

Grade 7 Mathematics

Week of Nov 9 – Nov 13

Lesson 2.1: Introduction to Fractions

Lesson Materials

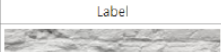
- Lessons for Section [2.1 Introduction to Fractions](#)
- Introduction to Fractions Learning Guide (This PDF)

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.

[G4T](#) > [Modules](#) > [Mathematics](#) > 1.1 Place Value

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Numbers are all around us. They serve very different purposes depending on how they are used. A number is a mathematical object used to count, measure or label.

Count	Measure	Label
—	centimeter decimeter	

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

<p>Monday</p> <ul style="list-style-type: none">• Introduction• Matching Fractions• Reducing Fractions• LG 2.1 #1-3, p. 1-2 <p>Tuesday</p> <ul style="list-style-type: none">• Practice Reducing Fractions• Fractions Reduced (Game)• LG #4-6, p. 2-3 <p>Wednesday</p> <ul style="list-style-type: none">• Remembrance Day	<p>Thursday</p> <ul style="list-style-type: none">• Improper Fractions• Practice – Improper Fractions• Game – Improper Fractions• LG #7-8, p. 4-5 <p>Friday</p> <ul style="list-style-type: none">• Mixed Numbers• Practice Mixed Numbers• Game – Mixed Numbers• LG #9-11, p. 6-7
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Name: _____

UNIT 2 LEARNING GUIDE – FRACTIONS

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.


2.1 INTRODUCTION TO FRACTIONS

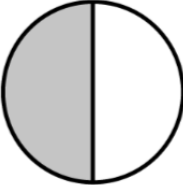
1. In your own words, write a definition for the following terms.

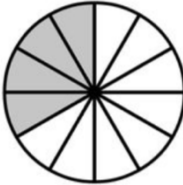
a. Numerator _____

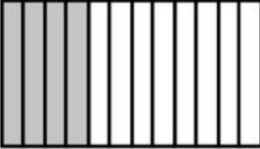
b. Denominator _____

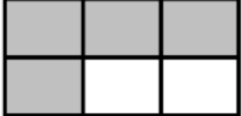
2. Represent the shaded parts using a fraction.


Ex.  $\frac{3}{5}$

a. 

b. 

c. 

d. 

e. 

3. Reduce each fraction to its lowest terms. Reminder: Find the number by which you can divide both the numerator and the denominator.

Ex. $\frac{8}{10} = \frac{4}{5}$

÷ 2

÷ 2

c. $\frac{7}{14} =$

÷ □

÷ □

a. $\frac{10}{25} =$

÷ □

÷ □

d. $\frac{9}{12} =$

÷ □

÷ □

b. $\frac{16}{20} =$

÷ □

÷ □

e. $\frac{30}{100} =$

÷ □

÷ □

4. Reduce each fraction to its lowest terms. Reminder: Write the number that you are using to divide the numerator and denominator, just like in question 3. If you get an answer that can still be reduced, repeat the process.

a. $\frac{6}{9} =$

c. $\frac{50}{70} =$

b. $\frac{9}{27} =$

d. $\frac{16}{40} =$

e. $\frac{48}{60} =$

f. $\frac{75}{100} =$

5. Circle the fractions that **can** be reduced to lower terms. Reminder: If the numerator and denominator of a fraction can both be divided by the same number, then it **can** be reduced. Use the divisibility rules that you practiced in Unit 1.

$\frac{3}{7}$

$\frac{36}{40}$

$\frac{13}{20}$

$\frac{5}{15}$

$\frac{7}{21}$

$\frac{1}{4}$

$\frac{2}{6}$

$\frac{54}{63}$

$\frac{4}{100}$

$\frac{6}{33}$

$\frac{74}{99}$

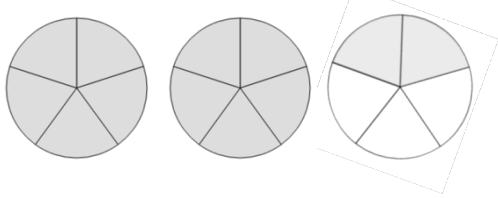
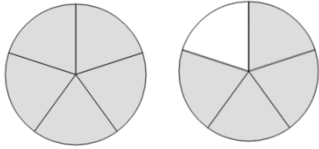
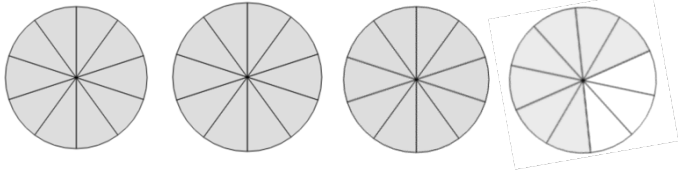
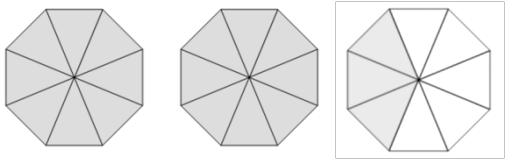
$\frac{8}{9}$

6. Draw and colour a picture to answer the following questions.
- a. There are 24 marbles in a bag: $\frac{1}{8}$ of the marbles are red, $\frac{5}{8}$ of the marbles are blue, and $\frac{2}{8}$ of the marbles are yellow. Hint: You need to draw a total of 24 marbles.
- b. There are 28 students in a class: $\frac{1}{7}$ of the students wear glasses, $\frac{2}{7}$ of the students wear hats, and $\frac{4}{7}$ of the students have long hair. Hint: You can draw a stick person or just a face to represent each student.

7. Label each fraction as a proper fraction or an improper fraction and determine if its value is less than or greater than 1.

	Fraction	Proper Fraction or Improper Fraction	Value < 1 or > 1
Ex.	$\frac{8}{9}$	<i>Proper fraction</i>	<i>>1</i>
a.	$\frac{19}{5}$		
b.	$\frac{47}{50}$		
c.	$\frac{2}{6}$		
d.	$\frac{12}{8}$		
e.	$\frac{50}{47}$		

8. Complete the following table.

	Model	Improper Fraction	Mixed Number
Ex.		$\frac{12}{5}$	$2\frac{2}{5}$
a.			
b.			
c.			
d.			$2\frac{1}{4}$
e.		$\frac{11}{6}$	

9. Convert the following mixed numbers to improper fractions.

Ex. $1\frac{3}{4} = \frac{(1 \times 4) + 3}{4} = \frac{7}{4}$

d. $3\frac{5}{8}$

a. $4\frac{2}{3}$

e. $15\frac{1}{2}$

b. $2\frac{1}{5}$

f. $5\frac{4}{7}$

c. $6\frac{7}{10}$

g. $10\frac{4}{5}$

10. Convert the following improper fractions to mixed numbers. *Reminder: Always check to see that your answer is in its lowest terms – you may need to simplify the fraction at the end.*

Ex. $\frac{9}{4} = 2\frac{1}{4}$ $2 \times 4 = 8$
 $9 - 8 = 1$
 $= 2\frac{1}{4}$

d. $\frac{6}{4}$

a. $\frac{19}{5}$

e. $\frac{28}{5}$

b. $\frac{5}{3}$

f. $\frac{54}{10}$

c. $\frac{22}{9}$

g. $\frac{21}{9}$

11. Which one is bigger? Add a less than (<) or more than (>) symbol between the sets of numbers to show which number is bigger. *Hint: You will need to have the numbers in the same format in order to accurately compare them.*

Ex. $2\frac{5}{9} < \frac{24}{9}$ $2\frac{5}{9} = \frac{23}{9}$

c. $5\frac{1}{6}$ $\frac{35}{6}$

$$\frac{23}{9} < \frac{24}{9}$$

a. $3\frac{1}{4}$ $\frac{11}{4}$

d. $\frac{11}{2}$ 6

b. $\frac{43}{10}$ $4\frac{1}{10}$

e. $\frac{64}{9}$ $7\frac{5}{9}$