# Grade 6 Mathematics <br> 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.


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.


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

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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
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## 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 $\qquad$
2. Represent the shaded parts using a fraction.

Ex.

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

a.

d.

b.

e.

3. Reduce each fraction to its lowest terms. Reminder: Find the number by which you can divide both the numerator and the denominator.
$\div 2$
Ex. $\begin{aligned} \frac{8}{10} & =\frac{4}{5} \\ \div & 2\end{aligned}$
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. $\frac{6}{9}=$
b. $\frac{9}{27}=$
c. $\frac{50}{70}=$
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. Reduce any fractions that can be reduced.

| $\frac{3}{7}$ | $\frac{36}{40}$ | $\frac{13}{20}$ |
| :---: | :---: | :---: |
| $\frac{2}{6}$ | $\frac{54}{63}$ | $\frac{4}{100}$ |
| $\frac{5}{15}$ | $\frac{7}{21}$ | $\frac{1}{4}$ |
| $\frac{6}{33}$ | $\frac{74}{99}$ | $\frac{8}{9}$ |

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.

### 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 <br> Improper Fraction | Value <br> $<1$ or $>1$ |
| :---: | :---: | :---: |
| a. | $\frac{8}{9}$ | Proper fraction |
| $\frac{19}{5}$ |  | $<1$ |
| b. | $\frac{47}{50}$ |  |

c.

| $\frac{2}{6}$ |  |  |
| :---: | :--- | :--- |
| $\frac{12}{8}$ |  |  |
| $\frac{50}{47}$ |  |  |

2. Complete the following table.

Ex.

| Mixed |
| :---: | :---: | :---: |
| Number |

e.

|  | $\frac{11}{6}$ |  |
| :--- | :--- | :--- |

3. Convert the following mixed numbers to improper fractions.
Ex. $1 \frac{3}{4} \quad \frac{(1 \times 4)+3}{4}=\frac{7}{4}$
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. $10 \frac{4}{5}$
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. $\frac{9}{4}$
$2 \frac{?}{4}$
$2 \times 4=8$
c. $\frac{22}{9}$
$9-8=1$

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

a. $\frac{19}{5}$
d. $\frac{6}{4}$
b. $\frac{5}{3}$
e. $\frac{28}{5}$

Math 6
f. $\frac{54}{10}$
g. $\frac{21}{9}$

