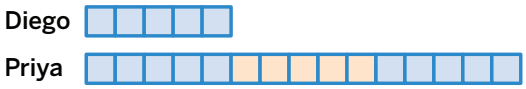
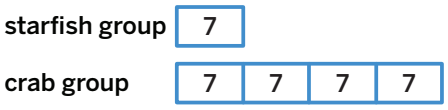
Sub-Unit 1 | Summary

In this sub-unit . . .

- We learned to use multiplication and the phrase "times as many" for comparing 2 quantities. We interpreted and created strip diagrams representing these comparison situations.



Diego has 5 cubes.
Priya has 3 times as many cubes as Diego.



The starfish group has 7 kids in it. The crab group has 4 times as many kids as the starfish group.

- We solved story problems involving comparison and represented unknown values in equations with a letter.

Penny swam 8 times as many laps as Lucas. Lucas swam 7 laps. How many laps did Penny swim?

$8 \times 7 = p$
$8 \times 7 = 56$
Penny swam 56 laps.

Lucas swam some laps. Penny swam 72 laps, which is 12 times as many laps as Lucas swam. How many laps did Lucas swim?

$12 \times l = 72$
$72 \div 12 = 6$
Lucas swam 6 laps.

- We identified relationships between 2 numbers in an **input-output table**.

Input	Rule	Output
1	× 10	10
2	× 10	20
3	× 10	30

Math tip: Look for patterns in the input and output to help you identify a rule for all values.

Sub-Unit 2 | Summary

In this sub-unit . . .

- We used the relationship between units to convert units of length measurement within the U.S. Customary and metric systems.

  1 yard is 3 times as long as 1 foot.

  1 **kilometer** is 1,000 times as long as 1 meter.

- We learned about various units for measuring liquid volume and converted units within a given system.

  1 cup = 8 fluid ounces

  1 pint = 2 cups

  1 quart = 2 pints

  1 gallon = 4 quarts

  Math tip: A conversion table can help you understand the relationship between units to convert units of measurement.

- We solved comparison problems where converting measurements was necessary.

  Clare's cat has a mass of 8 kilograms. Diego's cat has a mass of 5,000 grams. Whose cat has a greater mass?

  $8 \times 1{,}000 = 8{,}000$

  8,000 grams > 5,000 grams

  Clare's cat has a greater mass.

In this sub-unit . . .

- We calculated **profit** in given situations.

Lucas sells 3 batches of cinnamon banana nut muffins for $12 each. The cost to make them is $25.71. What is his profit?

$12 \times 3 = 36$

profit

```
      9
   5 1010
  3 6 . 0 0
- 2 5 . 7 1
-----------
  1 0 . 2 9
```

- We represented data on a **stem-and-leaf plot**.

Muffins Sold

Stem	Leaf	
8	0 4 7 7 9	⟶ 80, 84, 87, 87, 89
9	4 4 4 6 7 8	⟶ 94, 94, 94, 96, 97, 98
10	0 6	⟶ 100, 106

9 | **4** means 9**4** muffins.

Math tip: The key can help you understand how the numbers are separated by place value.

- We used data from frequency tables, dot plots, and stem-and-leaf plots to solve problems.

What is the total amount of allowance earned by Penny's friends in a single week?

Amount	Number of students
$10.50	𝍸
$15.00	||

$15 \times 2 = 30$

```
    2
  1 0 . 5 0
  1 0 . 5 0
  1 0 . 5 0
  1 0 . 5 0
+ 1 0 . 5 0
-----------
  5 2 . 5 0
```

```
  5 2 . 5 0
+ 3 0 . 0 0
-----------
  8 2 . 5 0
```