Grade 6 Mathematics
Week of January 4 – January 8

Lesson 4.1 – Ratios

Lesson Materials

- Lessons for Section 4.1 Ratios
- Unit 4 Learning Guide (This PDF)

Use the link above to open the lessons for this section. Remember: on the lesson page, use the arrow next to the "Table of Contents" at the **top of the page** to move through the lessons. You can also click on the Table of Contents to open the menu so you can jump to a specific lesson page.
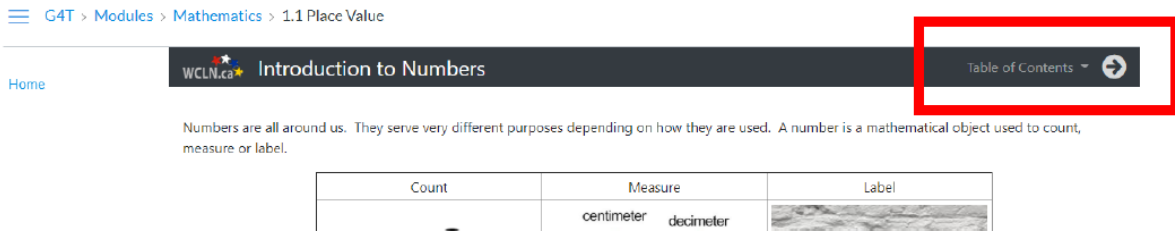
Work through the online lessons. You can work at your own pace or follow the suggested schedule below. Complete the activities in your Learning Guide as you work through the lessons. You can print the Learning Guide, or, copy out the questions on a separate piece of paper. Be sure to try the games and practice quizzes as you make your way through the online lesson book.

Suggested Lesson Schedule

Monday • Ratios • Ratio Match • LG 4.1, p. 1, #1-2 **Tuesday** • Simplifying Ratios • Test Your Skills • LG p. 2, #4-5 **Wednesday** • Ratios as Fractions • Example • Practice #1	**Thursday** • LG p. 3, #6-7 **Friday** • Three Term Ratios • Practice #2 • LG p. 3, #8

UNIT 4 LEARNING GUIDE – RATIOS

INSTRUCTIONS:

Using a pencil, complete the following questions as you work through the related lessons. Show ALL of your work as is explained in the lessons. Do your best and always ask questions if there is anything that you don't understand.

4.1 RATIOS

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1.   Use the image below to answer the following questions.

Ex. What is the ratio of white doughnuts to brown doughnuts?   5:7

What is the ratio of brown doughnuts to white doughnuts?

2.   Use the image below to answer the following questions.

a. What is the ratio of black stars to white stars?

b. What is the ratio of white stars to black stars?

3. Use the image below to answer the following questions.
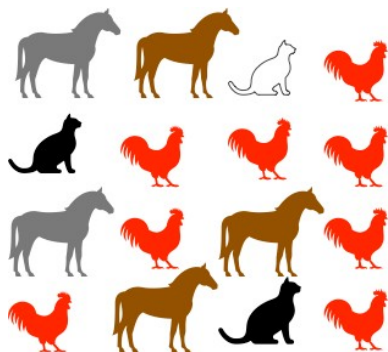
a)   What is the ratio of cats to roosters?
b)   What is the ratio of horses to animals?
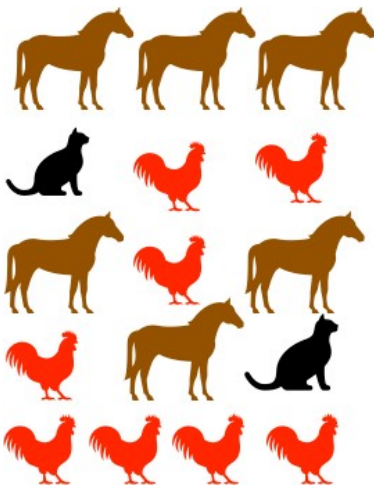c)   What is the ratio of roosters to black cats?
d)   What is the ratio of four-legged animals to two-legged animals?
e)   What is the ratio of cats to animals?

4. Reduce each ratio to its simplest form. _Reminder: To reduce a ratio to its simplest form, divide each part of the ratio by the Greatest Common Factor._

Ex. 4:10 GCF: **2** $4 \div 2 = 2$ $10 \div 2 = 5$ **2:5**	c. 9:3 GCF:	f. 6:9 GCF:
a. 15:5 GCF:	d. 8:24 GCF:	g. 15:25 GCF:
b. 2:4 GCF:	e. 25:100 GCF:	h. 21:14 GCF:

5. Use the image below to answer the following questions. Write each ratio in its simplest form.

a) What is the ratio of cats to horses?

b) What is the ratio of horses to roosters?

c) What is the ratio of roosters to horses?

d) What is the ratio of roosters to animals?

e) What is the ratio of cats to animals?

f) What is the ratio of roosters to cats?

6. Fill in the table.

	Ratio *x : y* format	Ratio Fraction format	Simplified Fraction
Ex. 7 baseballs to 21 balls	**7:21**	$\frac{7}{21}$	$\frac{1}{3}$
a. 15 mugs to 35 dishes			
b. 4 dogs to 14 animals			
c. 9 plumbers to 15 employees			
d. 18 swimmers to 42 people			

7. In an aquarium, there are 10 guppies, 8 neon tetras, and 2 goldfish. Write the part to whole ratios as fractions in their simplest form.

    f) Guppies to fish

    g) Neon tetras to fish

    h) Goldfish to fish

8. Use the image below to determine the following ratios. Simplify the ratios when possible.
   Reminder: 3-part ratios cannot be written as fractions.

Ex. Hikers to babies to cyclists

6:2:3

    i) Cyclists to skaters to babies

    j) Babies to skaters to hikers

    k) Skaters to cyclists to hikers

    l) Hikers to babies to skaters