

# Eureka Math

## 3rd Grade Module 1 Lesson 6

At the request of elementary teachers, a team of Bethel & Sumner educators met as a committee to create Eureka slideshow presentations. These presentations are not meant as a script, nor are they required to be used. Please customize as needed. Thank you to the many educators who contributed to this project!

Directions for customizing presentations are available on the next slide.



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# Customize this Slideshow

## Reflecting your Teaching Style and Learning Needs of Your Students

- When the Google Slides presentation is opened, it will look like Screen A.
- Click on the “pop-out” button in the upper right hand corner to change the view.
- The view now looks like Screen B.
- Within Google Slides (not Chrome), choose FILE.
- Choose MAKE A COPY and rename your presentation.
- Google Slides will open your renamed presentation.
- It is now editable & housed in MY DRIVE.

The image shows a transition from a presentation viewer (Screen A) to the Google Slides editor (Screen B). Screen A displays a blue slide with the text "ReadyGEN™ in Action" and "3rd Grade Unit 3, Module A Lesson 1". A red box highlights the "pop-out" button in the top right corner of the viewer. A red arrow points from this button to Screen B. Screen B shows the Google Slides editor interface for a file named "Gr3(2) U3MAL1 Sample Lesson.pptx". The "File" menu is open, and the "Make a copy..." option is highlighted with a red box. A "Copy document" dialog box is open, showing a text input field with "Rename Your Presentation" and "OK" and "Cancel" buttons. The background of Screen B is the same blue slide as in Screen A.

**Screen A**

ReadyGEN™ in Action

3<sup>rd</sup> Grade  
Unit 3, Module A  
Lesson 1

**“pop-out”**

**Screen B**

Gr3(2) U3MAL1 Sample Lesson.pptx

File Edit View Insert Slide Format Arrange Tools Table Help Last edit was yesterday at

Share...

New

Open...

Rename...

Make a copy...

Organize...

Move to trash

Import slides...

See revision history

Language

Download as

Publish to the web...

Email collaborators...

Email as attachment...

Page setup...

Print settings and preview

Print

Copy document

Enter a new document name:

Rename Your Presentation

Comments will not be copied to the new document.

Share it with the same people

OK Cancel

ReadyGEN™ in Action

3<sup>rd</sup> Grade  
Unit 3, Module A  
Lesson 1

# Icons



Read, Draw, Write



Learning Target



Personal White Board



Problem Set



Manipulatives Needed



Fluency



Think Pair Share



Whole Class



Individual



Partner



Small Group



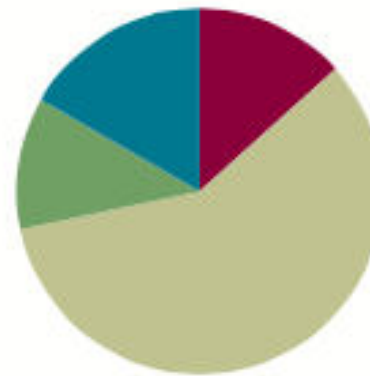
Small Group Time

## Lesson 6

Objective: Interpret the unknown in division using the array model.

### Suggested Lesson Structure

■ Fluency Practice	(8 minutes)
■ Application Problem	(7 minutes)
■ Concept Development	(35 minutes)
■ Student Debrief	(10 minutes)
<b>Total Time</b>	<b>(60 minutes)</b>





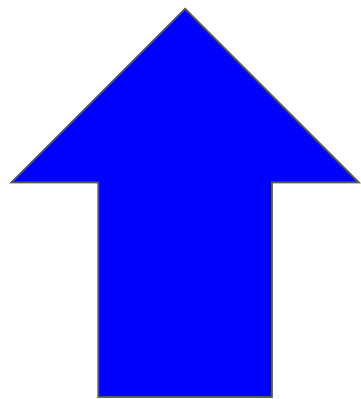
I can interpret the unknown in division using the array model.



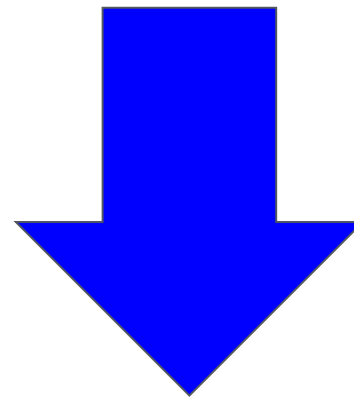
# Group Counting

Let's count by **twos**.

Watch my fingers to know whether or not to count up or count down. A closed hand means to stop.



Count up



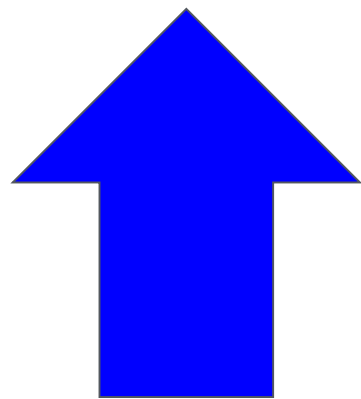
Count down



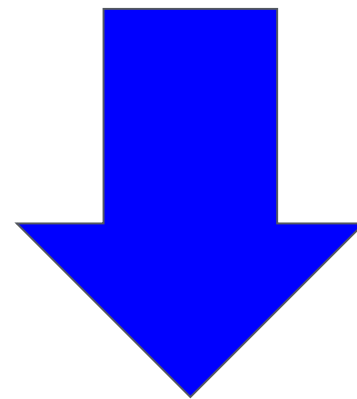
# Group Counting

Let's count by **threes**.

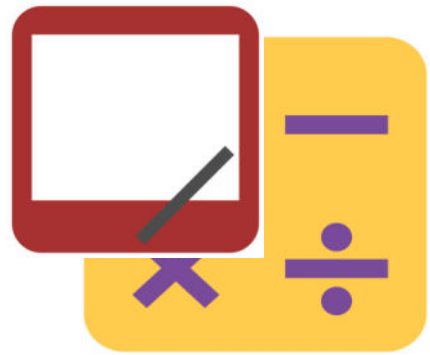
Watch my fingers to know whether or not to count up or count down. A closed hand means to stop.



Count up

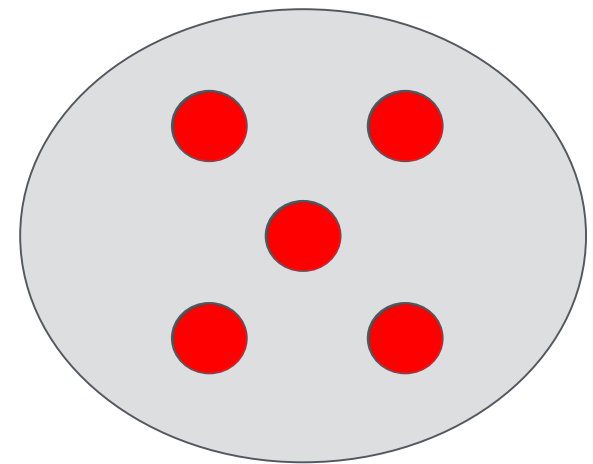
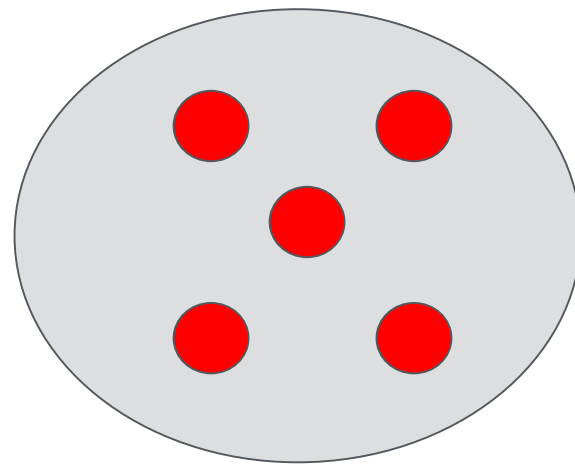
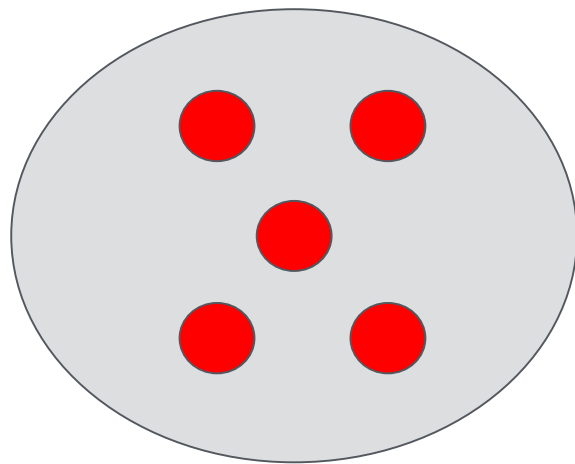


Count down

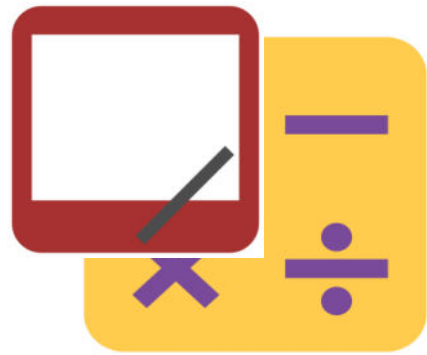


# Divide Equal Groups

Say the total as a repeated addition sentence.

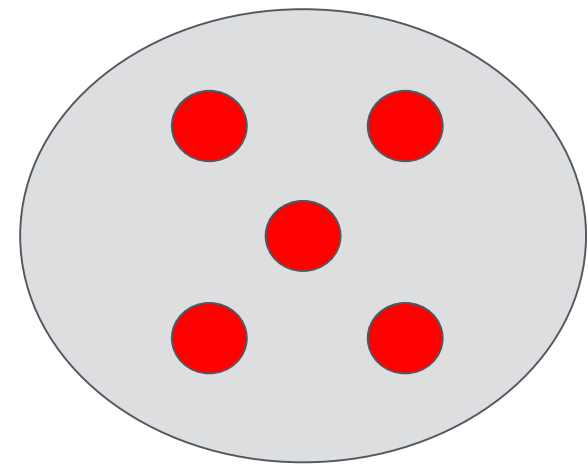
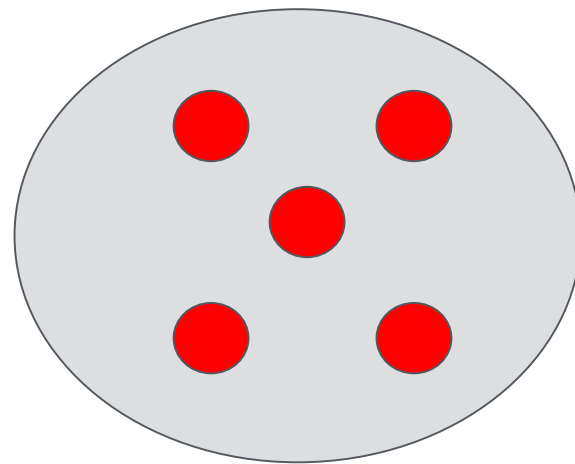
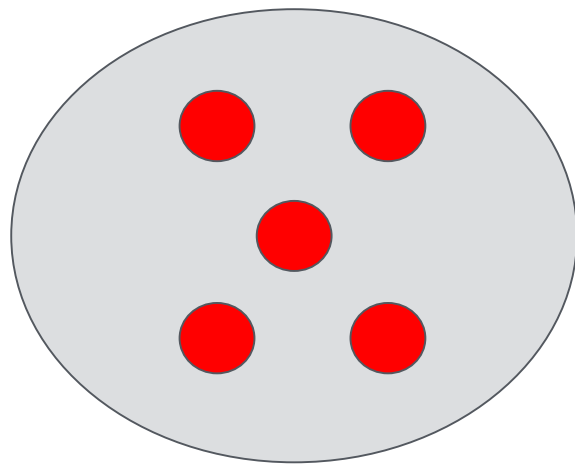


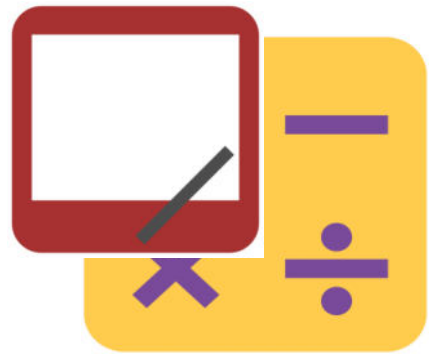




# Divide Equal Groups

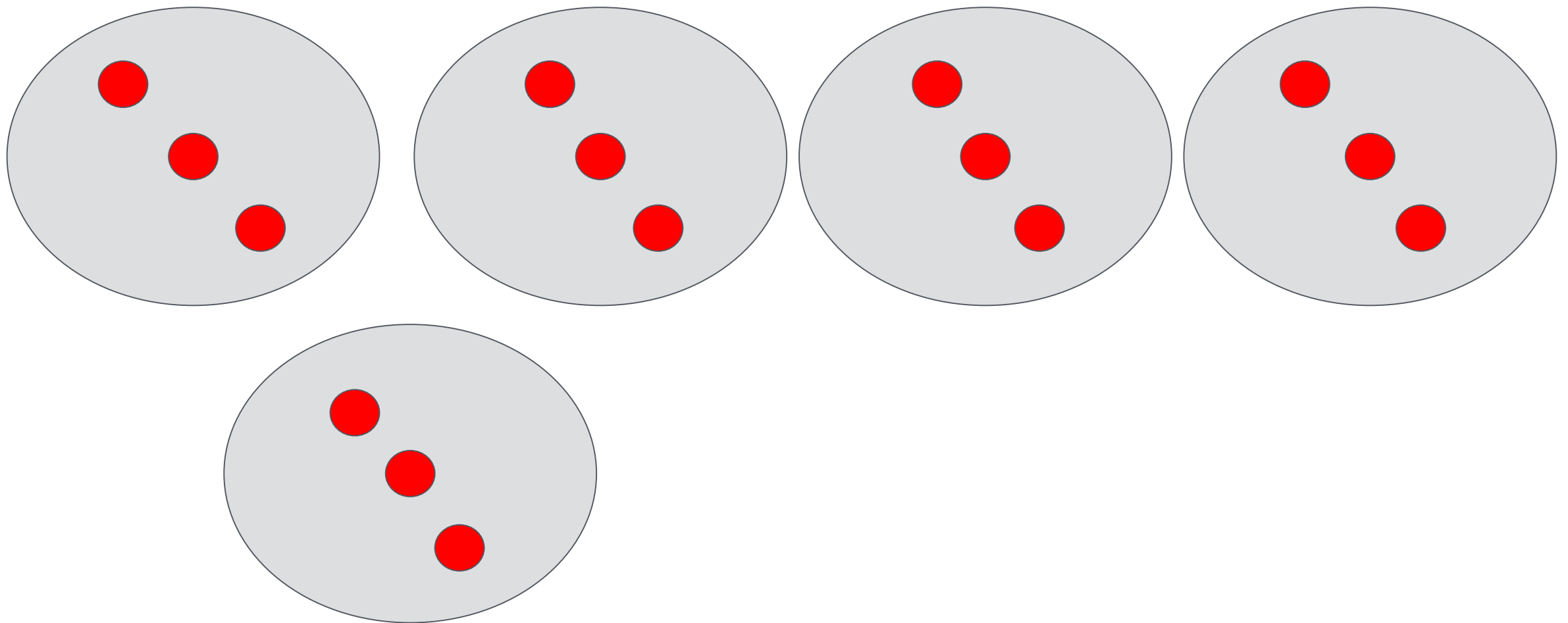
Write a division sentence for 15 divided into 3 equal groups.

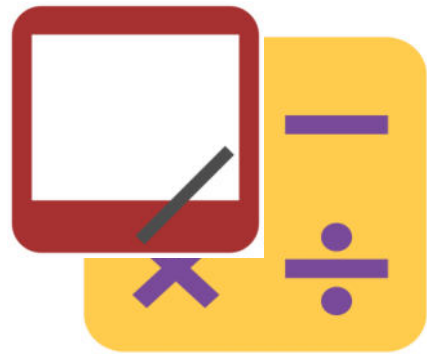




# Divide Equal Groups

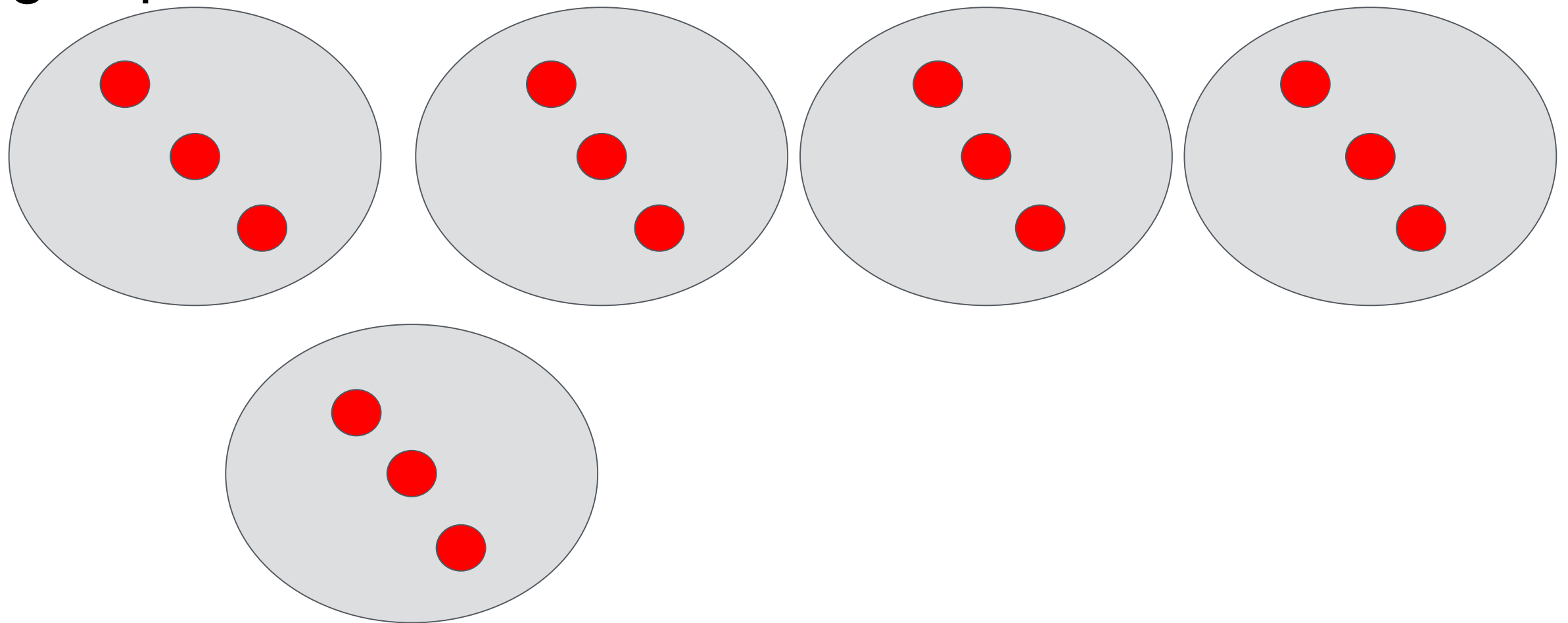
Say the total as a repeated addition sentence.





# Divide Equal Groups

Write a division sentence for 15 divided into 5 equal groups.



# Application Problem

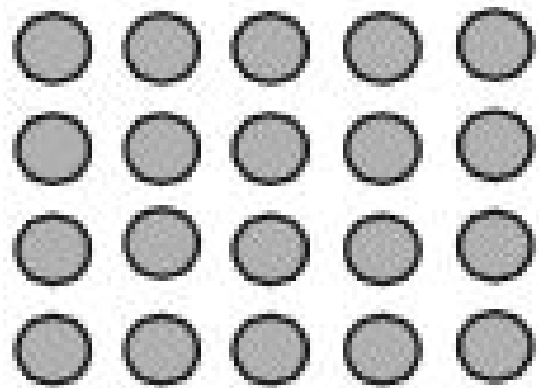
Twenty children play a game. There are 5 children on each team. How many teams play the game?  
Write a division sentence to represent the problem.





# Relate division to an array model.

Twenty children play a game. There are 5 children on each team. How many teams play the game? Write a division sentence to represent the problem.



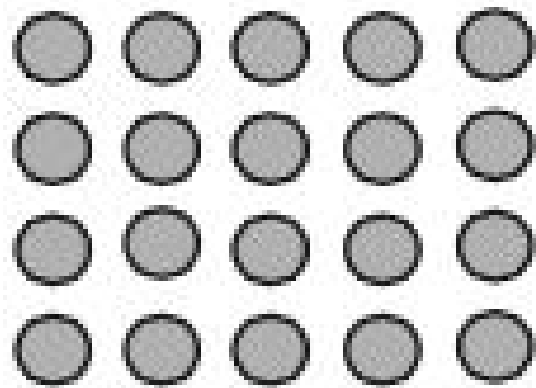
Look at the array and describe the following relationships:

-Total number of children and total number of dots



# Relate division to an array model.

Twenty children play a game. There are 5 children on each team. How many teams play the game? Write a division sentence to represent the problem.



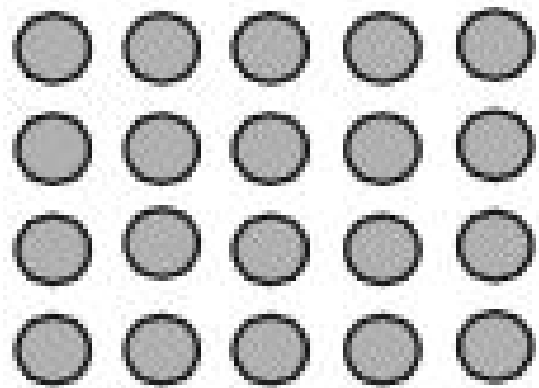
Look at the array and describe the following relationships:

-Number of children on each team and number of dots in each row



# Relate division to an array model.

Twenty children play a game. There are 5 children on each team. How many teams play the game? Write a division sentence to represent the problem.



Look at the array and describe the following relationships:

-Number of teams and number of rows



Use an array to relate the unknown factor in multiplication to the quotient in division.

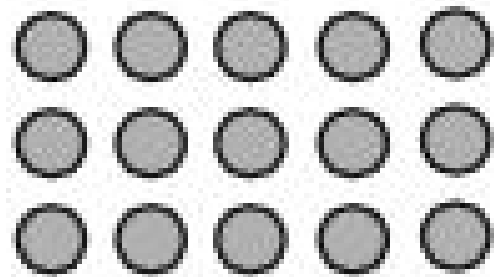
Draw an array that shows the equation  $15 \div 3 = 5$  where the **quotient** - that means the answer - represents the size of groups.





Use an array to relate the unknown factor in multiplication to the quotient in division.

Draw an array that shows the equation  $15 \div 3 = 5$  where the **quotient** - that means the answer - represents the size of groups.



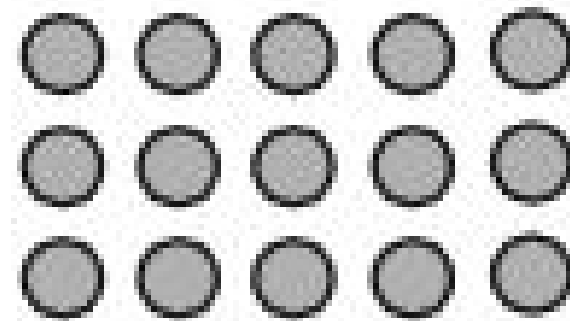
Now, write both a division and a multiplication equation for the array.



Use an array to relate the unknown factor in multiplication to the quotient in division.

$$15 \div 3 = 5$$

$$3 \times 5 = 15$$



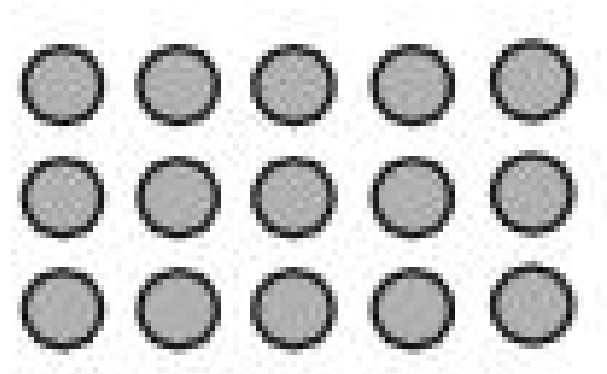
Where do you find the quotient in our multiplication equation?



Use an array to relate the unknown factor in multiplication to the quotient in division.

$$15 \div 3 = 5$$

$$3 \times 5 = 15$$



Circle the size of groups in both problems.



Relate multiplication and division.

$$\underline{\hspace{2cm}} \times 3 = 24$$

Skip-count and track the number of threes to solve.



Relate multiplication and division.

3, 6, 9, 12, 15, 18, 21, 24

$$8 \times 3 = 24$$

How many threes make 24? Answer in a complete sentence.



# Relate multiplication and division.

3, 6, 9, 12, 15, 18, 21, 24

$$8 \times 3 = 24$$

Write a related division equation where the quotient represents the unknown factor.



Relate multiplication and division.

$$24 \div 3 = 8$$

Twenty-four divided in threes makes how many groups? Answer in a complete sentence.



# Relate multiplication and division.

$$8 \times 3 = 24 \quad 24 \div 3 = 8$$

How are the unknown factor and quotient related in these equations?





Relate multiplication and division.

$$8 \times 3 = 24 \quad 24 \div 3 = 8$$

True or false: Both equations ask how many threes are in 24.



Relate multiplication and division.

$$2 \times \underline{\quad\quad\quad} = 18$$

Skip-count and track the number of twos to solve.



Relate multiplication and division.

2, 4, 6, 8, 10, 12, 14, 16, 18

$$2 \times 9 = 18$$

How many twos make 18? Answer in a complete sentence.



Relate multiplication and division.

2, 4, 6, 8, 10, 12, 14, 16, 18

$$2 \times 9 = 18$$

Write a related division equation where the quotient represents the unknown factor.



Relate multiplication and division.

$$18 \div 2 = 9$$

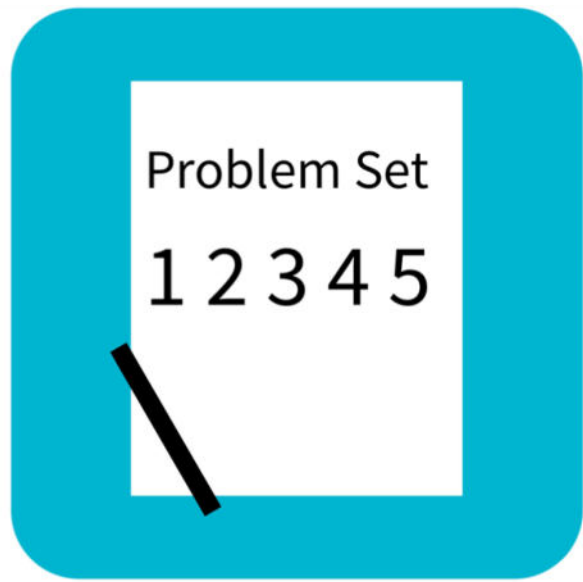
Eighteen divided in twos makes how many groups?  
Answer in a complete sentence.



# Relate multiplication and division.

$$2 \times 9 = 18 \quad 18 \div 2 = 9$$

How are the unknown factor and quotient related in these equations?



# Problem Set

Name \_\_\_\_\_

Date \_\_\_\_\_

1. Rick puts 15 tennis balls into cans. Each can holds 3 balls. Circle groups of 3 to show the balls in each can.



Rick needs \_\_\_\_\_ cans.

$$\underline{\hspace{2cm}} \times 3 = 15$$

$$15 \div 3 = \underline{\hspace{2cm}}$$

- 
2. Rick uses 15 tennis balls to make 5 equal groups. Draw to show how many tennis balls are in each group.

# Debrief

Analyze the four equations in Problem 3. Compare the multiplication and division equations, notice the difference in how the problem is represented by each one.

How do arrays represent both multiplication and division?

Based on your observation of arrays, what do multiplication and division have in common?

What is the relationship between the **quotient** in division and the unknown factor in a related



# Exit Ticket

Name \_\_\_\_\_

Date \_\_\_\_\_

Cesar arranges 12 notecards into rows of 6 for his presentation. Draw an array to represent the problem.

$$12 \div 6 = \underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}} \times 6 = 12$$

What do the unknown factor and quotient represent? \_\_\_\_\_