

## Unit Organizer 5<sup>th</sup> Grade Math Fractions

**Colorado State Standard 1:** Students develop number sense and use numbers and number relationships in problem-solving situations and communicate the reasoning used in solving these problems.

- Construct and interpret number meanings through real-world experiences and the use of hands-on materials.
- Represent and use numbers in a variety of equivalent forms (fractions).
- Use number sense, including estimation and mental arithmetic, to determine the reasonableness of solutions.

**Colorado State Standard 5:** Students use a variety of tools and techniques to measure, apply the results in problem-solving situations, and communicate the reasoning used in solving these problems.

- Understand and apply the attributes of length, capacity, weight, mass, time, and volume in problem-solving situations.
- Make and use direct and indirect measurements to describe and compare real-world situations.
- Understand the structure and use of systems of measurement.
- Select appropriate units, including metric and U.S. customary, and tools (such as rulers, protractors, compasses, thermometers) to measure to the degree of accuracy required to solve a given problem.

**Colorado State Standard 6:** Students link concepts and procedures as they develop and use computational techniques, including estimation, mental arithmetic, paper-and-pencil, calculators, and computers, in problem solving situations and communicate the reasoning used in solving these problems.

- Model, explain, and use the four basic operations-addition, subtraction, multiplication, and division- in problem-solving situations.
- Select and apply appropriate computational techniques to solve a variety of problems and determine whether the results are reasonable.

**Previous Unit:** Multiplication and Division of 2-Digit Whole Numbers

**Next Unit:** Area of a Triangle

### Unit 3- Fractions (Singapore Book 5A)

Standards for achievement and performance

Students will be able to ...

1. Divide a whole number by another and write the quotient as a fraction.
2. Associate fractions with division.
3. Change an improper fraction to a whole number or a mixed number by division.
4. Add and subtract like fractions.
5. Add and subtract unlike fractions.
6. Add and subtract mixed numbers.
7. Multiply a fraction and a whole number.
8. Find the value of a fractional part of a quantity.
9. Convert a measurement of length/width/volume of liquid/time from a larger unit of measure involving fractions (including mixed numbers) to a smaller unit of compound units, and vice versa.
10. Express a part of a quantity as a fraction.
11. Find the product of two fractions (excluding mixed numbers).
12. Divide a proper fraction by a whole number.
13. Solve multi-step word problems involving fractions.
14. Represent fraction amounts using fraction discs
15. Use vocabulary terms properly.

### Fractions

Mixed number

Fraction

Product

Improper

Simplest form

Numerator

Denominator

Quotient