Grade 6 Mathematics

Week of November 9- November 13

Lesson 2.1: Introduction to Fractions

Lesson 2.2: Improper Fractions and Mixed Numbers

Lesson Materials

- Lesson for Section 2.1 Intro to Fractions
- Lesson for Section 2.2 Improper Fractions and Mixed Numbers
- 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.



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

- Introduction
- Matching Fractions
- Reducing Fractions
- Practice Reducing Fractions
- Reducing Fractions Game
- LG 2.1 #1-6, p. 1-4

Tuesday

- Improper Fractions
- Practice Improper Fractions
- Game Improper Fractions
- Improper Fractions and Mixed Numbers
- LG 2.2 #1-2, p.5-6

Wednesday

Remembrance Day

Thursday

- Improper Fractions (with video)
- Conversions
- Naming
- Practice Improper Fractions
- Game Improper Fractions
- LG 2.2 #3, p. 6

Friday

- Mixed Numbers
- Conversions
- Practice Mixed Numbers
- Game Mixed Numbers
- LG 2.2 #4, p. 6-7



UNIT 2 LEARNING GUIDE - FRACTIONS

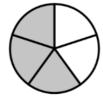
INSTRUCTIONS:

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.

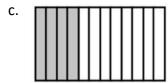
2.1 Introduction to Fractions

- 1. In your own words, write a definition for the following terms.
 - a. Numerator
 - b. Denominator ___
- 2. Represent the shaded parts using a fraction.

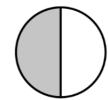
Ex.



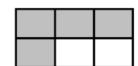
3 5



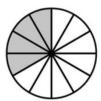
a.



d.



b.

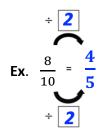


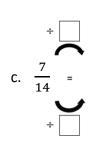
e.

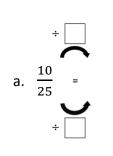




3. Reduce each fraction to its lowest terms. <u>Reminder</u>: Find the number by which you can divide both the numerator and the denominator.







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

$$\div \Box$$

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

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

4. Reduce each fraction to its lowest terms. <u>Reminder</u>: 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. <u>Reminder</u>: If the numerator and denominator of a fraction can both be divided by the same number, then it **can** be reduced. Reduce any fractions that can be reduced.

$\frac{3}{7}$	
2	
6	
_	
5	
$\frac{5}{15}$	
<u>15</u>	

$\frac{13}{20}$	
$\frac{4}{100}$	
$\frac{1}{4}$	
$\frac{3}{9}$	

- 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. <u>Hint</u>: 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. <u>Hint</u>: You can draw a stick person or just a face to represent each student.

2.2 IMPROPER FRACTIONS AND MIXED NUMBERS

1. 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.	$\frac{8}{9}$	Proper fraction	< 1
a.	19 5		
b.	47 50		



c.	$\frac{2}{6}$	
d.	$\frac{12}{8}$	
e.	$\frac{50}{47}$	

2. Complete the following table.

	Model	Improper Fraction	Mixed Number
Ex.		<u>12</u> 5	$2\frac{2}{5}$
a.			
b.			
C.			
d.			$2\frac{1}{4}$



 $\frac{11}{6}$ e.

3. Convert the following mixed numbers to improper fractions.

Ex.
$$1\frac{3}{4}$$
 $\frac{(1\times4)+3}{4} = \frac{7}{4}$

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

4. 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.
$$\frac{9}{4}$$

$$2\frac{?}{4}$$

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

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

$$9 - 8 = 1$$

$$=2\frac{1}{4}$$

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

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

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

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



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

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