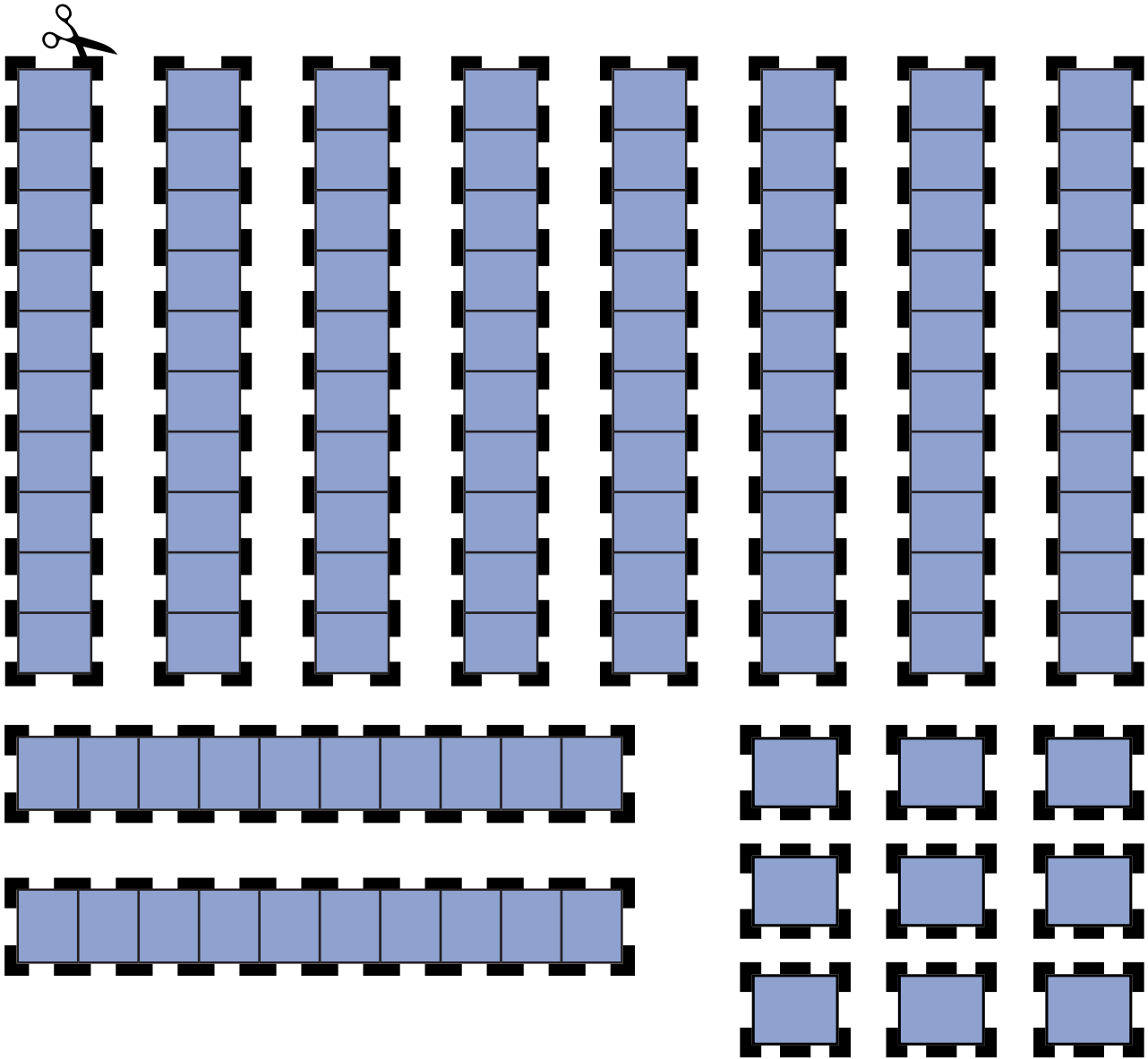


## Butterfly Cut-Outs





# Tens and Ones Blocks

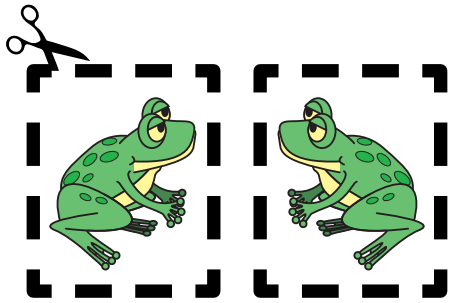


# Number Cards

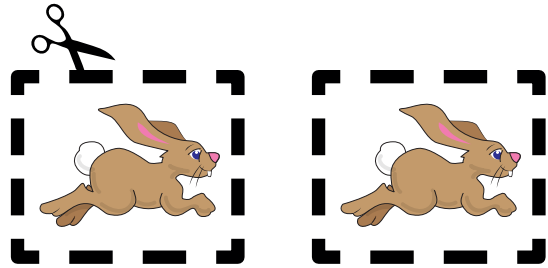




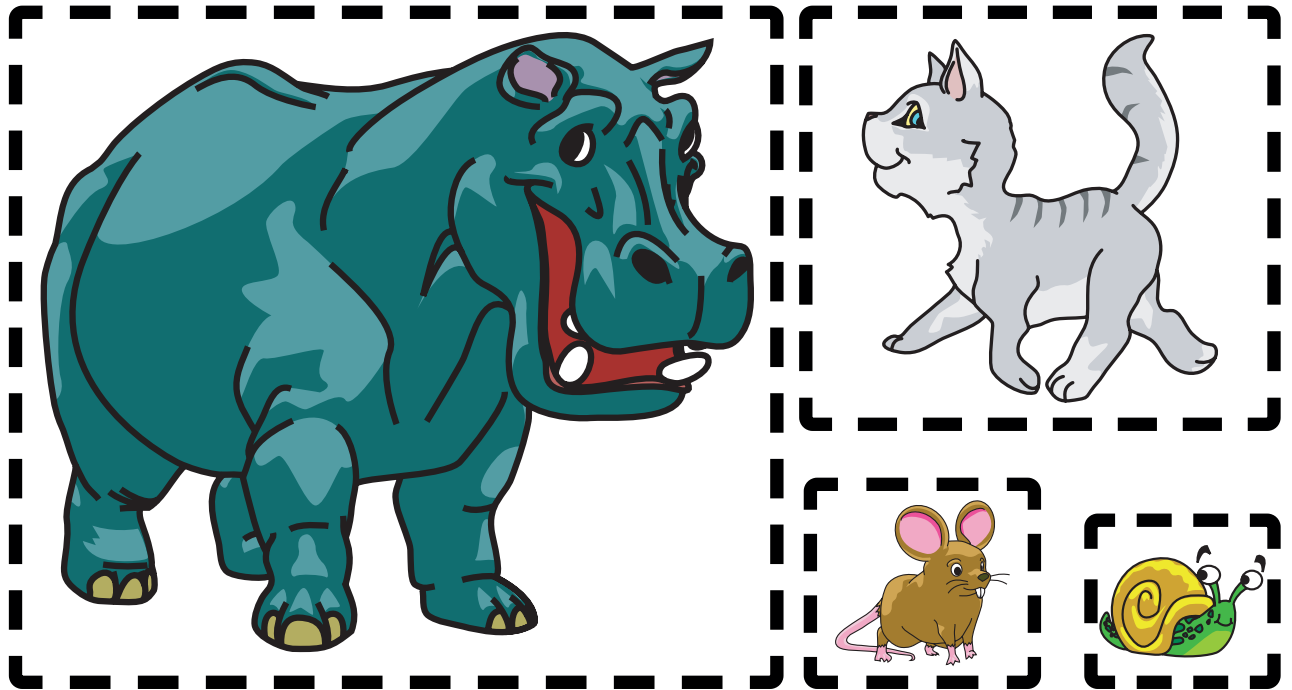
## Frog Hoppers



## Rabbit Hoppers



## Animal Cut-Outs

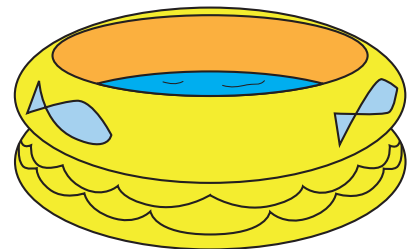
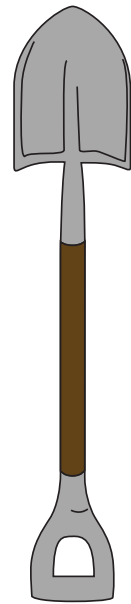


## Number Cards





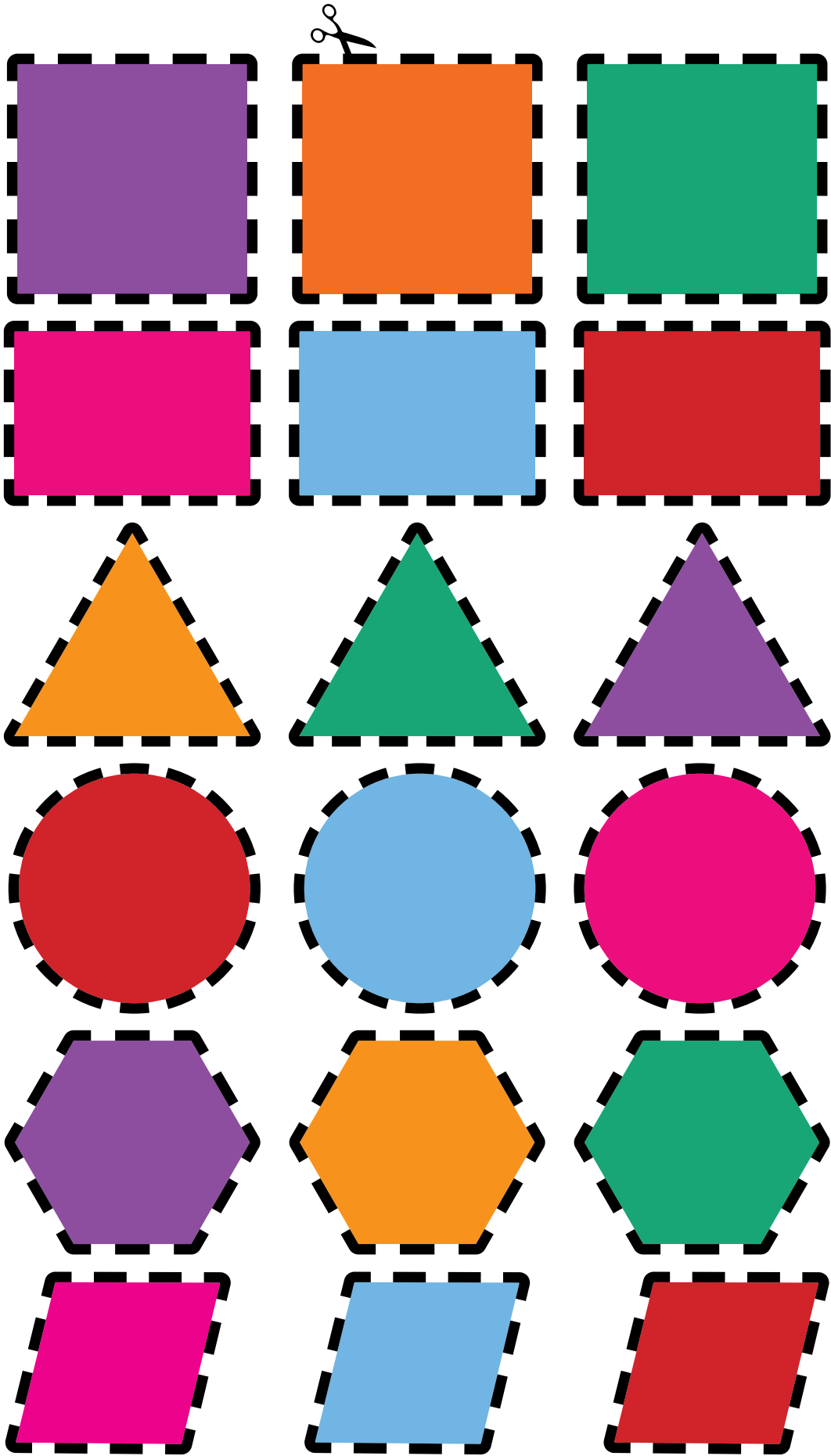
## Object and Animal Cut-Outs





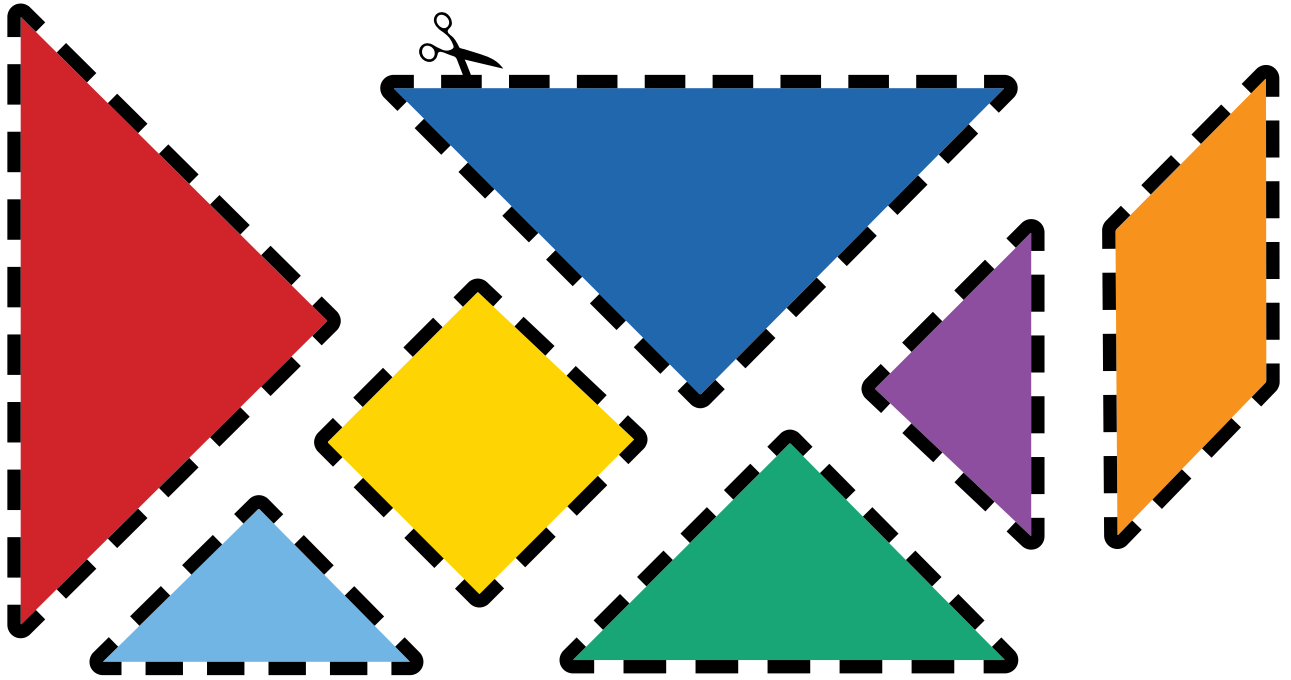


Shape Cut-Outs

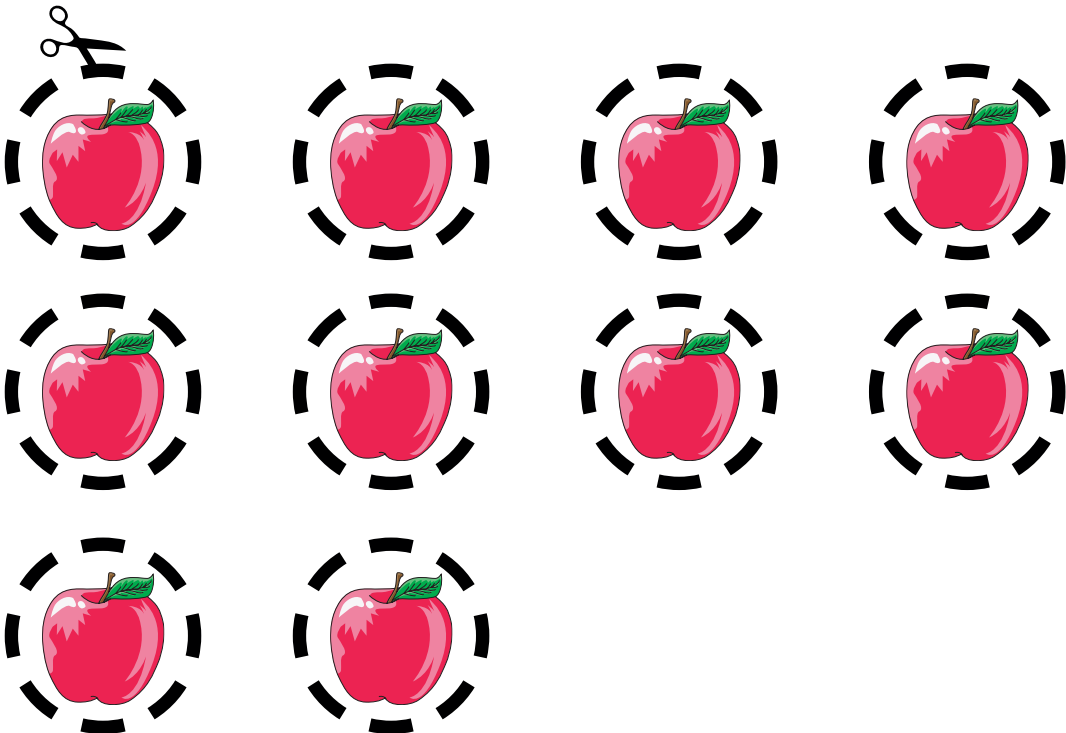




## Tangram Cut-Outs

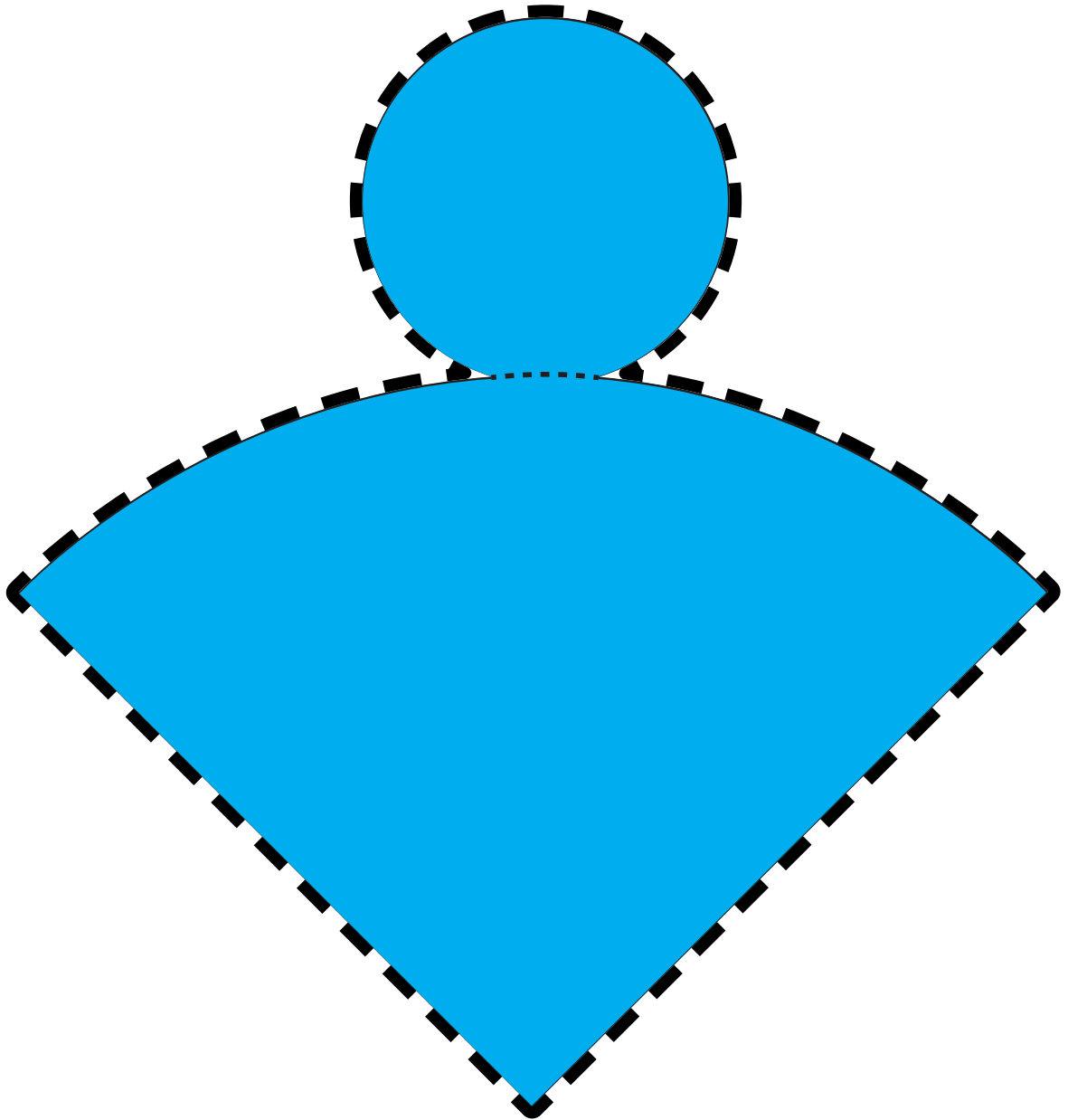


## Apple Counters





## Cone Net

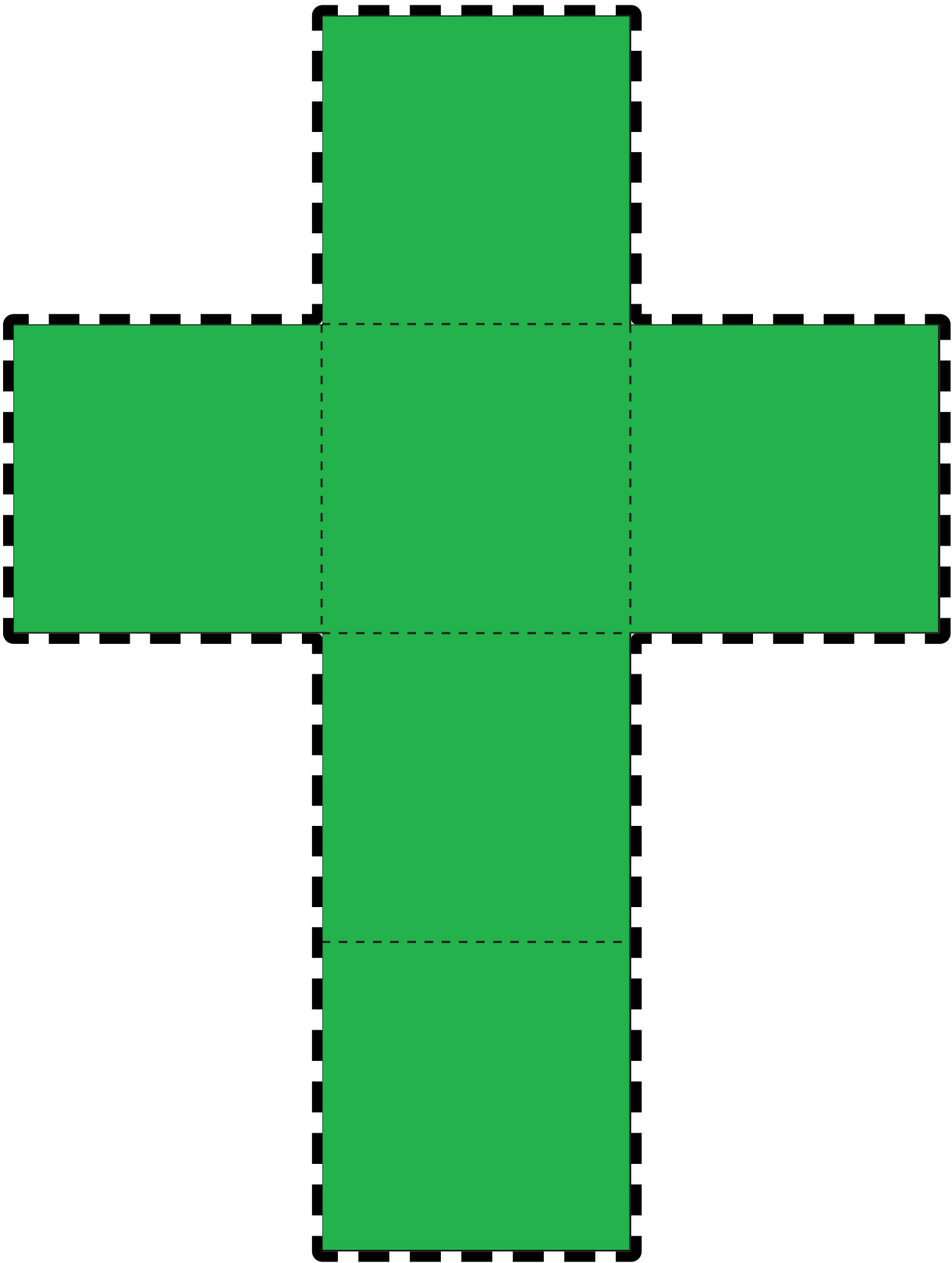


## Number Cards





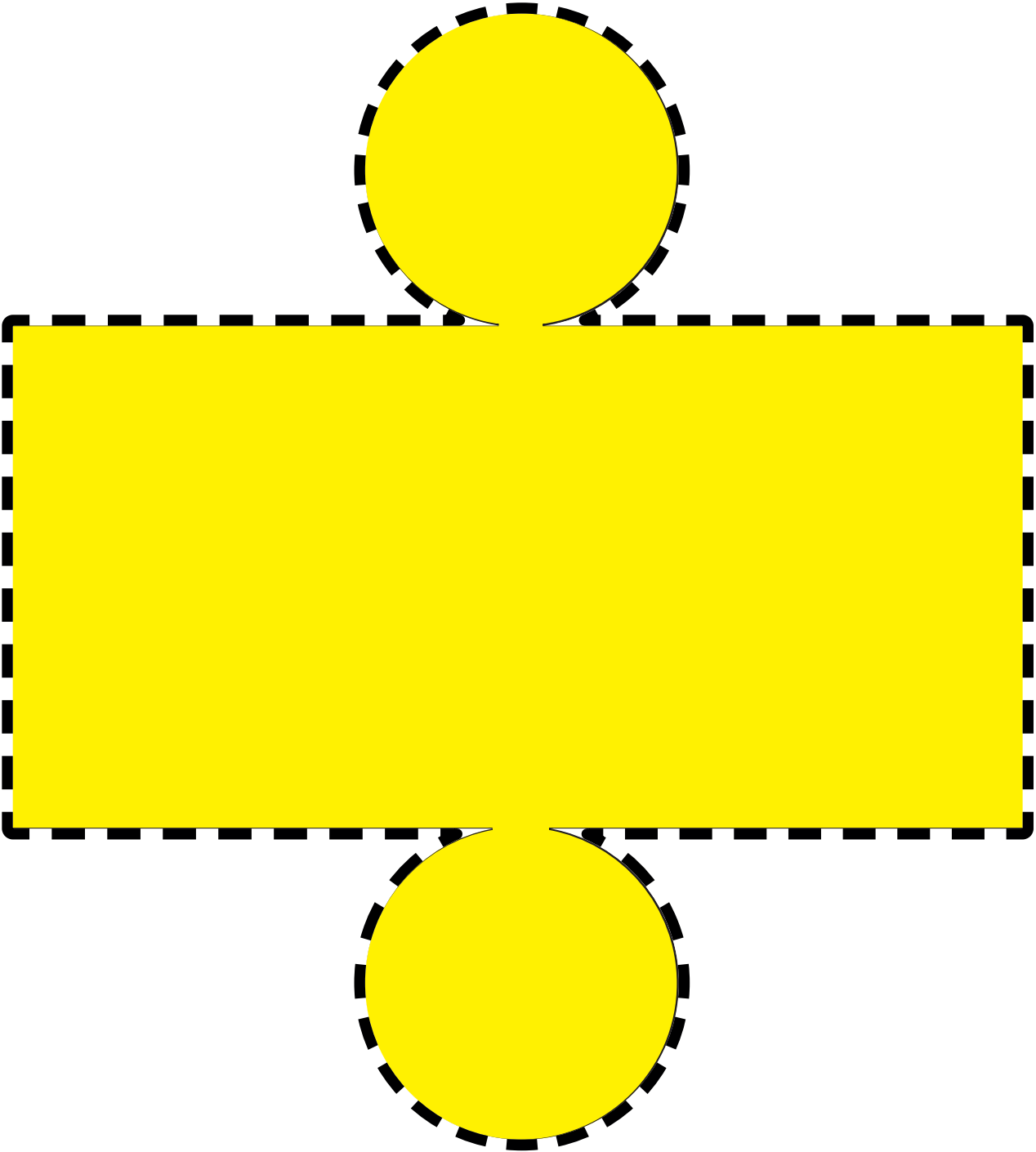
Cube Net





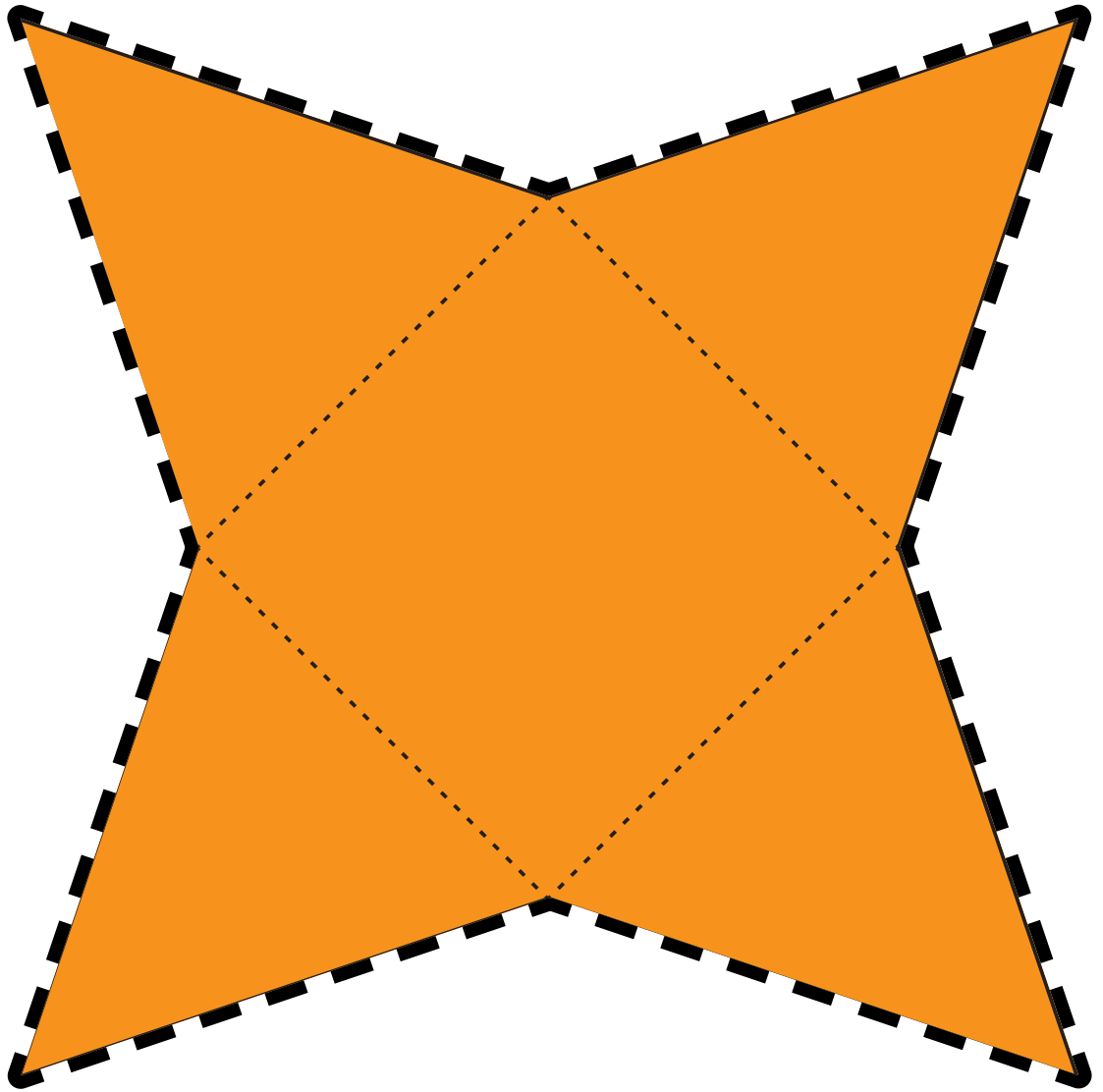


Cylinder Net





## Square Pyramid Net

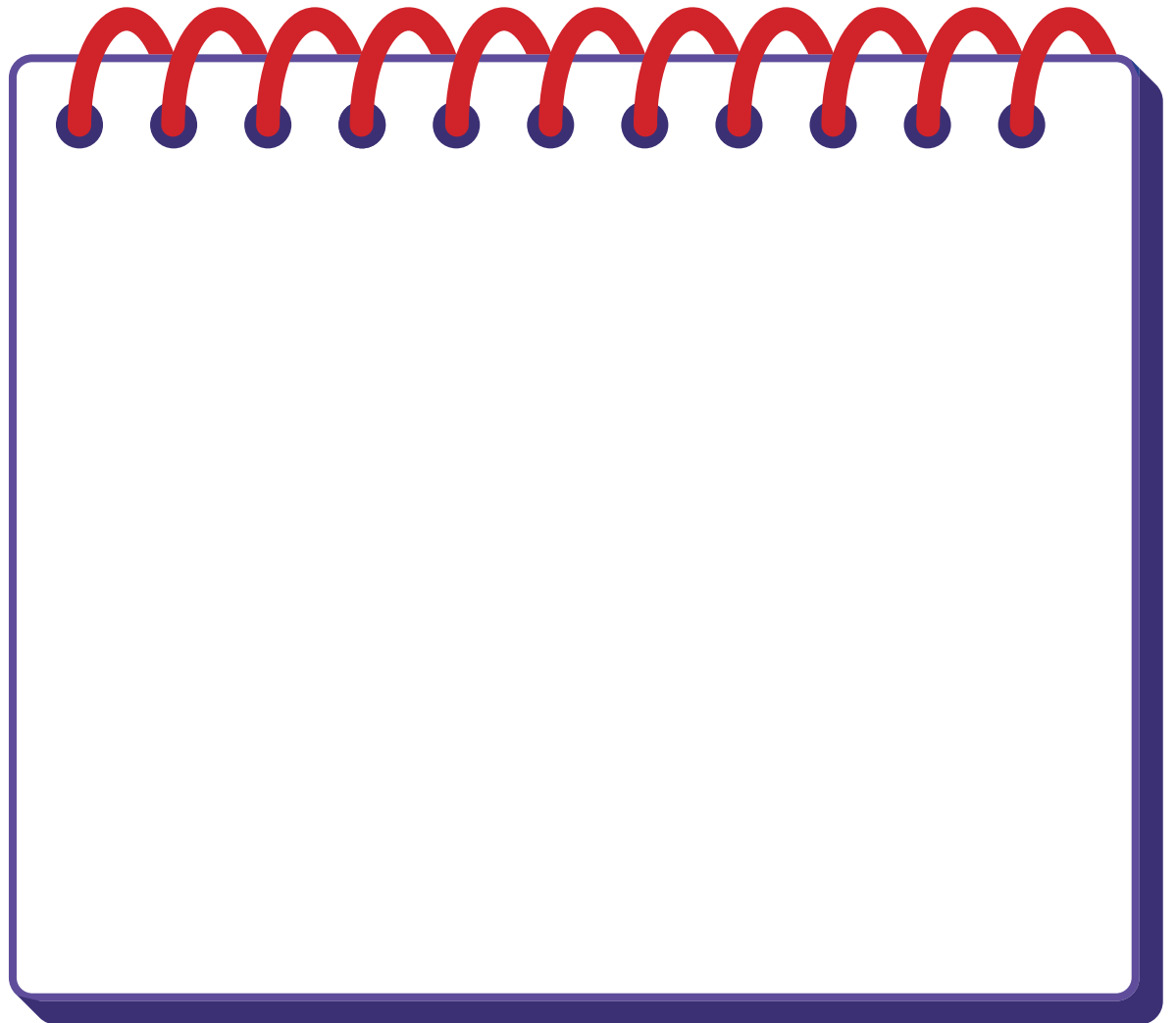


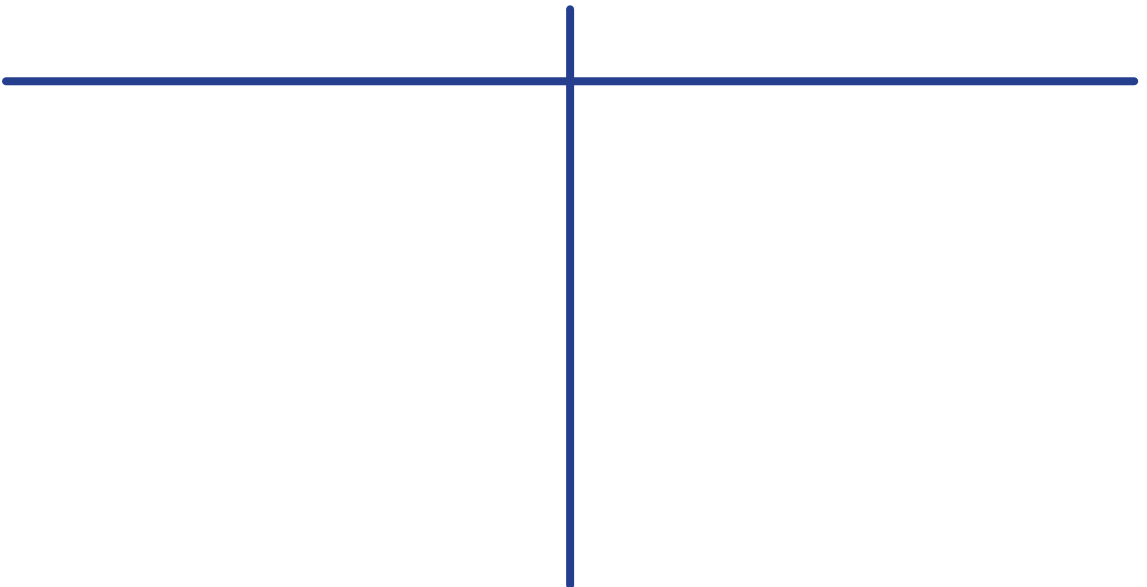
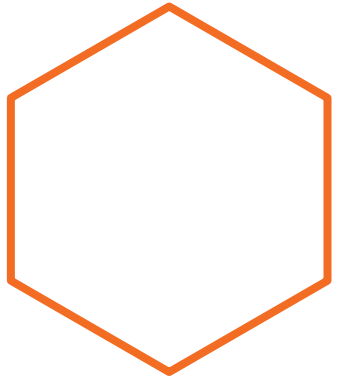
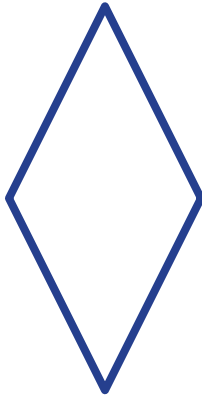
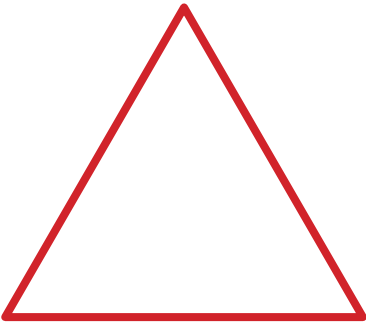
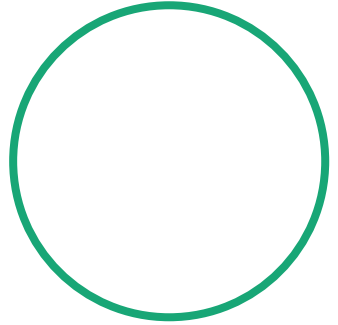
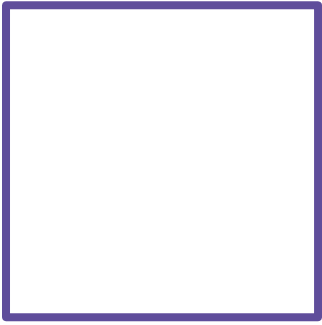
## Number Cards











**Spectrum Hands-On Math provides all you need to make kindergarten math easy to understand, practice, and master!**

**Inside this kit, you will find**

- A step-by-step visual walk-through of an important kindergarten math topic in each lesson.
- A handy storage pouch and 150+ manipulative pieces to use with hands-on activities that bring math to life, making it memorable and fun.
- A dry-erase pen and dry-erase practice activities to complete again and again.
- A special feature for parents and caregivers, *A Closer Look*, that explains math concepts and gives tips and strategies for helping children develop math skills.

