Unit 1

Adding, Subtracting, and Working With Data

Essential Questions

- How can you represent data in a way others can understand?
- How can you use counting to help you add and subtract?

Unit Story: Ying's New Town

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

Unit Investigation

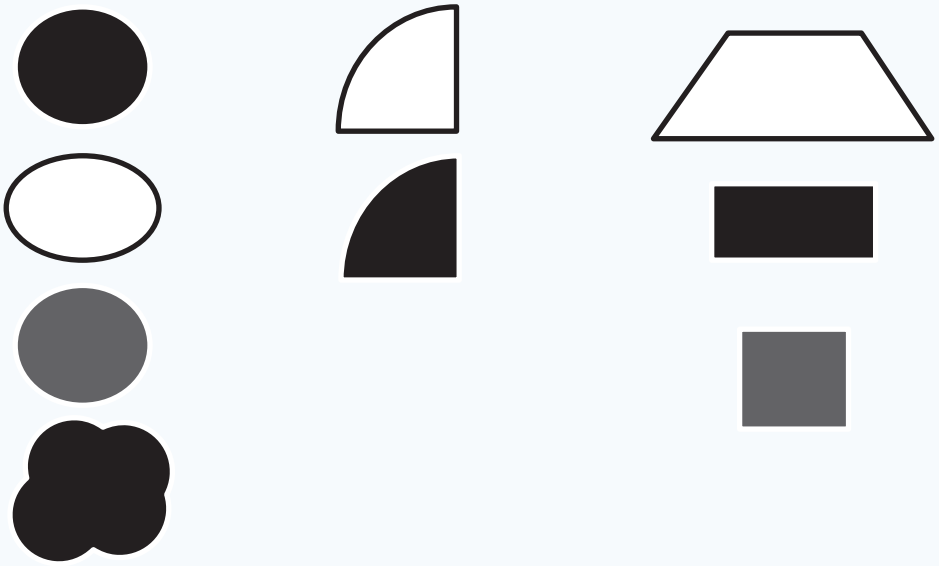
Lesson 1 is the Unit Investigation. Students organize a group of math tools into categories to build curiosity and apply their own knowledge in a variety of ways. Use the **Caregiver Connection** to help students continue to explore the math they will see in the unit.

Caregiver Connection

Students may enjoy organizing and counting groups of objects at home. Encourage them to find different collections of objects and organize them in a way that makes it clear how many are in each group.

Summary | Lesson 2

Objects can be organized into **categories** and represented with pictures, symbols, numbers, or words to make information clear for others to understand.



Try This

Jada and Priya sorted their stickers into 2 categories.

Category 1

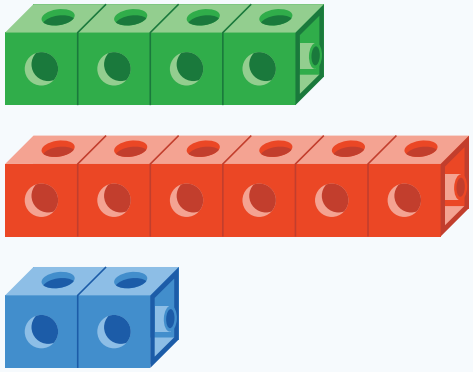
Category 2

1 How did they sort the stickers?

_____

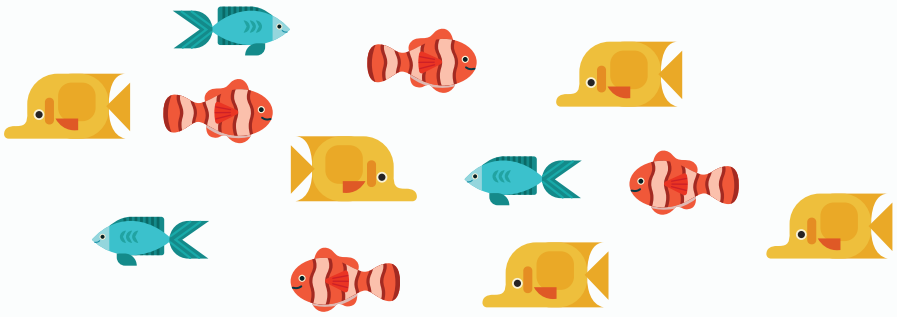
Summary | Lesson 3

Sorting and organizing representations of **data** into straight lines can help you count how many in each category.



Try This

1 Jada has some fish stickers.

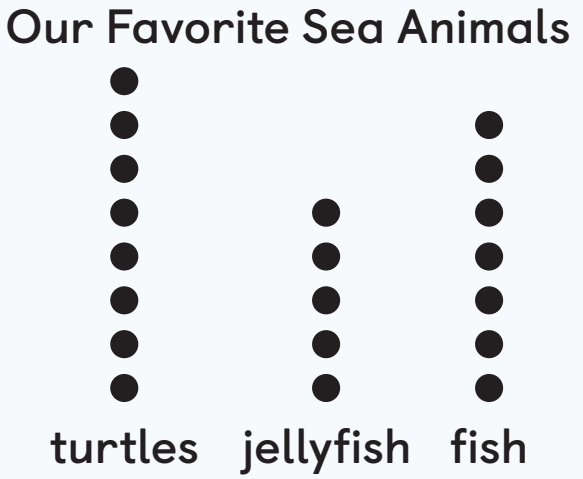


How could Jada sort the stickers into categories?

Jada could sort the stickers by _____.

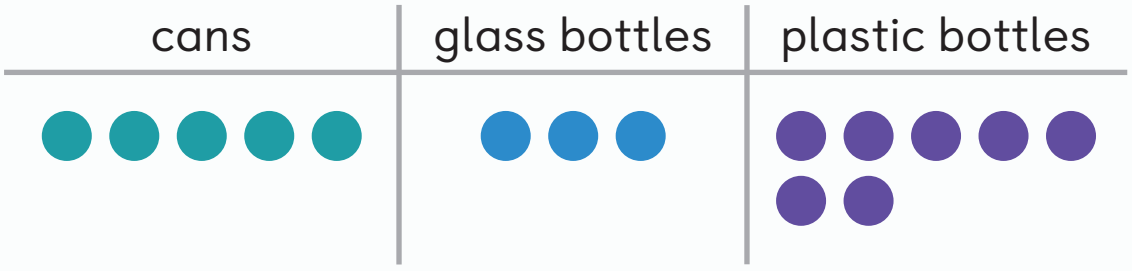
Summary | Lesson 4

Data can be represented with labels and a title so others can understand the data.



Try This

Clare sorted some items to recycle.
Use Clare's data representation for Problems 1 and 2.



1 How many glass bottles are there?

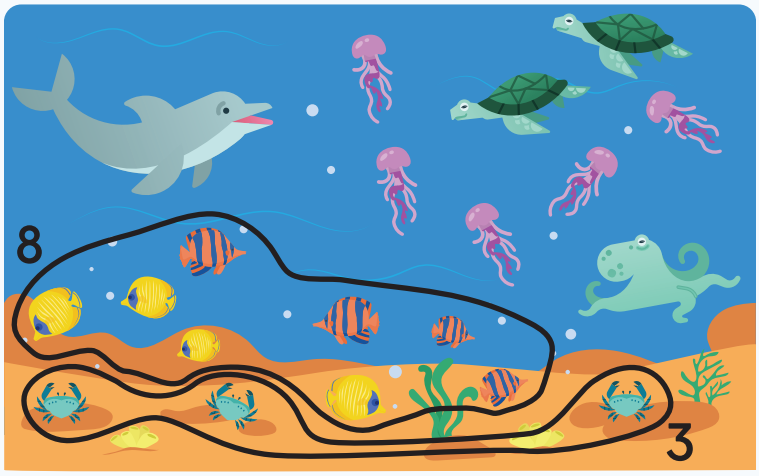
_____ glass bottles

2 How many cans are there?

_____ cans

Summary | Lesson 5

Addition expressions can represent the total amount in 2 groups.



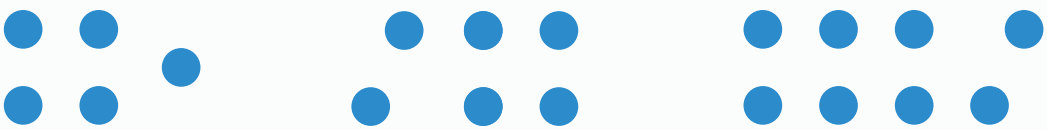
8 + 3

Try This

For Problems 1 and 2, circle the set of dots that matches the expression.

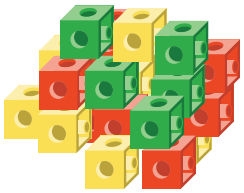
1 5 + 1

2 2 + 4

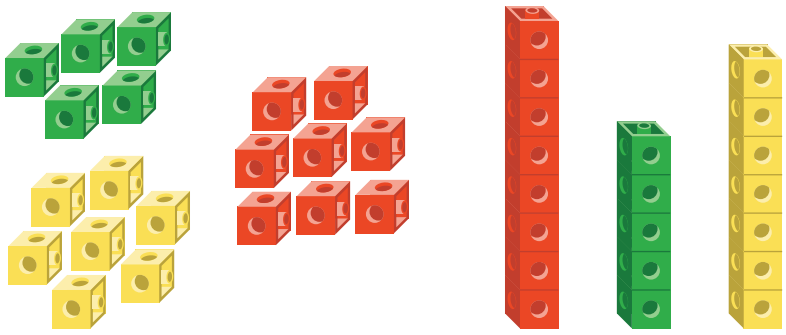


In this sub-unit . . .

- We took a class survey and used connecting cubes to represent the data.

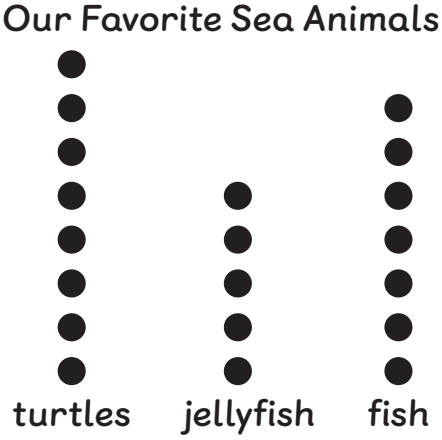


- We organized the data to count how many in each category.



Math tip: Sorting data into categories can help you count how many in each category.

- We represented the data on paper and used labels and a title to help others understand.



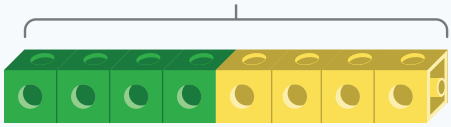
Summary | Lesson 6

Addition can be represented with story problems, objects, pictures, or expressions.

$4 + 4$

Ying saw 4 green fish in the left side of the aquarium and 4 yellow fish in the right side.
How many fish are in the aquarium?

The **sum** is 8.



Try This

Use the story for Problems 1 and 2.

There are 2 red crabs and 8 brown crabs.

1 How many crabs are there?

answer: _____ crabs

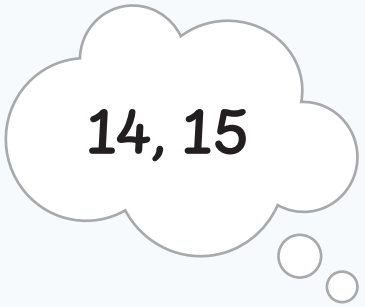
2 Write an addition expression to match the story.

expression: _____

Summary | Lesson 7

You can count 1 more to add 1 to a number.

14 + 1



Try This

For Problems 1–4, find the sum.

1. 9 + 1 _____

2. 8 + 1 _____

3. 7 + 1 _____

4. 6 + 1 _____

Summary | Lesson 8

Making connections between counting and adding can help you add 2 to a number.

7 + 2

Try This

For Problems 1–4, find the sum.

1. 3 + 1 _____

2. 3 + 2 _____

3. 5 + 1 _____

4. 5 + 2 _____

Summary | Lesson 9

An equation is true if the values on both sides of the equal sign are **equal**. Numbers or expressions could be on 1 or both sides of an equation.

$$4 + 6 = 1 + 9$$ 

Try This

For Problems 1 and 2, circle to show if the equation is *true* or *false*.

Show your thinking.

1 $10 = 5 + 5$

2 $8 + 2 = 6$

Summary | Lesson 10

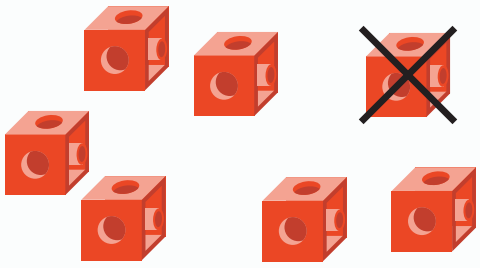
Subtraction can be represented with stories, objects, pictures, and expressions.

Ying packed 5 apples for the picnic.
She gave 2 apples to a friend.
How many apples are left?

5 – 2

Try This

Use Shawn's representation.



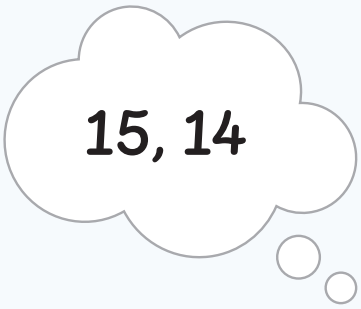
1 Write a subtraction expression for Shawn's representation.

expression: _____

Summary | Lesson 11

You can count back 1 to subtract 1 from a number.

$15 - 1$



Try This

For Problems 1–4, find the difference.

1. 9 − 1 _____

2. 6 − 1 _____

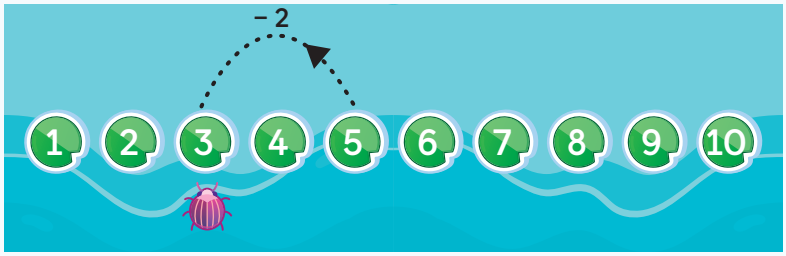
3. 4 − 1 _____

4. 5 − 1 _____

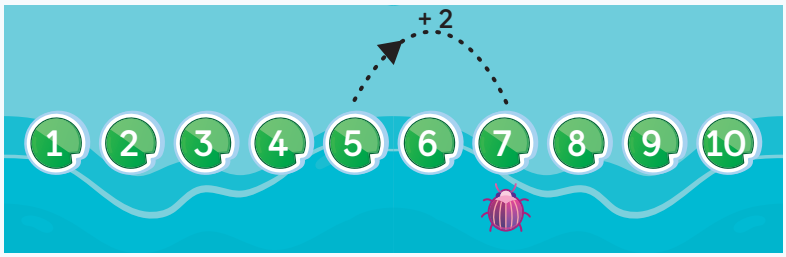
Summary | Lesson 12

You can use what you know about counting to subtract 2 or add 2.

$5 - 2 = 3$



$5 + 2 = 7$



Try This

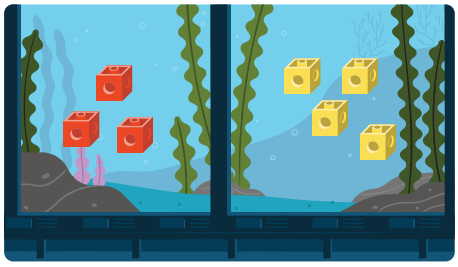
For Problems 1–2, find the difference.

1 $8 - 1$ _____

2 $8 - 2$ _____

In this sub-unit . . .

- We represented addition and subtraction stories with cubes and wrote expressions to match.



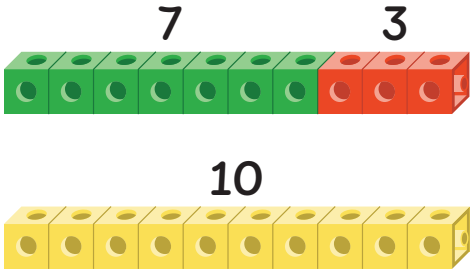
3 + 4

5 − 2

- We related counting to adding and subtracting 1 and 2.
  - 3 − 2 **I notice that 3 − 2 is the same as counting back 2 from 3.**

  Math tip: You can use what you know about adding 1 and subtracting 1 to add and subtract 2.

- We explained if equations were true or false.
  - 7 + 3 = 10 **This equation is true because 7 plus 3 more is 10. So, 7 + 3 and 10 have the same value.**



Summary | Lesson 13

Finding a sum can be helpful when describing the total in 2 or more categories of data.

Ying's Rides at the Fair

Ferris wheel	carousel	bumper cars
𝍸	𝍸	𝍸

How many times did Ying ride the carousel and the bumper cars?

$4 + 1 = 5$

Try This

Jada surveyed her friends about their favorite fruits.

Votes for Favorite Fruit

blueberries	apples	peaches
𝍸	𝍸	𝍸

1 Write an equation to represent the number of votes for apples and peaches.

equation: _____

Summary | Lesson 14

You can be sure a statement about data is true or false if the information is included in the data representation.

Kids' Butter Sculpture Votes

cow	house	goat
𝍸 ||	|	||

I do not know if this is true because the chart does not show how many kids came to the fair.

Some kids that came to the fair did not vote.

Try This

Diego collected data about the number of different animals he saw at the fair.

Animals Diego Saw at the Fair

cow	goat	pig
||	|||	𝍸

Circle to show if the statement is *true* or *false*.

1 Diego saw 5 pigs at the fair.

Summary | Lesson 15

There are many questions you can ask about data. Sometimes, you need to collect more data to answer a question.

Ying's Rides at the Fair

Ferris wheel	carousel	bumper cars
𝍸	𝍸	𝍸

How many times did Ying ride the Ferris wheel?

5 times

Why did Ying ride the Ferris wheel the most times?

I need more information.

Try This

Ying made a tally chart to show how many times she went on different rides at the fair.

Ying's Rides at the Fair

Ferris wheel	carousel	bumper cars
𝍸	𝍸	𝍸

Circle to show if the question can be answered using the data.

1 Which ride is *not* Ying's favorite?

In this sub-unit . . .

- We decided if statements about data were *true* or *false*.

Butter Sculpture Votes

cow	house	goat
𝍸	𝍸 |	𝍸

The house sculpture got 6 votes.

- We described 2 categories of data with addition equations.

Ying's Rides at the Fair

Ferris wheel	carousel	bumper cars
𝍸	𝍸	|

$5 = 4 + 1$

- We answered questions about data and noticed when a question could not be answered.
  - Why are most people excited about new friends? ***This question cannot be answered because we did not collect information about why people are excited.***

Math tip: Sometimes, you need to collect more data to answer a question.

Lesson 2

1. Sample response: They sorted by shape.

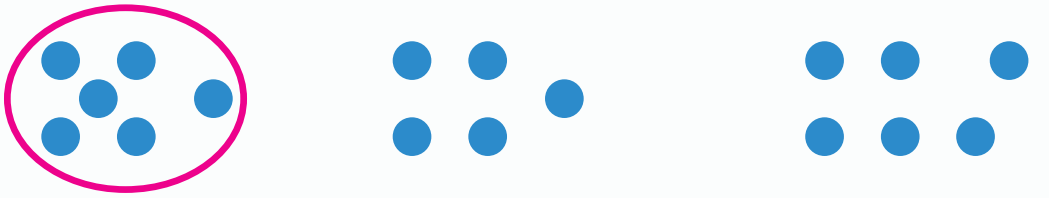
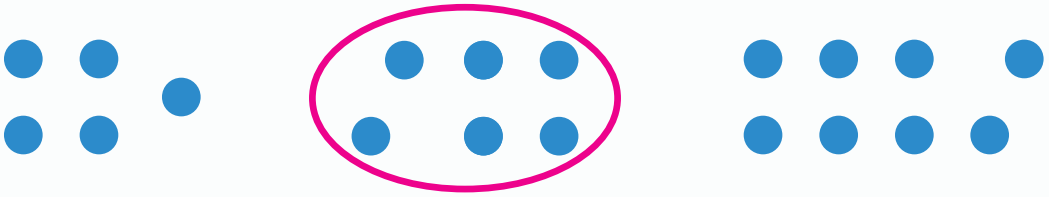
Lesson 3

1. Sample response: color or type

Lesson 4

1. 3
2. 5

Lesson 5

1. 
2. 

Lesson 6

1. 10
2. 2 + 8 or 8 + 2

Lesson 7

1. 10
2. 9
3. 8
4. 7

Try This | Answer Key

Lesson 8

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

Lesson 9

1. true
2. false

Lesson 10

1. 7 – 1

Lesson 11

1. 8
2. 5
3. 3
4. 4

Lesson 12

1. 7
2. 6

Lesson 13

1. Sample response: 4 + 2 = 6

Lesson 14

1. true

Lesson 15

1. false