

What You Need to Know

We use math every day. We even use math in video games!

We know how to add groups of objects. Pretend you collect five coins in three levels of a game.

We can **multiply** to solve the same problem. There are three groups of coins. Each group has five coins.



$$5 + 5 + 5 = 15$$

$$5 \times 3 = 15$$



$$21 \div 3 = 7$$

We can **divide** items into equal groups.

21 coins divides into 3 equal groups of 7 coins.

We can measure time. You start playing a video game at 7:30 a.m. You can only play until 8:10 a.m. You can use the clock to see that you have 40 minutes to play the game.



7:30

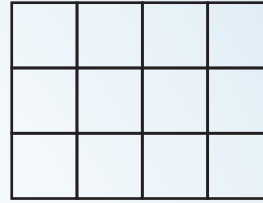


8:10

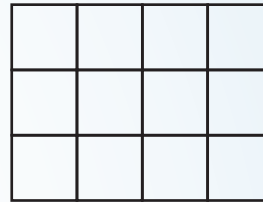
We can also measure shapes.

The **area** is the number of square units within a shape. You can multiply the length by the width to find the area.

The **perimeter** is the distance around a shape. You can add the length of each side to find the perimeter.



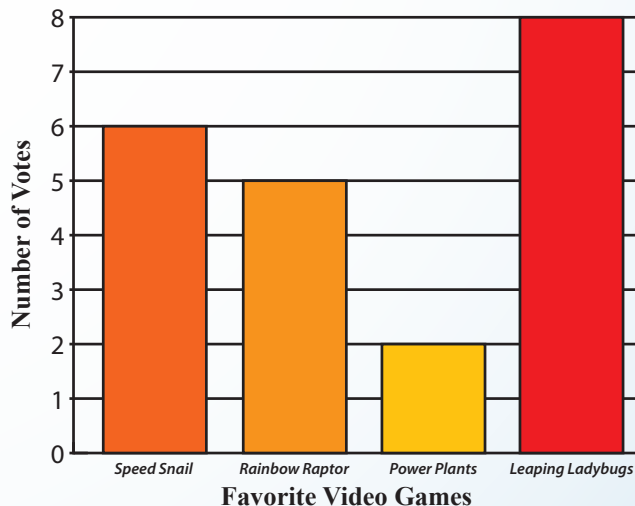
Area: $3 \times 4 = 12$ square units



Perimeter: $4 + 3 + 4 + 3 = 14$ units

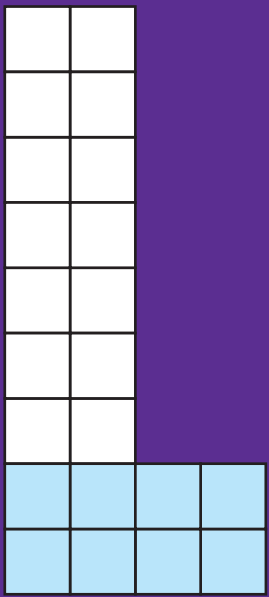
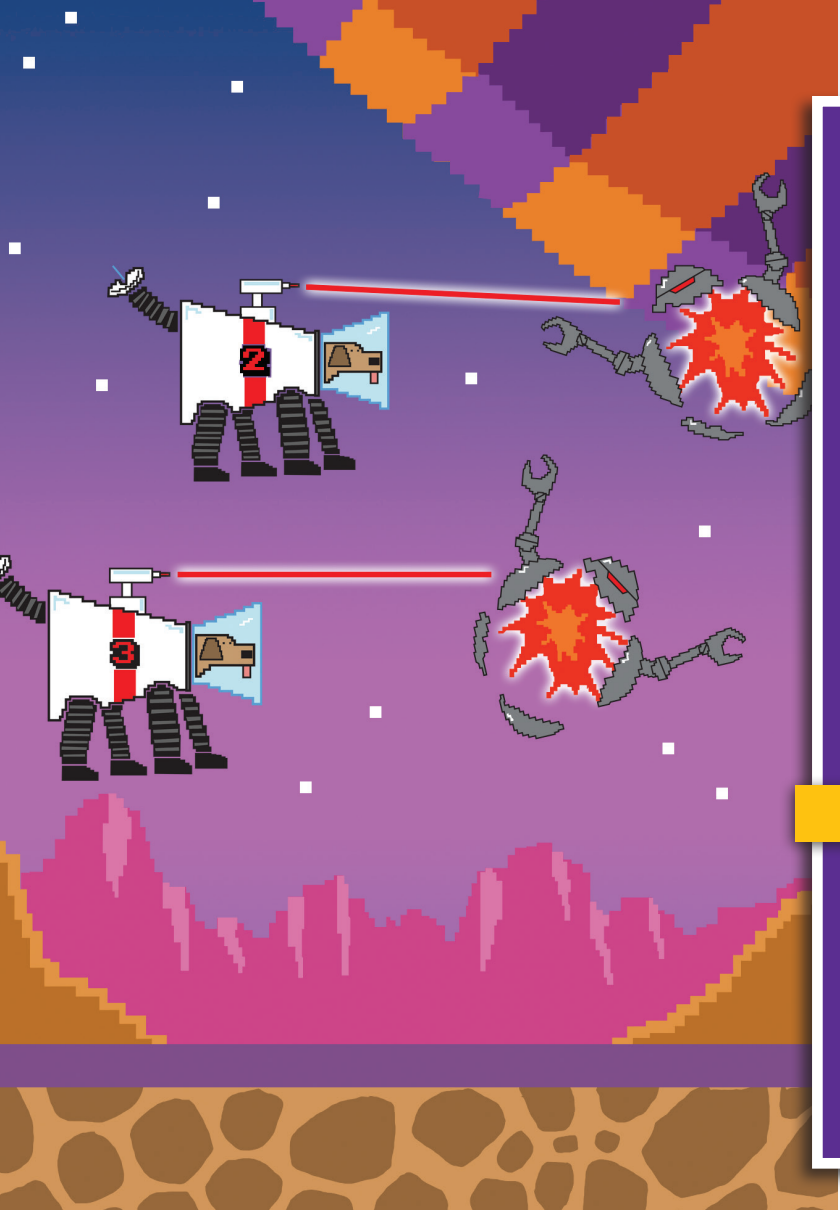
Lastly, we can collect **data**. Then, we can display it on a bar graph.

Favorite Video Games	Number of Votes
<i>Speed Snail</i>	
<i>Rainbow Raptor</i>	
<i>Power Plants</i>	
<i>Leaping Ladybugs</i>	





The family giggles and cheers as they play. They help their space dogs collect coins and make their way through the levels. Raven's mom uses her coins to buy the rocket-boost boots. Her space dog bounces all over the screen.



Work It Out

Otis builds the winning base to defeat the robots. What is the area of his base?

Hint: Find the area of the shaded and unshaded squares. Then, add them together.

“Dad, you spent all your coins on energy snacks!” Raven laughs.

“My space dog was hungry!” Raven’s dad grins.

The family works together as a team. They defeat the robots.
Their space dogs save the universe!