Unit 7

Solid Shapes All Around Us

Essential Questions

- How can we distinguish between flat shapes and solid shapes?
- How can we describe and compare solid shapes?
- How can solid shapes be put together to make larger shapes?

Unit Story: Everyone Needs Help Sometimes

You can read the Unit Story with your student by visiting the Unit Story page on the Caregiver Hub.

Unit Investigation

Lesson 1 is the Unit Investigation. Students build representations of drawings using solid shapes, such as cones, cubes, cylinders, spheres, and prisms to build curiosity and apply their own knowledge in a variety of ways. Use the **Caregiver Connection** to help students continue to explore the math they will see in the unit.

Caregiver Connection

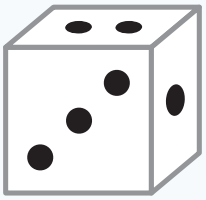
Students may enjoy drawing their own shape designs on paper and using solid shapes to represent their drawings. For example, using a soccer ball or a can to represent a circle.

You can ask:

- "What do you notice about the shapes you drew and the shapes you built with?"
- "How are they the same? How are they different?"

Summary | Lesson 2

We can find objects in our world that look like **solid shapes**.



Try This

Draw

1

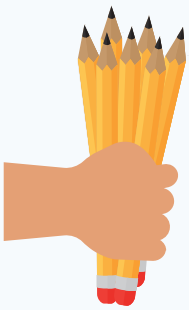
2

Directions:

1–2. Find and draw an object that matches the solid shape.

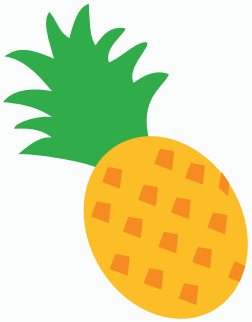
Summary | Lesson 3

You can compare the weights of 2 objects. Holding both objects can help you figure out which is **heavier** and which is **lighter**.



Try This

1



2

Directions:

1. Circle the object that is *heavier*.

2. Circle the object that is *lighter*.

Summary | Lesson 4

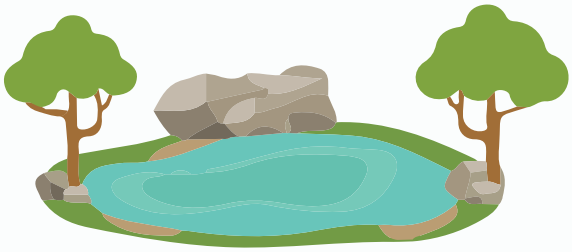
You can compare objects by measuring which holds more or which holds less.

Smart Calendar/Shutterstock.com

Design tech art/Shutterstock.com

Try This

1



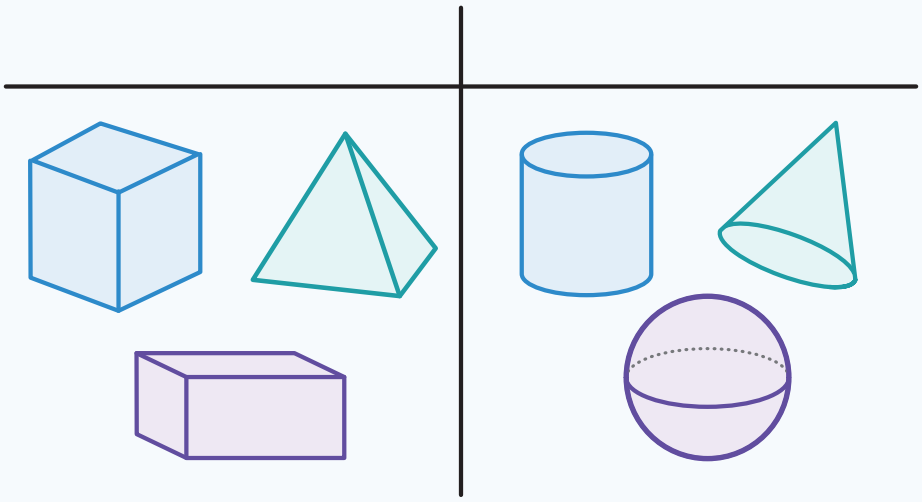
2

Directions:

1. Circle the container that can hold *more* water.
2. Circle the container that can hold *less* water.

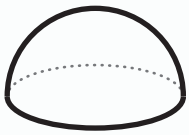
Summary | Lesson 5

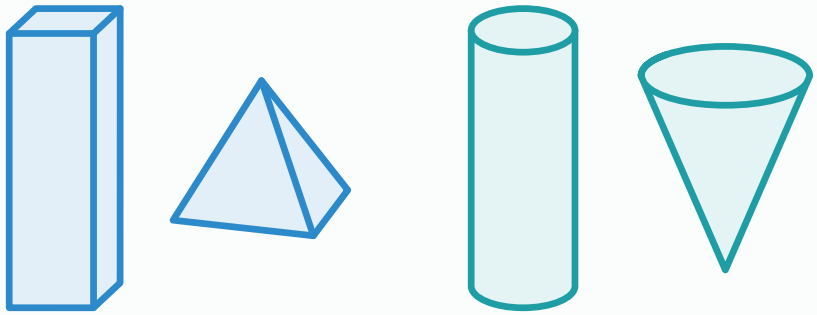
You can compare solid shapes by talking about what is alike or different about them.



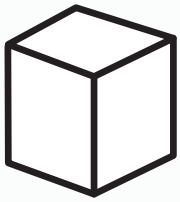
Try This

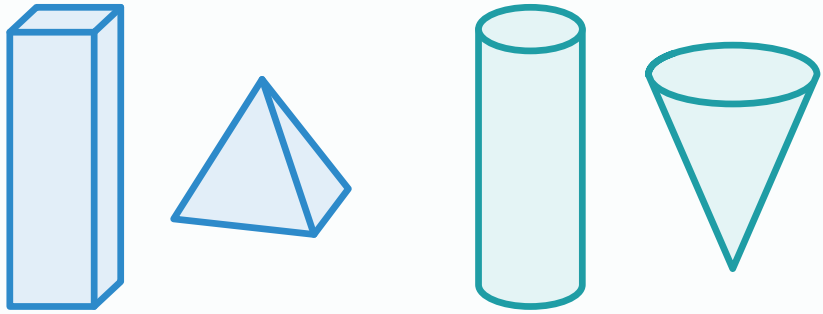
1





2



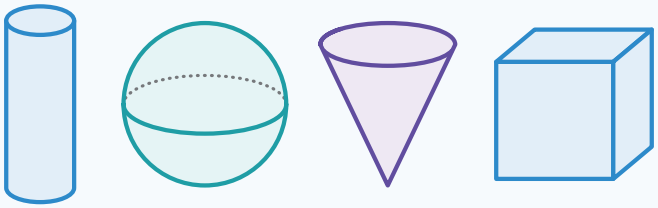


Directions:

1–2. Circle the group the shape belongs in.

Summary | Lesson 6

You can figure out the name of a solid shape, such as cylinder, sphere, cone, and cube, by noticing its parts.

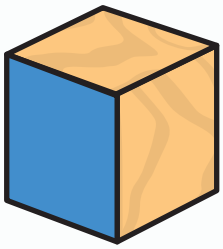


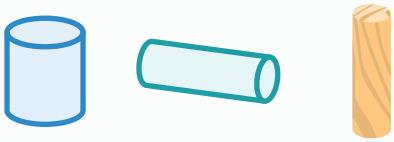
Try This

cube

cone

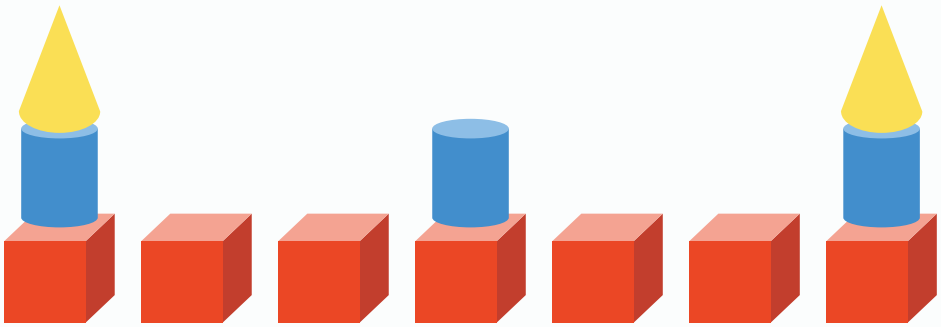
face →





cylinder

1

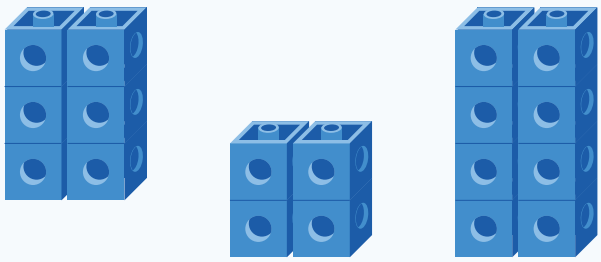


Directions:

1. Diego and Clare used solid shapes to build a wall. Use the words to name and describe the shapes that Diego and Clare used.

Summary | Lesson 7

Building shapes helps us notice how they are alike and different.



Try This

1

Draw

Directions:

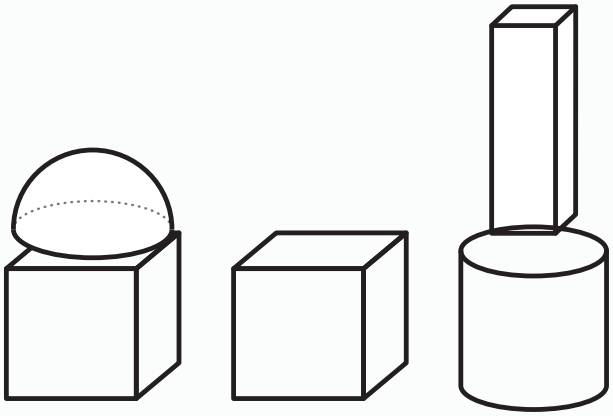
1. Use solid shapes to build something. Draw a picture of what you made.

Summary | Lesson 8

Solid shapes can be put together in different ways.

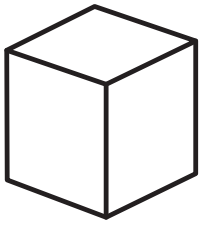
Try This

1



2

Draw



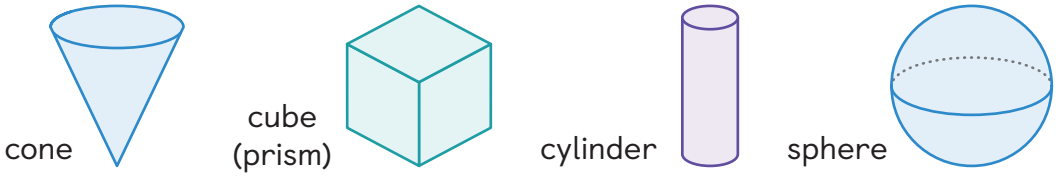
Directions:

1. Circle the shape that is *next to* the cylinder. Put an X on the shape that is *above* the cube. Color in the shape that is *below* the rectangular prism.
2. Draw a circle *next to* the cube and a triangle *above* the cube.

Sub-Unit 1 | Summary

In this sub-unit . . .

- We noticed solid shapes in the world around us and learned some of their names.

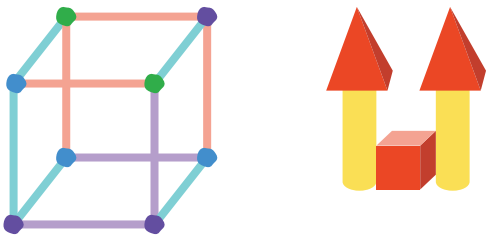


- We described and compared solid shapes. We noticed how they are different from flat shapes.

They are both pop-up shapes. I can see a triangle on one of them and a square on the other.

Math tip: We can compare solid shapes using words such as *heavier*, *lighter*, *taller*, *longer*, and *shorter*.

- We built solid shapes and put solid shapes together.



Summary | Lesson 9

Different expressions can have the same value.

5 – 2

2 + 1

4 – 1

3 + 0

Try This

1 $3 + 1 =$ _____

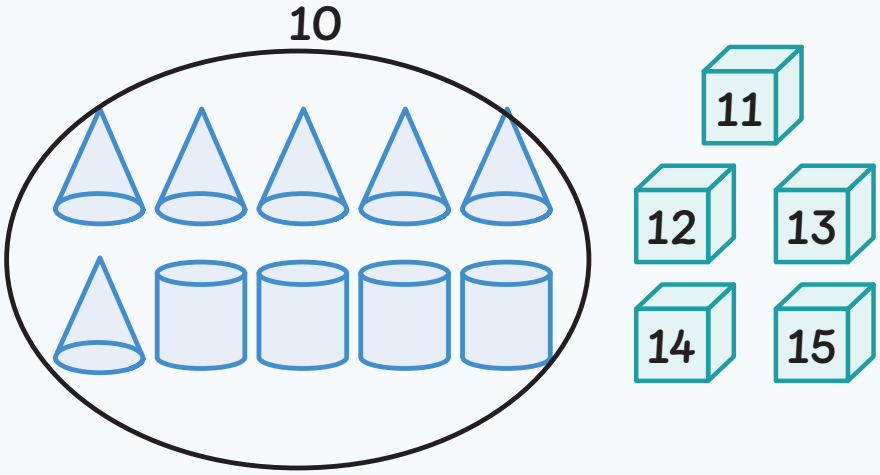
$5 - 1 =$ _____

Directions:

1. Write the value of each expression. Explain how the expressions are alike. Explain how they are different.

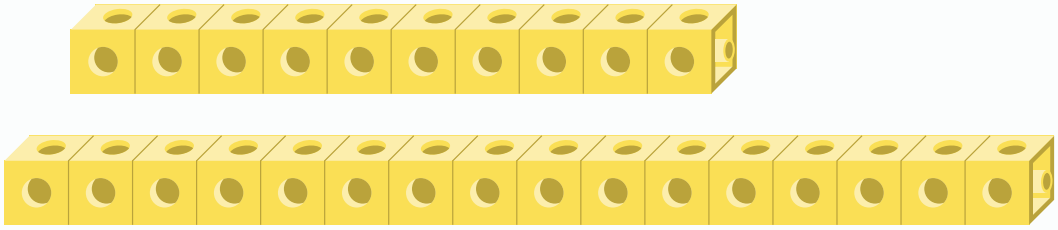
Summary | Lesson 10

You can group objects together in a way that helps you count them.



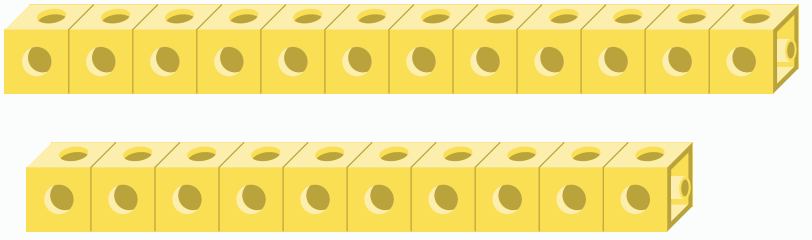
Try This

1



16

2



12

Directions:

1–2. Circle the tower that has the same amount of shapes as the number.

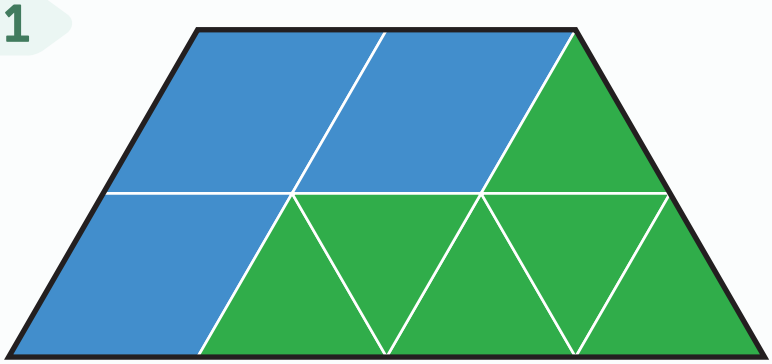
Summary | Lesson 11

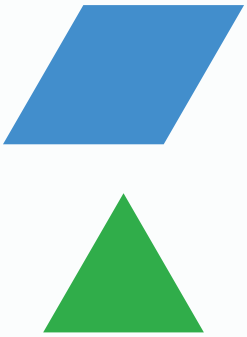
You can compare the number of shapes in 2 groups using the words *more*, *fewer*, and *same*.

There are more rhombuses than squares.
There are fewer squares than rhombuses.

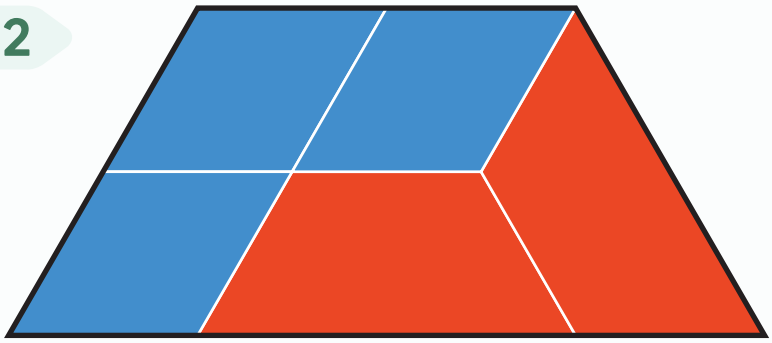
Try This

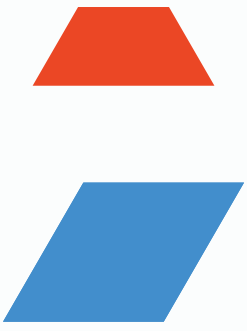
1





2

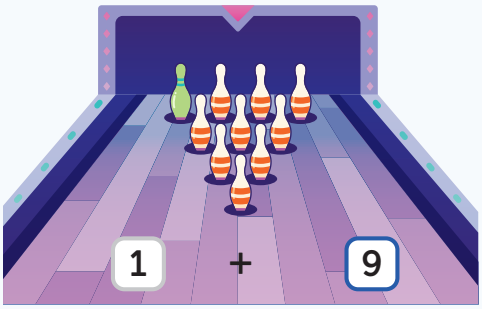


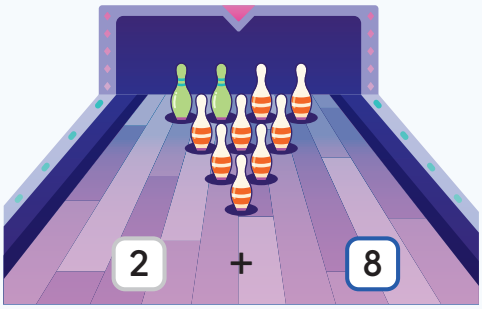


Directions:
1. Write the number that tells how many. Circle the shape that has *more*.
2. Write the number that tells how many. Circle the shape that has *fewer*.

Summary | Lesson 12

There are different ways to make and show 10.





Try This

1 Clare used 10 pattern blocks to make a puzzle. She used trapezoids and triangles.

How many trapezoids did Clare use?

How many triangles did Clare use?

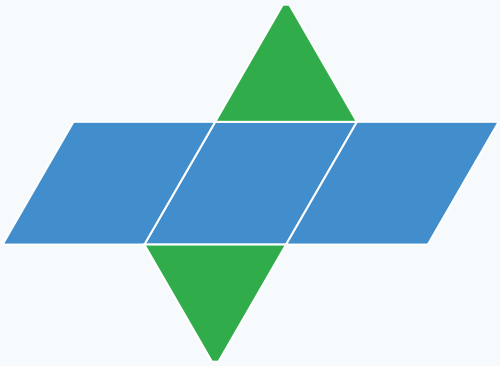
Show your thinking.

Directions:

1. Solve the story problem in more than 1 way. Show your thinking using objects, drawings, numbers, or words. Then write an equation to show your thinking.

Summary | Lesson 13

Equations about adding can look different.



$2 + 3 = 5$

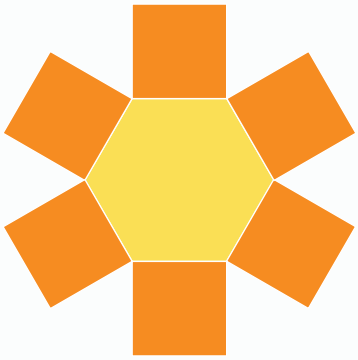
$3 + 2 = 5$

$5 = 2 + 3$

$5 = 3 + 2$

Try This

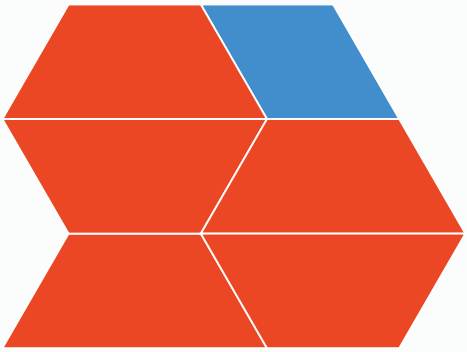
1



$6 = 5 + 1$

$1 + 6 = 7$

2



$5 = 1 + 4$

$6 = 5 + 1$

Directions:

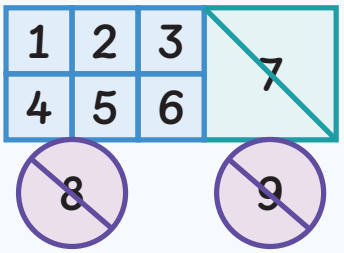
1–2. Circle the equation that matches the picture.

Summary | Lesson 14

We can show story problems about adding and subtracting with drawings and equations.

Jada built a train with 9 solid shapes.
She put 3 solid shapes away.

How many solid shapes are left?



$9 - 3 = 6$

Try This

1 Clare put 8 pattern blocks together to make a shape.

Then 3 of the pattern blocks fell on the floor.

How many pattern blocks does Clare have now?

Show your thinking.

_____

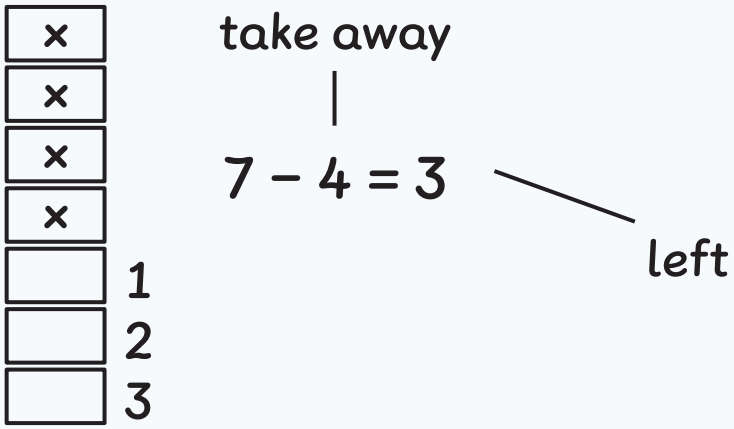
_____

Directions:

1. Solve the story problem. Show your thinking using drawings, numbers, or words. Write your answer on the line.

Summary | Lesson 15

Subtraction story problems can be shown and solved using drawings, numbers, words, or equations.



Try This

1 9 − 4 = 5 9 − 5 = 4 5 + 4 = 9

Show your thinking.

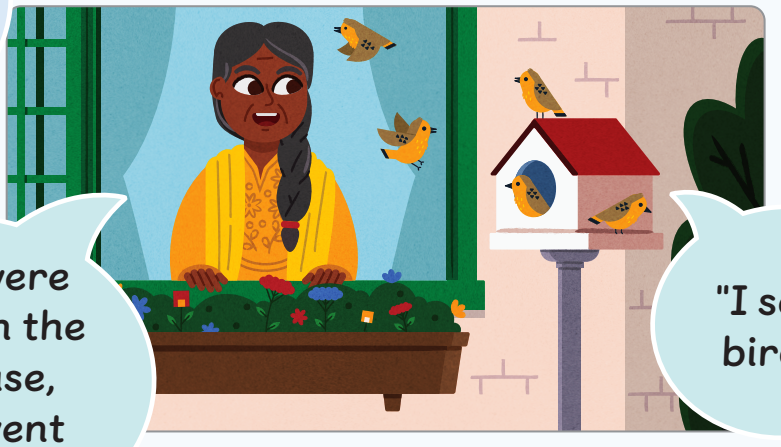
Directions:

1. Create a story problem about River that matches 1 of the equations. Circle the equation you chose and solve your story problem.

Summary | Lesson 16

You can think about the math you see in the world.

"The pole of the birdhouse looks like a cylinder."

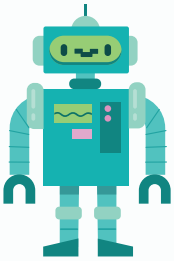


"There were 5 birds on the birdhouse, then 2 went away."

"I see 5 birds."

Try This

1



Show your thinking.

Directions:

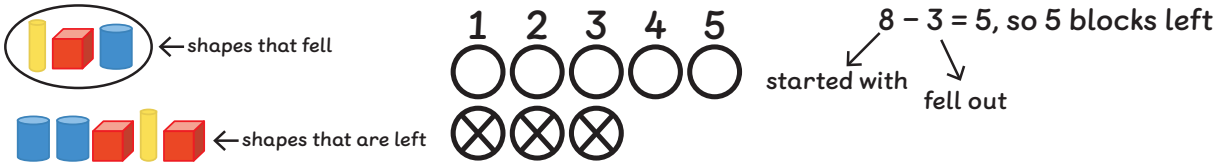
1. Create a story problem about the picture. Solve your story problem using objects, drawings, numbers, or words.

In this sub-unit . . .

- We counted and compared the number of shapes.

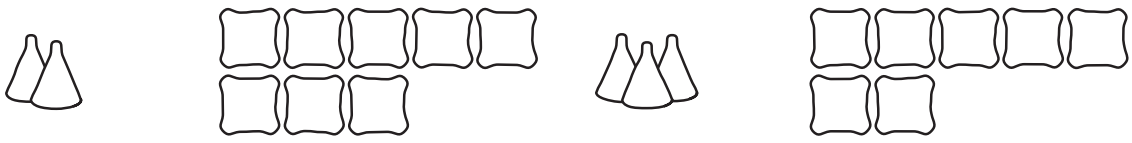
There are more rhombuses than squares.
There are fewer squares than rhombuses.

- We showed and solved story problems about shapes.



Math tip: Equations can be written in different ways, such as 10 = 4 + 6 or 4 + 6 = 10.

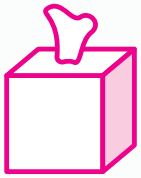
- We found different ways to make 10 using shapes.



Try This | Answer Key

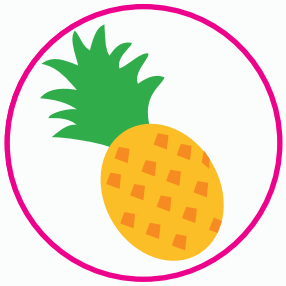
Lesson 2

Sample responses shown.

1  tissue box

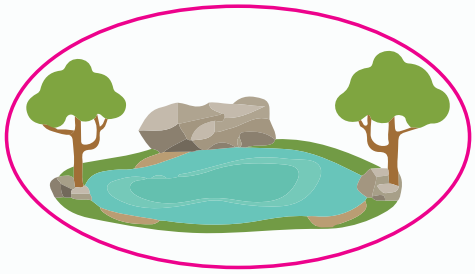
2  marker

Lesson 3

1 

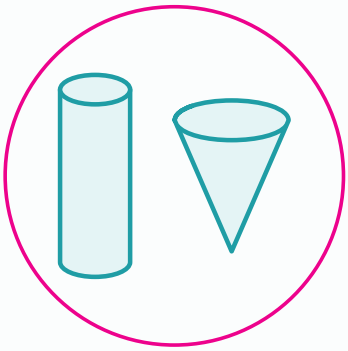
2 

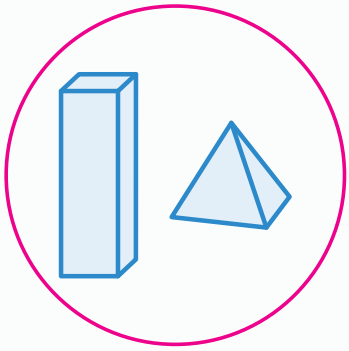
Lesson 4

1 

2 

Lesson 5

1 

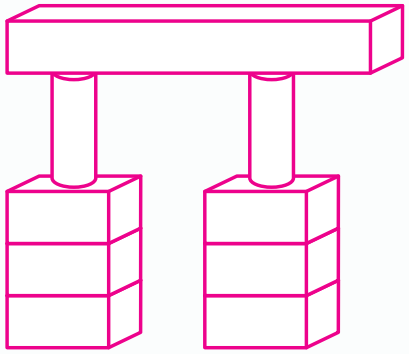
2 

Lesson 6

1 Oral activity: No writing expected. Sample response shown.
The cones are on top of the cylinders. The cubes have square faces.

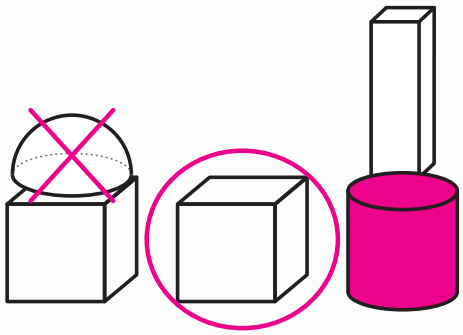
Lesson 7

1 Sample response shown.

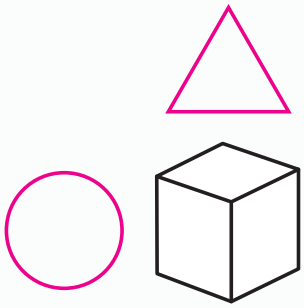


Lesson 8

1



2 Sample responses shown.



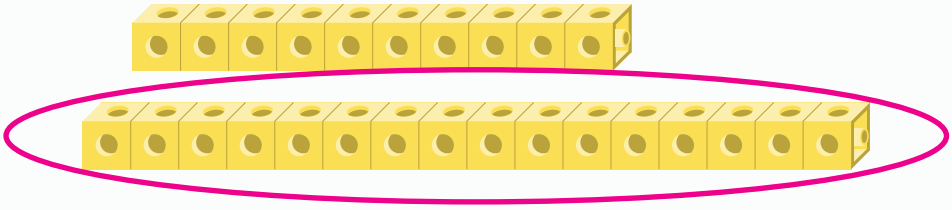
Lesson 9

1 $3 + 1 = \square$

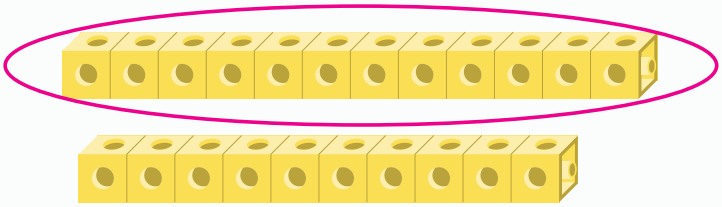
$5 - 1 = \square$

Lesson 10

1



2



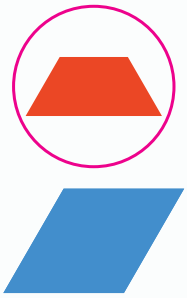
Lesson 11

1

3

6

2



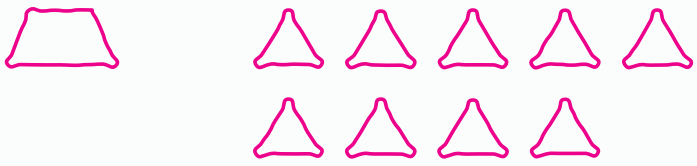
2

3

Lesson 12

1 Sample response shown.

4 + 6 = 10



1 + 9 = 10

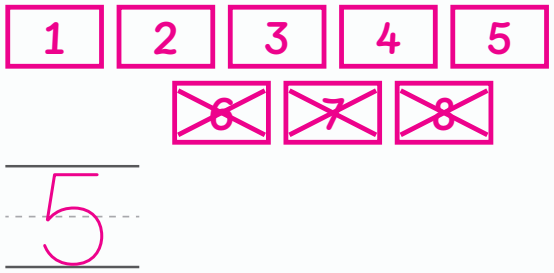
Lesson 13

1 1 + 6 = 7

2 6 = 5 + 1

Lesson 14

1 Sample work shown.

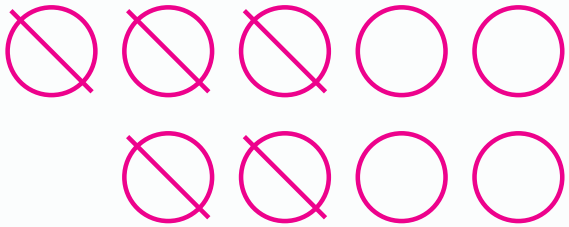


Lesson 15

Sample response shown.

1 9 − 5 = 4

Sample work shown.

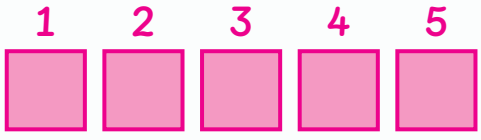


Lesson 16

Oral activity. No writing expected.

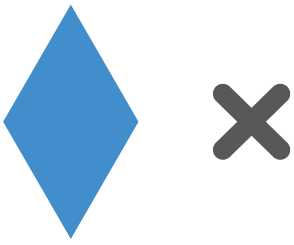
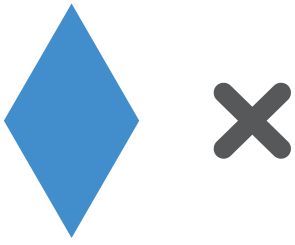
1 Sample student story problem:
There are 2 milk boxes and 3 juice boxes.
How many drink boxes are there?

Sample response shown.



2 + 3 = 5

Kindergarten Unit 7 Glossary/K Unidad 7 Glosario

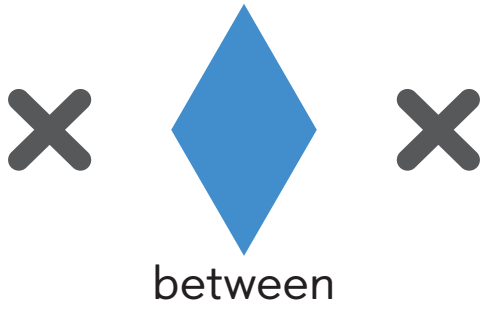
English	Español
A	
above	**arriba**
above 	arriba 
add	**sumar**
4 + 3 Four plus three 	4 + 3 Cuatro más tres 
B	
below	**debajo**
 below	 debajo
beside/next to	**al lado de/junto a**
beside next to 	al lado de junto a 

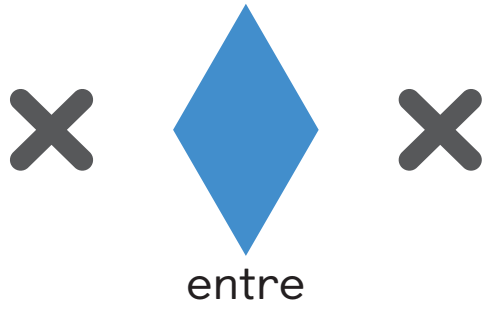
English

Español

between

entre





C

cone

cono

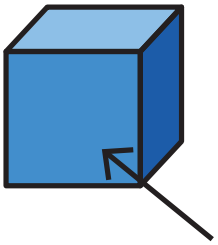
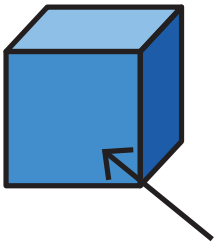
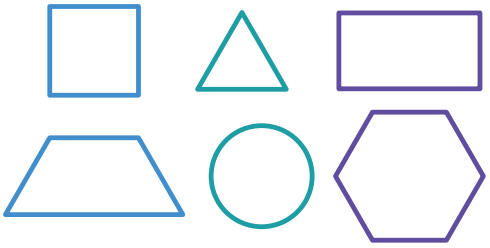
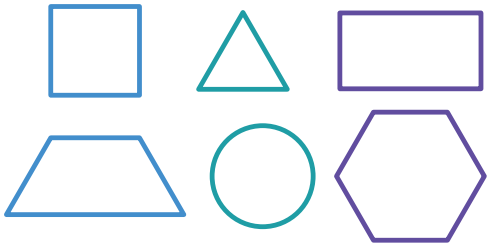
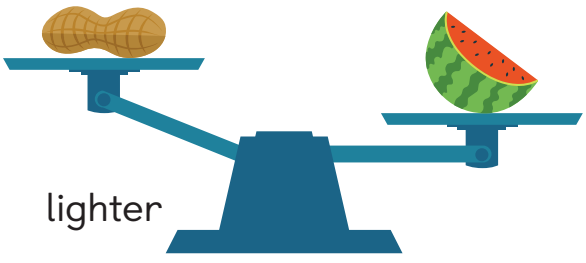
cube

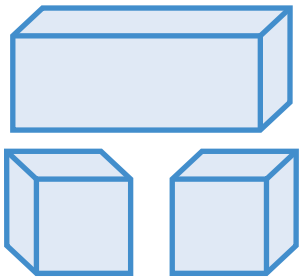
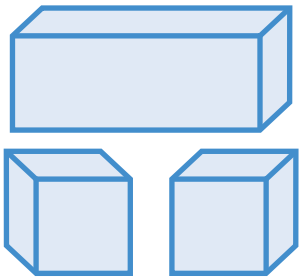
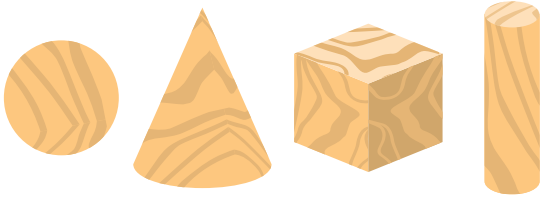
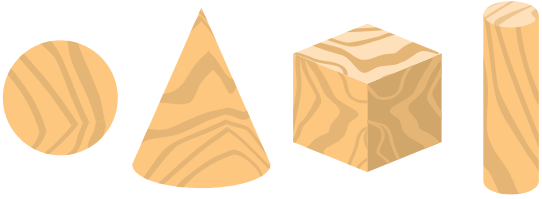
cubo

cylinder

cilindro

Kindergarten Unit 7 Glossary/K Unidad 7 Glosario

English	Español
F	
face 	cara 
flat shapes 	figuras planas 
H	
heavier 	más pesado 
L	
lighter 	más liviano 

English	Español
P	
prism 	**prisma** 
S	
shorter  shorter	**más corto/más bajo**  más corto
solid shapes 	**cuerpos geométricos** 
sphere 	**esfera** 

Kindergarten Unit 7 Glossary/K Unidad 7 Glosario

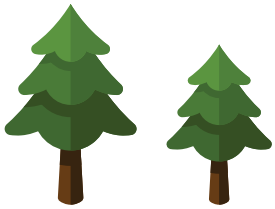
English	Español

T

taller

taller

más alto



más alto