Access Course Curriculum Maps

Each access course curriculum map is organized to align with the curriculum map for its corresponding general education course. Following the pacing of the curriculum maps will allow access course and general education teachers to collaboratively plan instructional strategies, resources, and content-related events, while also ensuring that course standards are thoroughly instructed.

In this curriculum map, each course standard includes the aligned Florida Standards Access Points, instructional resources, and a space to indicate the date of instruction. When developing standards-aligned lesson plans, teachers should keep in mind the “Big 3” of lesson planning:

1. Identify the Florida Standard to be taught,
2. Crosswalk to the corresponding Florida Standard Access Point, and
3. Identify resources to be used.

The instructional resources listed in this curriculum map were gathered from several sources, including general education curriculum maps, the Florida Access Project website (https://accesstofls.weebly.com/), CPALMS (http://www.cpalms.org/Public/), and Volusia’s approved curricula and instructional materials for access courses.

Access courses are setting-neutral, which means a student working on Florida Standards Access Points can be instructed on those standards in a variety of settings, including those with same-grade nondisabled peers in general educational courses. Grade-level access points instruction is delivered at the individual level needed for students to be successful and move learning forward.

Access points in the subject areas of Science, Social Studies, Art, Dance, Physical Education, Theatre, and Health provide tiered access to the general curriculum through three levels (Participatory, Supported, and Independent). Access points in English Language Arts and Mathematics do not contain these tiers, but instead contain Essential Understandings (or EUs). EUs consist of skills at varying levels of complexity and are a resource when planning for instruction.

Only students with a significant cognitive disability are eligible to participate in the Florida Standards Access Points curriculum pathway and be enrolled in access courses. Students with significant cognitive disabilities will learn and acquire skills at varied rates. Although efforts should be made to follow the curriculum map as written, modifications to the pacing in this curriculum map may need to occur. Prioritized standards, based on the Florida Standards Alternate Assessment (FSAA) Blueprint, have an asterisk and are highlighted in yellow throughout the curriculum map.
### Unit 1

#### Topic 1: Understanding Volume

**Pacing:** August 13 – October 19

*MAFS.5.MD.3.3:* Recognize volume as an attribute of solid figures and understand concepts of volume measurement.

a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume.

A solid figure which can be packed without gaps or overlaps using \( n \) unit cubes is said to have a volume of \( n \) cubic units.

<table>
<thead>
<tr>
<th>Resources</th>
<th>LAKESHORE:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx</a> (Teachers Guide pp 21-22; Daily math Practice Journal pp 52, 54,56,58,62; Pick a Problem pp 62, 64-68.)</td>
</tr>
<tr>
<td></td>
<td>CPALMS:</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66178">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66178</a> (How do you find the Volume)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66175">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66175</a> (How do we Determine Volume)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66177">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66177</a> (Determining Volume)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/31905">http://www.cpalms.org/Public/PreviewResourceLesson/Preview/31905</a> (Building Rectangular Prisms Part1)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/45816">http://www.cpalms.org/Public/PreviewResourceLesson/Preview/45816</a> (Hands-On Rectangular Prisms)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46107">http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46107</a> (Manipulating Cubic Units)</td>
</tr>
</tbody>
</table>

**LEARNZILLION:**

Videos
[https://learnzillion.com/lessonPlans/9043/](https://learnzillion.com/lessonPlans/9043/) (Understanding Volume)
[https://learnzillion.com/lessonPlans/8903/](https://learnzillion.com/lessonPlans/8903/) (Understanding the difference between a square unit and a cube unit)

Lessons
[https://learnzillion.com/lessonPlans/11210-2-identify-objects-that-have-volume-fp/](https://learnzillion.com/lessonPlans/11210-2-identify-objects-that-have-volume-fp/) (Identifying objects that have a volume)
[https://learnzillion.com/lessonPlans/11230-4-understand-that-a-cube-with-side-length-1-unit-is-called-a-unit-cube-and-measures-volume-c/](https://learnzillion.com/lessonPlans/11230-4-understand-that-a-cube-with-side-length-1-unit-is-called-a-unit-cube-and-measures-volume-c/) (Understand that a cube with side length 1 unit is called a unit cube and measures volume)

### Related Access Points

| **MAFS.5.MD.3.AP.3a:** | Use packing to recognize volume of a solid figure. |

<table>
<thead>
<tr>
<th><strong>EUs</strong></th>
<th><strong>Concrete:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identify a rectangular prism using models.</td>
</tr>
<tr>
<td></td>
<td>Identify a unit cube given models.</td>
</tr>
<tr>
<td></td>
<td>Use unit cubes to pack a rectangular prism.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Representation:</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify a rectangular prism using images.</td>
</tr>
<tr>
<td>Understand that packing is filling a rectangular prism (i.e., box) with cubes having no gaps or overlaps.</td>
</tr>
<tr>
<td>Understand the following vocabulary and concepts of unit cubes, solid figure, rectangular prism, volume.</td>
</tr>
</tbody>
</table>
| Resources | Content Module Perimeter, Area and Volume: [Click here](#)  
Element Card 5th: [Click here](#)  
UDL Unit Middle School Measurement: [Click here](#)  |
| --- | --- |
| **MAFS.5.MD.3.4:** Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. | Lakeshore:  
https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx  
CPALMS  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66723 (Find The Volume)  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66730 (Volume with Improvised Units)  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/66732 (Volume in Cubic Units)  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/67209 (Measuring Volume)  
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/28355 (Volume About the Count)  
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/35911 (Building Rectangular Prism Part 2)  
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/35816 (Pump up The Volume)  
LEARNZILLION:  
Video:  
https://learnzillion.com/lesson_plans/5815 (Find the volume of a rectangular prism by filling it with unit cubes)  
Lessons:  
https://learnzillion.com/lesson_plans/12462/ (Pack rectangular prisms with unit cubes to find volume)  
https://learnzillion.com/lesson_plans/12488-8-decompose-and-recompose-solid-figures-by-partitioning-figures-into-layers-fp/ (Decompose and recompose solid figures by partitioning figures into layers)  |
| Related Access Point | Description | Date(s) of Instruction |
| **MAFS.5.MD.3.AP.4a:** | Determine the volume of a rectangular prism built by “unit cubes.” | |
| **EUs** | **Concrete:**  
- Count unit cubes used to pack a rectangular prism to determine volume. | |
| **Representation:** |  
- Understand the following vocabulary and concepts of unit cubes, solid figure, rectangular prism, volume.  
- Identify the numeral representing the quantity of cubes inside the rectangular prism. | |
| **Resources** | Curriculum Resource Guide Measurement and Geometry: [Click here](#)  
Element Card 5th: [Click here](#)  
UDL Unit Middle School Measurement: [Click here](#)  
Equals Lesson 11.E.4 pg.109 | |
| **MAFS.K12.MP.3.1:** Construct viable arguments and critique the reasoning of others. | **MAFS.K12.MP.7.1:** Look for and make use of structure. | |
Topic 2: Expanding understanding of place value decimals

**MAFS.5.NBT.1.1:** Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.

**Examples of Opportunities for In-Depth Focus**
The extension of the place value system from whole numbers to decimals is a major intellectual accomplishment involving understanding and skill with base-ten units and fractions.

**Resources**

- **AIMS:**
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/ModelingMillion.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/ModelingMillion.pdf) (Modeling A Million)

- **LAKESHORE:**
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
    (Teacher Guide: Place Value Detective p 5; Daily Math Practice Journal pp 10,12,16,26,28; How did you solve it? 21 and 22)

- **CPALMS:**
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56851](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56851) (Walking to School)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56852](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56852) (Five Tenths)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56854](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56854) (Dylan’s Baseball Card Collection)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56853](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56853) (The Odometer)
  - [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/28707](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/28707) (“Shift the Place Shift the Value” Understanding Adjacent Places in the Base-ten System)
  - [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72225](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72225) (Predicting Place Value Patterns)
  - [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/55048](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/55048) (Wire we All Wet)

- **ILLUSTRATIVE MATHEMATICS:**
  - [https://www.illustrativemathematics.org/content-standards/5/NBT/A/1/tasks/1562](https://www.illustrativemathematics.org/content-standards/5/NBT/A/1/tasks/1562) (Kipton’s Scale)
  - [https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/969](https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/969) (Which Number is it)
  - [https://www.illustrativemathematics.org/content-standards/5/NBT/A/1/tasks/1800](https://www.illustrativemathematics.org/content-standards/5/NBT/A/1/tasks/1800) (Tenths and Hundredths)
  - [https://www.illustrativemathematics.org/content-standards/5/NBT/A/1/tasks/1931](https://www.illustrativemathematics.org/content-standards/5/NBT/A/1/tasks/1931) (Millions and Billions of People)

- **LEARZILLION:**
  - [https://learnzillion.com/lesson_plans/2732-3-solve-problems-using-place-value-understanding-a/?card=41574](https://learnzillion.com/lesson_plans/2732-3-solve-problems-using-place-value-understanding-a/?card=41574) (Solve Problems Using Place Value Understanding)

**Related Access Points**

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NBT.1.AP.1a:</strong></td>
<td>Compare the value of a number when it is represented in different place values of two three-digit numbers.</td>
</tr>
<tr>
<td><strong>EUs</strong></td>
<td>Concrete</td>
</tr>
</tbody>
</table>
Given two models of base ten blocks on a place value chart, compare the value of the same digit used in different place value positions (e.g., 123 where 2 represents 2 tens and 142 where 2 represents 2 ones).

**Representation:**
- Recognize the value of a digit based on its place in a three-digit number (e.g., the 2 in 125 represents 2 tens or 20).
- Compare the value of the same digit used in different place value positions (e.g., 123 where 2 represents 2 tens and 142 where 2 represents 2 ones).

**Resources**
Element Card 5th: [Click here](#)

**MAFS.5.NBT.1.2:** Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.

**Resources**
LAKSHORE: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
(Daily Math Practice Journal pp 10, 14, 16, 19, 20, 24, 27; Pick a Problem pp39 and 40
How Did you Solve it? pp 23 and 24; Daily Dose of Fractions and Decimals pp 76-150 (#1 Only)
CPALMS:
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56825](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56825) (Multiplied by Ten Three Times)
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56844](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56844) (How Many Zeros)
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56848](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56848) (The Error)
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56845](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56845) (Using Whole Number Exponents)
[http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47989](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47989) (Seeking Patterns Using Base 10 and Powers of 10)
[http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73414](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73414) (What Happens When You Multiply by Ten)
ILLUSTRATIVE MATHEMATICS:
[https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/555](https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/555) (Watch out for Parentheses)
[https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/969](https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/969) (Bowling for Numbers)
[https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/1596](https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/1596) (Using Operations and Parentheses)
LEARNZILLION:
[https://learnzillion.com/lesson_plans/9433-8-understand-how-multiplication-and-division-by-10-relate-to-place-value-c](https://learnzillion.com/lesson_plans/9433-8-understand-how-multiplication-and-division-by-10-relate-to-place-value-c) (Understand how Multiplication and Division by 10 Relate to Place Value)

**Related Access Points**

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NBT.1.AP.2a:</strong> Identify what an exponent represents (e.g., 10³= 10X10X10).</td>
<td></td>
</tr>
<tr>
<td>EUs</td>
<td>Concrete:</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>• Locate the exponent on a given number.</td>
</tr>
<tr>
<td></td>
<td>• Use manipulatives or objects to demonstrate exponents.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Representation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use repeated addition or multiplication to solve for the total value of a number with an exponent.</td>
</tr>
<tr>
<td>• Understand the following concepts, symbols, and vocabulary for exponents: $\times$, exponent.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Element Card 5th: <a href="#">Click here</a></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NBT.1.3:</strong> Read, write, and compare decimals to thousandths.</td>
<td></td>
</tr>
<tr>
<td>a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.</td>
<td></td>
</tr>
<tr>
<td>Compare two decimals to thousandths based on meanings of the digits in each place, using $&gt;$, $=$, and $&lt;$ symbols to record the results of comparisons.</td>
<td></td>
</tr>
</tbody>
</table>

| Resources | AIMS: [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/DealingWithDecimals.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/DealingWithDecimals.pdf) (Dealing with Decimals) |
|-----------|https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/DeducingDecimals.pdf (Deducing Decimals) |
|           | Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx) (Teachers Guide pp 6-9; Reproducible pp 5,6,7, and 8; Daily Math Practice Journal pp 11, 14, 22, 24) |
|           | CPALMS: [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56863](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56863) (Writing and reading Decimals) |
|           | [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56865](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56865) (Decimals in Number Name) |
|           | [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56910](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56910) (Decimals in Expanded Form) |
|           | [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56864](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56864) (Decimals in Word and Expanded Form) |
|           | [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/31750](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/31750) (Where’s Your Place in the Kingdom of Decimals) |
|           | [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72747](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72747) (Fraction Frenzy! Division/Fractional Word Problem) |
|           | [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46576](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46576) (Picture This! Fractions as Division) |
|           | [https://www.illustrativemathematics.org/content-standards/5/NBT/A/3/tasks/1813](https://www.illustrativemathematics.org/content-standards/5/NBT/A/3/tasks/1813) (Are These Equivalent to 9.52) |

<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.1.AP.3a:</td>
<td>Read, write, or select a decimal to the hundredths place.</td>
<td></td>
</tr>
</tbody>
</table>
### EUs

**Concrete**
- Recognize part/whole when materials are divided into tenths.
- Count tenths to determine how many (e.g., four tenths; 0.4 have the decimal present but not required to read).

**Representation:**
- Count to 100.
- Understand place value to the hundredths.
- Understand where to write a decimal point.
- Understand the following concepts, symbols, and vocabulary: decimal, decimal point, tenths place, hundredths place.

**Resources**
- Content Module Fractions and Decimals: [Click here](#)
- Curriculum Resource Guide Fractions and Decimals: [Click here](#)
- Element Card 5th: [Click here](#)

### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NBT.1.AP.3b:</strong> Compare two decimals to the hundredths place, whose values are less than one.</td>
<td></td>
</tr>
<tr>
<td><strong>MAFS.5.NBT.2.5:</strong> Fluently multiply multi-digit whole numbers using the standard algorithm.</td>
<td></td>
</tr>
</tbody>
</table>

### EUs

**Concrete:**
- Recognize parts of a whole using materials divided into hundredths.
- Understand the structure of a decimal, including the place value patterns.
- Understand that numbers to the right of the decimal represent a value less than one.
- Compare various amounts of change when making purchases, and determine which amount is larger.

**Representation:**
- Know value of places to the thousandths.
- Understand where to write a decimal point (e.g., to the right of the units).
- Understand the following concepts, symbols, and vocabulary: decimal, decimal point, hundredths, thousandths, thousandths place.

**Resources**
- Element Card 5th: [Click here](#)
- Content Module Fractions and Decimals: [Click here](#)
- Curriculum Resource Guide Fractions and Decimals: [Click here](#)

### MAFS.K12.MP.6.1: Attend to precision.

### MAFS.K12.MP.7.1: Look for and make use of structure.

---

**Topic 3: Developing multiplication and division strategies**

<table>
<thead>
<tr>
<th>MAFS.5.NBT.2.5: Fluently multiply multi-digit whole numbers using the standard algorithm.</th>
<th>Pacing: September 11 – October 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fluency Expectations or Examples of Culminating Standards</td>
<td></td>
</tr>
<tr>
<td>5.NBT.2.5 Students fluently multiply multi-digit whole numbers using the standard algorithm.</td>
<td></td>
</tr>
</tbody>
</table>
| Resources        | LAKESHORE: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
(Daily Math Practice pp 11, 12, 13, 17, 21, 22, 23, 25, 29)  
CPALMS: [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58070](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58070) (Complete the Multiplication Problem)  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58068](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58068) (Multiplying Using the Standard algorithm)  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58072](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58072) (More Multiplication using the Standard Algorithm)  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58067](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58067) (Find the Multiplication error)  
[http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73394](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73394) (Area Models to Algorithms)  
[http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73137](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73137) (Multi-digit Multiplication using frames)  
[http://www.cpalms.org/Public/PreviewResourceLesson/Preview/69646](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/69646) (Beach on a Budget)  
LEARNZILLION:  
Lessons:  

<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.2.AP.5a:</td>
<td>Fluently multiply two-digit numbers.</td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Use base ten blocks to perform repeated addition
- Use objects or manipulatives to create arrays.

**Representation:**
- Use visual representations to solve problems.
- Understand the process of carrying and borrowing when adding and subtracting.
- Understand the following concepts, symbols, and vocabulary for +, - , =.

**Resources**

Element Card 5th: [Click here](#)

Equals Lesson 11 B2

*MAFS.5.NBT.2.6: Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.*

**Examples of Opportunities for In-Depth Focus**

The extension from one-digit divisors to two-digit divisors requires care. This is a major milestone along the way to reaching fluency with the standard algorithm in grade 6 (6.NS.2).

**Resources**

LAKESHORE: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.2.AP.6a:</td>
<td>Find whole number quotients up to two dividends and two divisors.</td>
<td>Instruction</td>
</tr>
<tr>
<td><strong>EUs</strong></td>
<td><strong>Concrete:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decompose (+) with concrete objects; use counting to get the answers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Match the action of decomposing with vocabulary (i.e., divide or separate into groups).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand concept of division: Sharing or grouping numbers into parts.</td>
<td></td>
</tr>
<tr>
<td><strong>Representation:</strong></td>
<td><strong>Concrete:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand the following concepts symbols and vocabulary of division, part, whole, divisor, quotient, ÷, =, —).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use a visual representation of dividends and divisors.</td>
<td></td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>Curriculum Resource Guide Ratio and Proportions: <a href="#">Click here</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Element Card 5th: <a href="#">Click here</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MASSI: <a href="#">Click here</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equals Lesson 11.c.3 and 11.d.3</td>
<td></td>
</tr>
<tr>
<td>MAFS.5.NBT.2.AP.6b:</td>
<td>Find whole number quotients of whole numbers with up to two-digit dividends and two-digit divisors.</td>
<td>Instruction</td>
</tr>
<tr>
<td><strong>EUs</strong></td>
<td><strong>Concrete:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decompose (+) with concrete objects; use counting to get the answers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Match the action of decomposing with vocabulary (i.e., divide or separate into groups).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Understand concept of division: Sharing or grouping numbers into parts.</td>
<td></td>
</tr>
<tr>
<td><strong>Representation:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| - Understand the following concepts, symbols, and vocabulary of division, part, whole, divisor, quotient, ÷, =. —  

<table>
<thead>
<tr>
<th><strong>Resources</strong></th>
</tr>
</thead>
</table>
| Element Card 5th: [Click here](#)  
| Curriculum Resource Guide Ratio and Proportions: [Click here](#)  

**MAFS.K12.MP.1.1:** Make sense of problems and persevere in solving them.  
**MAFS.K12.MP.8.1:** Look for and express regularity in repeated reasoning.
<table>
<thead>
<tr>
<th>Resources</th>
<th>Topic 4: Using equivalency to add and subtract fractions with unlike denominators</th>
</tr>
</thead>
</table>

**MAFS.5.NF.1.1**: Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, \(\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}\). (In general, \(\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}\).)

<table>
<thead>
<tr>
<th>Resources</th>
<th>Topic 4: Using equivalency to add and subtract fractions with unlike denominators</th>
</tr>
</thead>
</table>

AIMS:
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/FractionTime.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/FractionTime.pdf) (Fraction Time)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Part4FractionAction.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Part4FractionAction.pdf) (Fraction Action 4)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Part5FractionAction.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Part5FractionAction.pdf) (Fraction Action 5)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Part9FractionAction.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Part9FractionAction.pdf) (Fraction Action 9)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/FractionFringeOnCuttingEdge.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/FractionFringeOnCuttingEdge.pdf) (Fraction Fringe)

LAKESHORE:
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
  (Teachers Guide pp 13-14; Reproducible pp 4,9-11; Daily Math Practice Journal pp 30,32,34,36,38,40,42,44,46,48; Pick a Problem 46-49)

CPALMS:
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59566](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59566) (Adding Fractions with Unlike denominators)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59597](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59597) (Adding More Fractions With Unlike Denominators)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59570](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59570) (Subtracting Fractions)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59572](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59572) (Subtracting More Fractions)
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/33201](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/33201) (Adding and Subtracting Mixed Numbers with Unlike Denominators)
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/30113](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/30113) (Discovering Common Denominators)

ILLUSTRATIVE MATHEMATICS:
- [https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/839](https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/839) (Egyptian Fraction)
- [https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/848](https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/848) (Finding Common Denominators to add)
- [https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/859](https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/859) (Finding Common Denominators to subtract)
- [https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/855](https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/855) (Jog A Thon)
- [https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/847](https://www.illustrativemathematics.org/content-standards/5/NF/A/1/tasks/847) (Mixed Numbers With Unlike Denominators)

LEARNZILLION:
  (Using Multiplication Arrays to Solve Division Problems)
  (Relating Dividend, Divisors, and quotient to a Division problem)
<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NF.1.AP.1a:</td>
<td>Add and subtract fractions with like denominators with sums greater than 1 represented by mixed numbers using visual fraction models.</td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- To add, use fraction manipulatives (each piece may be labeled with the corresponding unit fraction) to model each fraction and join them to find the sum (e.g., $\frac{3}{4} + \frac{2}{4} = \frac{5}{4}$).
- To subtract, use fraction manipulatives (each piece may be labeled with the corresponding unit fraction) to model the first number in the expression and remove manipulatives that represent the fraction being subtracted (e.g., $\frac{5}{4} - \frac{2}{4} = \frac{3}{4}$).

**Representation:**
- To add, use a visual representation of a whole divided into equal pieces (each piece may be labeled with the corresponding unit fraction). Shade each unit to represent the fractions in the expression and count the shaded units to find the sum.
- To subtract, use a visual representation of the first fraction in the expression. Cross out the piece(s) that represent the fraction being subtracted. Count the remaining piece(s) to find the remainder.
- Understand the following vocabulary: fraction, numerator, denominator, fraction greater than one, mixed number.

**Resources**

Element Card 5th: [Click here](#)  
Content Module Fractions and Decimals: [Click here](#)  
Curriculum Resource Guide Fractions and Decimals: [Click here](#)  

<table>
<thead>
<tr>
<th>MAFS.5.NF.1.AP.1b</th>
<th>Add or subtract fractions with unlike denominators within one whole unit on a number line.</th>
<th></th>
</tr>
</thead>
</table>

**EUs**

**Concrete:**
- Use manipulatives to represent fractions.
- Use manipulatives to combine fractions within 1. [Click here](#)  
- Use manipulatives to separate fractions within 1. [Click here](#)  
- Use a number line to represent fractions.
**Representation:**
- Use a number line to combine fractions within 1.
- Use a number line to separate fractions within 1.

**Resources**
- Element Card 5th: [Click here](#)
- Content Module Fractions and Decimals: [Click here](#)
- Curriculum Resource Guide Fractions and Decimals: [Click here](#)
- Equals Lesson 4.B.2, 4.B.5, and 5.C2

*MAFS.5.NF.1.2*: Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result \(2/5 + 1/2 = 3/7\), by observing that \(3/7 < 1/2\).

**Examples of Opportunities for In-Depth Focus**
When students meet this standard, they bring together the threads of fraction equivalence (grades 3–5) and addition and subtraction (grades K–4) to fully extend addition and subtraction to fractions.

**Resources**
- AIMS: [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/CindysCarpetEmporium.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/CindysCarpetEmporium.pdf) (Cindy’s Carpet)
  [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/RoyalRugs.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/RoyalRugs.pdf) (Royal Rugs)
- Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
  (Teachers Guide pp 15-16; Reproducible pp 4, 12; Daily Math Practice pp 31, 33, 35, 36, 38, 43; How did you Solve it pp 31, 33, 35, 36, 38, 43; Pick a problem pp 50, 54-55)
- CPALMS:
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61660](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61660) (Sarah’s Hike)
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61668](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61668) (Maris Has A Party)
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61670](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61670) (Just Run)
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61540](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61540) (Baking Cakes)
  [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/69959](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/69959) (Babysitter’s Club Fun With Fractions MEA)
  [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73106](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73106) (Lets have a Fraction Party!)
  [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73030](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73030) (Fractions Make The Real WORLD Problems Go Around)
- ILLUSTRATIVE MATHEMATICS:
### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solve word problems involving the addition and subtraction of fractions using visual fraction models.</td>
<td></td>
</tr>
</tbody>
</table>

#### Concrete:
- Match the vocabulary in a word problem to an action.
- Use manipulatives to model the context of the word problem.
- Count to find the answer.
- To add, use fraction manipulatives (each piece may be labeled with the corresponding unit fraction) to model each fraction and join them to find the sum (e.g., \(1/4 + 2/4 = 3/4\)).
- To subtract, use fraction manipulatives (each piece may be labeled with the corresponding unit fraction) to model the first fraction in the expression and remove manipulatives that represent the fraction being subtracted (e.g., \(3/4 - 2/4 = 1/4\)).

#### Representation:
- Create a pictorial representation of the word problem.
- Use context clues to interpret the concepts, symbols, and vocabulary for addition and subtraction.
- To add, use a visual representation of a whole divided into equal pieces (each piece may be labeled with the corresponding unit fraction). Shade each unit to represent the fractions in the expression and count the shaded units to find the sum.
- To subtract, use a visual representation of the first fraction in the expression. Cross out the piece(s) that represent the fraction being subtracted. Count the remaining piece(s) to find the remainder.

### Resources

- Content Module Fractions and Decimals: [Click here](#)
- Curriculum Resource Guide Fractions and Decimals: [Click here](#)
- Element Card 5th: [Click here](#)

**MAFS.K12.MP.2.1**: Reason abstractly and quantitatively.

**MAFS.K12.MP.4.1**: Model with mathematics.
**Unit 2**

**Topic 5: Understanding the concept of multiplying fractions by fractions**

<table>
<thead>
<tr>
<th>Pacing October 22 – January 18</th>
</tr>
</thead>
</table>

**MAFS.5.NF.2.3:** Interpret a fraction as division of the numerator by the denominator \((a/b = a ÷ b)\). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret \(3/4\) as the result of dividing 3 by 4, noting that \(3/4\) multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size \(3/4\). If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?

<table>
<thead>
<tr>
<th>Resource</th>
</tr>
</thead>
</table>

**Lakeshore:**
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx) (Teacher Guide p 16; Daily Math Practice Journal pp 31,36,46,48; Pick a Problem pp 49, 53, 54; How did you Solve it pp 44-45)

**CPALMS:**
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61976](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61976) (Sharing Pizza)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61977](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61977) (Sharing Brownies)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61995](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61995) (Two Thirds)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61998](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/61998) (Five Thirds)
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72747](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72747) (Fraction Frenzy! (Division/Fractional Word Problems))
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46576](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46576) (Picture This! Fraction as Division)

**ILLUSTRATIVE MATHMATICS:**
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/292](https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/292) (What is 23/5?)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/293](https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/293) (Converting Fractions of a Unit into a Smaller)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/858](https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/858) (How Much is Pie?)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/2074](https://www.illustrativemathematics.org/content-standards/5/NF/B/3/tasks/2074) (Sharing Lunches)

**LEARNZILLION:**
- [https://learnzillion.com/lesson_plans/3905-1-fractions-as-division-c/?card=52926](https://learnzillion.com/lesson_plans/3905-1-fractions-as-division-c/?card=52926) (Fractions as Division)
- [https://learnzillion.com/lesson_plans/3891-2-understand-fractions-as-division/?card=52794%23lesson%23lesson%23lesson#lesson](https://learnzillion.com/lesson_plans/3891-2-understand-fractions-as-division/?card=52794%23lesson%23lesson%23lesson#lesson) (Understand Fractions as Division)
- [https://learnzillion.com/lesson_plans/3909-4-pet-palace-reporting-results-of-division-as-fractions-a/](https://learnzillion.com/lesson_plans/3909-4-pet-palace-reporting-results-of-division-as-fractions-a/) (Pet Palace: Reporting Results of Division as Fractions)

**ACHIEVE THE CARE:**
**Related Access Points**

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NF.2.AP.3a: Divide unit fractions by whole numbers and whole numbers by unit fractions using visual fraction models.</td>
<td></td>
</tr>
</tbody>
</table>

**Concrete:**
- To show whole numbers divided by unit fractions, use fraction manipulatives to model the wholes. Use a template to guide placement of the unit fractions to illustrate that every whole can be represented in terms of groups of unit fractions (e.g., $3 \div \frac{1}{2}$ is 3 wholes divided into 6 groups of $\frac{1}{2}$).

**Representation:**
- Count the number of groups of the unit fraction to determine the quotient.

**EUs**

- Understand the following concepts and vocabulary: fraction, whole number, divide, $\div$.
- Use visual representations to model whole numbers and groups of unit fractions.
- Count the number of groups of the unit fraction to determine the quotient.

**Resources**

<table>
<thead>
<tr>
<th>Resources</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Element Card 5th: <a href="#">Click here</a></td>
<td></td>
</tr>
<tr>
<td>Content Module Fractions and Decimals: <a href="#">Click here</a></td>
<td></td>
</tr>
</tbody>
</table>

**MAFS.5.NF.2.4:** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.

a. Interpret the product $(a/b) \times q$ as a parts of a partition of $q$ into $b$ equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(2/3) \times 4 = 8/3$, and create a story context for this equation. Do the same with $(2/3) \times (4/5) = 8/15$. (In general, $(a/b) \times (c/d) = ac/bd$.)

b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

c. **Examples of Opportunities for In-Depth Focus**

When students meet this standard, they fully extend multiplication to fractions, making division of fractions in grade 6 (6.NS.1) a near target.

**AIMS:**
https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%20205/Part6FractionAction.pdf (Fraction Action p 109-188)

LAKESHORE:
https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx
(Teachers Guide p 16; Daily Math Practice Journal pp 31, 36, 46, 48; Pick a Problem p 49,53,54; How Did You Solve It? pp 44-45)

CPALMS:
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62844  (Multiplying Fractions by a Whole Number)
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62901  (Using Visual Fraction Models)
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62895  (Multiplying Fractions by Fractions)
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62896  (The Rectangle)
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/32280  (Multiplying a Fraction by a Fraction)
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72343  (Real-World Fractions)

ILLUSTRATUTIVE MATHEMATICS:
https://www.illustrativemathematics.org/content-standards/5/NF/B/4/tasks/321  (Connor and Makayla Discuss Multiplication)
https://www.illustrativemathematics.org/content-standards/5/NF/B/4/tasks/965  (Folding Strips of Paper)
https://www.illustrativemathematics.org/content-standards/5/NF/B/4/tasks/1988  (Chavone’s Bathroom Tiles)
https://www.illustrativemathematics.org/content-standards/5/NF/B/4/tasks/2075  (Connecting the Area Model to Context)

LEARNZILLION:
https://learnzillion.com/lesson_plans/3895-5-understand-multiplying-with-fractions-c/?card=52835  (Understand Multiplying with Fractions)
https://learnzillion.com/lesson_plans/3906-6-find-a-fraction-of-a-whole-number-fp/?card=52939  (Find a Fraction of a Whole Number)
https://learnzillion.com/lesson_plans/3908-8-find-the-area-of-a-rectangle-with-fractional-side-lengths-fp/  (Find the Area of a Rectangle with Fractional side Lengths)
https://learnzillion.com/lesson_plans/3911-9-apply-multiplication-of-fractions-to-find-area-a/  (Apply Multiplication of Fractions to Find Area)

ORIGO ONE:
https://www.youtube.com/watch?v=kGH5VvMxGyg&index=24&list=PLftMBEZKW0lTqmZyJuvXnCULVQ72yckFt  (Exploring the Area Model of Fractions)

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NF.2.AP.4a:</td>
<td>Multiply a fraction by a whole or mixed number using visual fraction models.</td>
<td></td>
</tr>
<tr>
<td>EUs</td>
<td>Concrete:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* Place fraction manipulatives in groups as indicated by the whole number in a given multiplication expression (e.g., (2 \times \frac{1}{3} = 2) groups of (\frac{1}{3}) or (3 \times \frac{1}{4} = 3) groups of (\frac{1}{4})).</td>
<td></td>
</tr>
</tbody>
</table>
- Use repeated addition or skip counting to find the product (e.g., $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$ or $\frac{1}{4} + \frac{1}{4} = \frac{3}{4}$).

**Representation:**
- Use a visual representation of a whole divided into equal pieces (each piece may be labeled with the corresponding unit fraction). Shade the number of groups of the fraction (e.g., 3 groups of $\frac{1}{5}$) as indicated by the whole number.
- Use repeated addition or skip counting to find the product (e.g. $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{3}{5}$).
- Understand the following vocabulary: numerator, denominator.

**Resources**
- Element Card 5th: [Click here](#)
- Content Module Fractions and Decimals: [Click here](#)
- Curriculum Resource Guide Fractions and Decimals: [Click here](#)
- Equals Lesson – 12.C.5

**MAFS.K12.MP.1.1:** Make sense of problems and persevere in solving them.
**MAFS.K12.MP.4.1:** Model with mathematics.
**MAFS.K12.MP.5.1:** Use appropriate tools strategically.

---

**Topic 6: Comparing and rounding decimals**

**Pacing November 8 – 29**

**MAFS.5.NBT.1.3:** Read, write, and compare decimals to thousandths.

- Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
- Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

**Resources**
- AIMS: [Dealing with Decimals](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/DealingWithDecimals.pdf)
- Deducing Decimals: [Deducing Decimals](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/DeducingDecimals.pdf)
- LAKESHORE: [Lakshore-5th-Grade](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
- CPALMS: [Comparing Decimals](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56913)
- Writing and Reading Decimals: [Writing and Reading Decimals](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56915)
- Decimals in Number Name: [Decimals in Number Name](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56865)
- Decimals in Expanded Form: [Decimals in Expanded Form](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56910)
<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.1.AP.3a:</td>
<td>Read, write, or select a decimal to the hundredths place.</td>
<td>Instruction</td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Recognize part/whole when materials are divided into tenths.
- Count tenths to determine how many (e.g., four tenths; 0.4 have the decimal present but not required to read).

**Representation:**
- Count to 100.
- Understand place value to the hundredths.
- Understand where to write a decimal point.
- Understand the following concepts, symbols, and vocabulary: decimal, decimal point, tenths place, hundredths place.

**Resources**

Content Module Fractions and Decimals: [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56864) (Decimals in Word and Expanded Form)
Content Module Fractions and Decimals: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46573) (Tacking on Decimals)
Content Module Fractions and Decimals: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/30773) (Batting a Thousand(TH))
Content Module Fractions and Decimals: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/69741) (Solar Cooking)

ILLUSTRATIVE MATHEMATICS:
- [Click here](https://www.illustrativemathematics.org/content-standards/5/NBT/A/3/tasks/1801) (Drawing Pictures to Illustrative Comparisons)
- [Click here](https://www.illustrativemathematics.org/content-standards/5/NBT/A/3/tasks/1802) (Comparing Decimals on a Number Line)
- [Click here](https://www.illustrativemathematics.org/content-standards/5/NBT/A/3/tasks/1803) (Placing Thousandths on a Number Line)

LEARZILLION:
- [Click here](https://learnzillion.com/lesson_plans/3660-3-comparing-decimals-with-different-numbers-of-digits-c/?card=50554) (Comparing Decimals with a Different Numbers of Digits)
- [Click here](https://learnzillion.com/lesson_plans/3689-4-comparing-decimals-with-different-numbers-of-digits-fp/) (Comparing Decimals with Different Number of Digits)
- [Click here](https://learnzillion.com/lesson_plans/3687-5-using-understanding-of-place-value-to-compare-decimals-of-different-digits-fp/?card=50774) (Using Understanding of Place Value to Compare Decimals of Different digits)
- [Click here](https://learnzillion.com/lesson_plans/3696-6-gumball-machine-comparing-decimals-extending-to-different-place-values-in-word-problems-a/?card=50849) (Gumball Machine: Comparing Decimals Extending to Different Place Values in Word Problems)
**MAFS.5.NBT.1.AP.3b:** Compare two decimals to the hundredths place, whose values are less than one.

<table>
<thead>
<tr>
<th>EUs</th>
<th>Instruction</th>
</tr>
</thead>
</table>
| **Concrete:** | - Recognize parts of a whole using materials divided into hundredths.  
- Understand the structure of a decimal, including the place value patterns.  
- Understand that numbers to the right of the decimal represent a value less than one.  
- Compare various amounts of change when making purchases, and determine which amount is larger. |
| **Representation:** | - Know value of places to the thousandths.  
- Understand where to write a decimal point (e.g., to the right of the units).  
- Understand the following concepts, symbols, and vocabulary: decimal, decimal point, hundredths, hundredths place, thousandths, thousandths place. |

**Resources**
- Element Card 5th: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
- Content Module Fractions and Decimals: [Click here](https://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56913) (Rounding to the Nearest Whole Number)
- Content Module Fractions and Decimals: [Click here](https://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56915) (Rounding to the Tenths Place)
- Content Module Fractions and Decimals: [Click here](https://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56917) (Rounding to the Thousands Place)
- Content Module Fractions and Decimals: [Click here](https://www.cpalms.org/Public/PreviewResourceLesson/Preview/69646) (Shopping for Produce (Hundredth))
- Content Module Fractions and Decimals: [Click here](https://www.cpalms.org/Public/PreviewResourceLesson/Preview/46842) (Beach on a Budget)
- Content Module Fractions and Decimals: [Click here](https://www.cpalms.org/Public/PreviewResourceLesson/Preview/69646) (Which Cellphone for Mia)
- Illustrative Mathematics: [Click here](https://www.illustrativemathematics.org/content-standards/5/NBT/A/4/tasks/1804) (Rounding to Tenths and Hundredths)
- Learnzillion: [Click here](https://learnzillion.com/lesson_plans/3679-7-daniel-s-race-rounding-decimals-c/?card=50705) (Daniel’s Race: Rounding Decimals)
- Learnzillion: [Click here](https://learnzillion.com/lesson_plans/3694-8-rounding-decimals-to-the-nearest-tenth-fp/) (Rounding Decimals to the Nearest Tenth)
### Related Access Points

<table>
<thead>
<tr>
<th>Access Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.1.AP.4a</td>
<td>Round decimals to the next whole number.</td>
</tr>
</tbody>
</table>

#### EUs

**Concrete:**
- Understand that numbers to the right of the decimal represent a value less than one.
- Use rules for rounding with whole numbers.
  - If last number is five or more, round to the next highest whole number
  - If the last number is four or less, round to the next lowest whole number.
- Use change to represent less than one with one being a dollar.

**Representation:**
- Make comparisons between similar/different with concrete representations (i.e., is this set of manipulatives [8 ones] closer to this set [a 10] or this set [a one]?)
- Understand the following vocabulary:
  - Fraction \((a/b)\)
  - Decimal \((.a)\)
  - Tenths place \((.a)\)
  - Hundredths place \((.aa)\)

#### Resources

- Element Card 5th: [Click here](#)
- Content Module Fractions and Decimals: [Click here](#)
- Curriculum Resource Guide Fractions and Decimals: [Click here](#)
- Equals Lesson 8.B.3

### Related Access Point

<table>
<thead>
<tr>
<th>Access Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.1.AP.4b</td>
<td>Round decimals to the tenths place.</td>
</tr>
</tbody>
</table>

#### EUs

**Concrete:**
- Use rules for rounding.
  - If last number is five or more, round to the next highest tenth.
  - If the last number is four or less, round to the next lowest tenth.
  - Identify “tenths” on a number line between 0 and 1.

**Representation:**
- Make comparisons between similar/different with concrete representations (i.e., is this set of manipulatives \([8 \text{ ones}]\) closer to this set \([a \text{ 10}]\) or this set \([a \text{ one}]\)?
- Understand the following vocabulary:
  - Fraction \((a/b)\)
  - Decimal \((.a)\)
  - Tenths \((.1)\)

<table>
<thead>
<tr>
<th>Resources</th>
<th>Element Card 5th: <a href="#">Click here</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Content Module Fractions and Decimals: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>Curriculum Resource Guide Fractions and Decimals: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>Equals Lesson 8.B.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.1.AP.4c</td>
<td>Round decimals to the hundredths place.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EUs</th>
<th>Concreted:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- Estimate with decimals.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Demonstrate understanding that we are estimating whether the number is closest to the next lowest or next highest specified place (e.g., (0.45) to the nearest tenth).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Representation:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Understand the following concepts, symbols, and vocabulary: decimal, decimal point, round, hundredths, hundreds place, thousandths, thousandths place.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Resources</th>
<th>Element Card 5th: <a href="#">Click here</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Content Module Fractions and Decimals: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>Curriculum Resource Guide Fractions and Decimals: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>Equals Lesson 8.B.4 and 8.B.5</td>
</tr>
</tbody>
</table>

**MAFS.K12.MP.6.1:** Attend to precision.
**MAFS.K12.MP.7.1:** Look for and make use of structure.

<table>
<thead>
<tr>
<th>Topic 7: Interpreting multiplying fractions as scaling</th>
<th>Pacing November 30 –December 19</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NF.2.5:</strong> Interpret multiplication as scaling (resizing), by:</td>
<td></td>
</tr>
<tr>
<td>a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.</td>
<td></td>
</tr>
</tbody>
</table>

| Resources                             | Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](#) |
(Teacher Guide p 18; Daily Math Practice Journal pp 30,33,39,40,42,45,48; Pick a Problem pp 47-49, 51-52, 54-55; How did you Solve it pp 51-52; Daily Dose of Fractions and Decimals p 46-50)

**CPALMS:**
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70646](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70646) (Multiplying by a Fraction Greater Than One)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70642](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70642) (Multiplying by a Fraction Less Than One)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70545](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70545) (More Than or Less Than Two Miles)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70513](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70513) (Estimating Product)
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/10019](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/10019) (Looking for Patterns in a Sequence of Fractions)
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72343](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72343) (Real-World Fractions)

**ILLUSTRATIVE MATHEMATICS:**
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/22](https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/22) (Running a Mile)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/49](https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/49) (Reasoning About Multiplication)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/143](https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/143) (Grass Seedlings)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/150](https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/150) (Fundraising)
- [https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/151](https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/151) (Calculator Trouble)

**LEARNZILLION:**
- [https://learnzillion.com/lesson_plans/3745-3-practice-scaling-down-fp/?card=51295](https://learnzillion.com/lesson_plans/3745-3-practice-scaling-down-fp/?card=51295) (Practice Scaling Down)
- [https://learnzillion.com/lesson_plans/3746-4-apply-scaling-down-to-a-real-world-situation-a/?card=51333](https://learnzillion.com/lesson_plans/3746-4-apply-scaling-down-to-a-real-world-situation-a/?card=51333) (Apply Scaling Down to a Real-World Problem)
- [https://learnzillion.com/lesson_plans/3749-7-using-multiplying-by-one-to-maintain-equivalence-and-to-solve-problems-a/?card=51333](https://learnzillion.com/lesson_plans/3749-7-using-multiplying-by-one-to-maintain-equivalence-and-to-solve-problems-a/?card=51333) (Using Multiplication by One to Maintain Equivalence and to Solve problems)

<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NF.2.AP.5a:</strong></td>
<td>Determine whether the product will increase or decrease based on the multiple using visual fraction models.</td>
<td></td>
</tr>
</tbody>
</table>
| **EUs** | **Concrete:**  
  - Use fraction manipulatives and begin with single groups of a number (e.g., 1 × 5, 1 × 6, 1 × 7) to show the product will remain the same.  
  - Use fraction manipulatives to model groups of numbers greater than 1 (e.g., 2 × 5, 3 × 6, 4 × 7) to show the product will increase.  
  - Use fraction manipulatives to model groups of a numbers less than 1 (e.g., 1/2 × 6, 1/2 × 4) to show the product will decrease. | |

23
**Representation:**
- Recognize when a number is multiplied by a number less than one (e.g., $1/2$, $3/4$, $5/6$, $0$) the product will decrease.
- Recognize when a number is multiplied by a number greater than one, the product will increase.
- Understand the following vocabulary: product, increase, decrease, and fraction.

**Resources**

<table>
<thead>
<tr>
<th>Resources</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Element Card 5th</td>
<td>Click here</td>
</tr>
<tr>
<td>Content Module</td>
<td>Click here</td>
</tr>
<tr>
<td>Fractions and</td>
<td>Click here</td>
</tr>
<tr>
<td>Decimals:</td>
<td></td>
</tr>
<tr>
<td>Curriculum Resource</td>
<td></td>
</tr>
<tr>
<td>Guide Fractions</td>
<td></td>
</tr>
<tr>
<td>and Decimals:</td>
<td></td>
</tr>
</tbody>
</table>

**MAFS.5.NF.2.6:** Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

** Resources**

LAKESHORE:
https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx
(Daily Math Practice Journal pp 32, 34, 37, 38, 41, 42, 49; Pick a Problem pp 50-57; How do you solve it pp 53-54; Daily Dose of Fractions and Decimals pp 71-73)

CPALMS:
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63180 (Pizza Party)
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63181 (Box Factory)
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63182 (Half of a Recipe)
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63183 (Candy at the Party)
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47536 (Wazzup Charter Schools Playground Dilemma MEA)
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/30150 (Garden Variety Fractions)

ILLUSTRATIVE MATHEMATICS:
https://www.illustrativemathematics.org/content-standards/5/NF/B/5/tasks/2101 (Scaling Up and Down)
https://www.illustrativemathematics.org/content-standards/5/NF/B/6/tasks/294 (Running to School)

LEARNZILLION:
https://learnzillion.com/lesson_plans/2647-8-using-multiplication-arrays-to-solve-division-problems-c/?card=40795 (Using Multiplication Arrays to Solve Division Problems)
https://learnzillion.com/lesson_plans/3265-11-relating-dividend-divisor-and-quotient-to-a-division-problem-c/ (Relating Dividend, Divisor, and Quotient to a Division problem)
https://learnzillion.com/lesson_plans/3652-14-partial-quotients-to-solve-division-problems-fp/ (Partial Quotients to Solve Division Problems)

**Related Access Point**

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NF.2.AP.6a:</td>
<td>Multiply a fraction by a whole or mixed number using visual fraction models.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EUs</th>
<th>Concrete:</th>
</tr>
</thead>
</table>
- Place fraction manipulatives in groups as indicated by the whole number in a given multiplication expression (e.g., $2 \times \frac{1}{3} = 2$ groups of $\frac{1}{3}$ or $3 \times \frac{1}{4} = 3$ groups of $\frac{1}{4}$).
- Use repeated addition/skip counting to find the product (e.g., $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$ or $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} = \frac{3}{4}$).

**Representation:**
- Use a visual representation of a whole divided into equal pieces (each piece may be labeled with the corresponding unit fraction). Shade the number of groups of the fraction (e.g., 3 groups of $\frac{1}{5}$) as indicated by the whole number.
- Use repeated addition/skip counting to find the product (e.g., $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = \frac{3}{5}$).
- Understand the following vocabulary: numerator, denominator

**Resources**
- Element Card 5th: [Click here]
- Equals Lesson 12.C.5

**MAFS.K12.MP.2.1:** Reason abstractly and quantitatively.
**MAFS.K12.MP.4.1:** Model with mathematics.
**MAFS.K12.MP.6.1:** Attend to precision.

### Topic 8: Developing the concepts of dividing unit fractions

**Pacing January 7-18**

*MAFS.5.NF.2.7:* Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

1. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for $\frac{1}{3} \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $\frac{1}{3} \div 4 = \frac{1}{12}$ because $(\frac{1}{12}) \times 4 = \frac{1}{3}$.*

2. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for $4 \div (\frac{1}{5})$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (\frac{1}{5}) = 20$ because $20 \times (\frac{1}{5}) = 4$.*

Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?*

**Resources**
- LAKESHORE: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
  (Teachers Guide pp 18-19; Reproducible pp 13-14; Daily Math Practice Journal pp 41, 43, 45, 47, 49; Pick a Problem pp 50 – 60; How do you Solve it pp 55-57; Daily Dose of Fractions and Decimals pp 15 and 63)
- CPALMS: [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64667](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64667) (Whole Numbers Divided by Fractions)
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64674](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64674) (Bags of Fudge)
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64673](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64673) (Fraction Divide by Whole Numbers)
**Related Access Points**

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divide unit fractions by whole numbers and whole numbers by unit fractions using visual fraction models.</td>
<td></td>
</tr>
</tbody>
</table>

**MAFS.5.NF.2.AP.7a:**

- **Concrete:**
  - To show whole numbers divided by unit fractions, use fraction manipulatives to model the wholes. Use a template to guide placement of the unit fractions to illustrate that every whole can be represented in terms of groups of unit fractions (e.g., $3 \div \frac{1}{2}$ is 3 wholes divided into 6 groups of $\frac{1}{2}$).

- **Representation:**
  - Use visual representations to model whole numbers and groups of unit fractions.
• Count the number of groups to determine the quotient.

<table>
<thead>
<tr>
<th>Resources</th>
<th>Element Card 5th: <a href="#">Click here</a></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Content Module Fractions and Decimals: <a href="#">Click here</a></td>
</tr>
</tbody>
</table>

**MAFS.K12.MP.1.1:** Make sense of problems and persevere in solving them.

**MAFS.K12.MP.2.1:** Reason abstractly and quantitatively.

<table>
<thead>
<tr>
<th>Unit 3</th>
<th>January 22- April 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Topic 9: Solving problems including volume</td>
<td>January 22 – February 4</td>
</tr>
</tbody>
</table>

**MAFS.5.MD.3.5:** Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.
a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication.

b. Apply the formulas \( V = l \times w \times h \) and \( V = B \times h \) for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.

c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

Examples of Opportunities for In-Depth Focus
Students work with volume as an attribute of a solid figure and as a measurement quantity. Students also relate volume to multiplication and addition. This work begins a progression leading to valuable skills in geometric measurement in middle school.

Resources

AIMS:  
https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/DeducingDecimals.pdf (Luggage Limits)

LAKESHORE:  
https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx  
(Teachers Guide pp 21-22; Daily Math Practice Journal pp 50, 52, 56, 58, 60, 62; Pick a Problem pp 62, 64-69; How Did you Solve it p 68-74)

CPALMS:  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70381 (Determining and Interpreting Volume)  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70369 (Using Additive Reasoning When Finding Volume)  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70373 (Determining Dimensions)  
http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70378 (Volume Two Ways)  
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/35911 (Building Rectangular Prisms Part 2)  
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/30402 (Volume: Let’s Be Efficient)  
http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73388 (Lunchbox Volume)

ILLUSTRATIVE MATHMATICS:  
https://www.illustrativemathematics.org/content-standards/5/MD/C/5/tasks/1308 (Cari’s Aquarium)  
https://www.illustrativemathematics.org/content-standards/5/MD/C/5/tasks/1631 (You Can Multiply 3 Numbers in Any Order)  
https://www.illustrativemathematics.org/content-standards/5/MD/C/5/tasks/1655 (Understand the Associative property of Multiplication)  
https://www.illustrativemathematics.org/content-standards/5/MD/C/5/tasks/1971 (Breaking Apart Composite Solids)

LEARNZILLION:  
https://learnzillion.com/lesson_plans/11406-6-understand-that-volume-can-be-measured-by-packing-objects-with-unit-cubes-c/ (Understand That Volume can be Measured by)

ACHIEVE THE CORE:  
https://achievethecore.org/page/617/box-of-clay (Box of Clay)
<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.MD.3.AP.5a:</td>
<td>Use multiplication to represent each layer of the rectangular prism.</td>
<td></td>
</tr>
<tr>
<td><strong>EUs</strong></td>
<td><strong>Concrete:</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use unit cubes to fill a rectangular prism.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Count to determine how many unit cubes are in one row of a layer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Count to determine how many unit cubes are in one column of a layer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use multiplication or repeated addition to determine the total number of unit cubes in one layer (area of the base or B).</td>
<td></td>
</tr>
<tr>
<td><strong>Representation:</strong></td>
<td>• Understand the following vocabulary and concepts: row, column, layer, unit cubes, solid figure, rectangular prism, and volume.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use a visual representation to determine how many unit cubes are in one row of a layer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use a visual representation to determine how many unit cubes are in one column of a layer.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Use multiplication or repeated addition to determine the total number of unit cubes in one layer (area of the base or B).</td>
<td></td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>Element Card 5th: <a href="#">Click here</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UDL Unit Middle School Measurement: <a href="#">Click here</a></td>
<td></td>
</tr>
<tr>
<td>Related Access Points</td>
<td>Description</td>
<td>Date(s) Instruction</td>
</tr>
<tr>
<td>MAFS.5.MD.3.AP.5b:</td>
<td>Use addition to determine the length, width, and height.</td>
<td></td>
</tr>
<tr>
<td><strong>Concrete:</strong></td>
<td>• Identify a composite three-dimensional (3-D) figure (i.e., two or more rectangular prisms put together).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Decompose the composite figure into two separate rectangular prisms.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Pack each rectangular prism with unit cubes.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Find the volume of figure a (e.g., by counting all of the unit cubes); find the volume of figure b; add the two volumes together.</td>
<td></td>
</tr>
<tr>
<td><strong>Representation:</strong></td>
<td>• Understand the following vocabulary and concepts: volume, composite 3-D figure, decompose, rectangular prism, length, width, height.</td>
<td></td>
</tr>
</tbody>
</table>
Use a visual representation of a composite figure to determine the total volume of figure a and figure b combined.

### Resources
- Element Card 5th: [Click here](#)

### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connect the layers to the dimensions and multiply to find the volume of the rectangular prism.</td>
<td></td>
</tr>
</tbody>
</table>

### EUs
- **Concrete:**
  - Use unit cubes to fill one layer (base) of the rectangular prism.
  - Use the unit cubes to find the area of the base layer.
  - Determine the number of layers needed to fill the rectangular prism.
  - Use the area of the base and the number of layers (height) to find the volume of the rectangular prism by multiplying or using repeated addition.

- **Representation:**
  - Recognize the formula for finding volume: \( V = l \times w \times h \).
  - Relate the concrete model to the formula \( V = B \times h \); where \( B \) = area of the base

### Curriculum Resource Guide Measurement and Geometry
- [Click here](#)

### MAFS.K12.MP.5.1: Use appropriate tools strategically.
- [Click here](#)

### MAFS.K12.MP.7.1: Look for and make use of structure.
- [Click here](#)

### MAFS.K12.MP.8.1: Look for and express regularity in repeated reasoning.

### Topic 10: Performing operations with decimals

<table>
<thead>
<tr>
<th>Topic</th>
<th>Pacing February 5 – February 25</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NBT.2.7:</strong></td>
<td>Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.</td>
</tr>
</tbody>
</table>

### Resources
- **AIMS:**
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/OperationDecimals.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/OperationDecimals.pdf) (Operation Decimals)
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/PackAndPost.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/PackAndPost.pdf) (Pack and Post)
- **LAKESHORE:**
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
  - (Teachers Guide p 12; Daily Math Practice Journal pp 14, 19, 23, 28; Pick a problem pp 26-38, 82; How did you Solve it pp 36, 37; Daily Dose of Fractions and decimals pp 76 -150)
- **CPALMS:**
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59146](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59146) (Running a Race (Addition))
### Related Access Points

<table>
<thead>
<tr>
<th>Access Point</th>
<th>Description</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NBT.2.AP.7a</td>
<td>Solve one-step problems using decimals.</td>
<td></td>
</tr>
</tbody>
</table>

### EU's

- **Concrete:**
  - Given a real-world context, determine when to add, subtract, multiply, and divide.
  - Understand that numbers to the right of the decimal represent a value less than one.
  - Follow rules for decimal point placement when adding, subtracting, multiplying, or dividing.

- **Representation:**
  - Understand symbols for $+$, $-$, $\times$, $\div$.
  - Understand the following vocabulary: decimal point, decimal.

### Resources

- **Content Module Fractions and Decimals:** [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59147) (Tony's Lunchbox (Subtraction))
- **Curriculum Resource Guide Fractions and Decimals:** [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/59148) (Buying Candy Bars (Multiplication))
- **To Oregon By Wagon:** [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/69276) (Running (Division))
- **The 20 Second Game:** [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49922) (The 20 Second Game)
- **ILLUSTRATIVE MATHEMATICS:** [Click here](https://www.illustrativemathematics.org/content-standards/5/NBT/B/7/tasks/1293) (Value of Education)
- **LEARNZILLION:**
  - Adding Decimals Using Base Ten Blocks: [Click here](https://learnzillion.com/lesson_plans/8583/)
  - Use an Area Model to Multiply a Decimal by a Decimal: [Click here](https://learnzillion.com/lesson_plans/6683/)
  - Divide decimal: [Click here](https://learnzillion.com/lesson_plans/3135/?card=45452)

### MAFS.5.MD.1.1

- Convert among different-sized standard measurement units (i.e., km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec) within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.

### AIMS

- **Measure for Measure:** [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/MeasureForMeasure.pdf)
- **Straw Planes:** [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/StrawPlanes.pdf)

### C PALMS

- Converting Metric Measurements Units (First Question Only): [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/65764)
- Converting Customary Measurement Units (2nd and 3rd problem only): [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/65699)
- Candy and Ribbon: [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/65698)
### EUs

**Concrete:**
- Use tools to demonstrate knowledge of how many seconds are in a minute; minutes are in an hour; hours are in a day.
- Use tools to demonstrate knowledge of how many days are in a week; weeks in a month; months in a year.
- Use tools to locate specific intervals of time (i.e., one week from this date).
- Use daily schedule as a reference when solving problems involving intervals of time (e.g., It is 8:00 AM. Activity is at 10:00 AM. How many hours until activity? If you know there are 60 minutes in an hour, how many minutes until activity?).
- Use a calendar as a reference when solving problems involving intervals of time (e.g., It is August 31. How many days until October 1?).

**Representation:**
- Understand the vocabulary for: seconds, minutes, hours, days, weeks, months, years, calendar, AM, and PM.
- Understand the number(s) on the left represents the hour and numbers on the right represent minutes for digital clock time.
- Demonstrate the progression of a calendar (i.e., days in a week, months in a year).
- Demonstrate that as units of measurement get larger (i.e., minutes → hours), the number gets smaller (i.e., 60 minutes → 1 hour).

### Resources

- Curriculum Resource Guide Measurement and Geometry: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73298)
- Element Card 5th: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/28132)
- (Metric Length Madness)
- Illustrative Mathematics: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73267)
- (Where on earth is)
- Illustrative Mathematics: [Click here](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/293)
- (Converting Fractions of a Unit to a Smaller Unit)

### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convert standard measurements of time to solve real-world problems.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Concrete:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use tools to demonstrate knowledge of how many inches are in a foot; feet are in a yard.</td>
</tr>
<tr>
<td>Use tools to demonstrate knowledge of how many centimeters are in a meter.</td>
</tr>
</tbody>
</table>
• Use tools (i.e., yardstick, ruler) as a reference when solving problems involving length (e.g., Your desk is 2 feet wide. There are 12 inches in 1 foot. How many inches wide is your desk?).

**Representation:**
• Understand standard units and abbreviations (e.g., feet = ft).
• Understand concepts and vocabulary: conversion, inch, foot, yard, centimeter, and meter.
• Demonstrate that as units of measurement get larger (i.e., inches → feet), the number gets smaller (i.e., 12 inches → 1 foot)

**Resources**
Curriculum Resource Guide Measurement and Geometry: [Click here](#)
Element Card 5th: [Click here](#)
MASSI: [Click here](#)

**MAFS.K12.MP.2.1:** Reason abstractly and quantitatively.
**MAFS.K12.MP.3.1:** Construct viable arguments and critique the reasoning of others.

---

### Topic 11: Classifying two-dimensional geographic figures

**MAFS.5.G.2.3:** Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. 
*For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.*

**Resources**
AIMS:
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/ClassifyingQuadrilaterals.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/ClassifyingQuadrilaterals.pdf) (Classifying Quadrilaterals)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/LinesToDesign.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/LinesToDesign.pdf) (Lines to Design)

LAKESHORE: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
(Teachers Guide pp 23-24; Reproducible pp 4, 15; Daily Math Practice Journal pp 64, 66, 68, 70; Pick a Problem pp 97, 98, 99, 100; How do you Solve it pp 83, 84, 85, 86)

CPALMS:
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70569](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70569) (Classifying Squares)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70573](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70573) (What do You Know About Rectangles)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70581](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70581) (Guess My Shape)
- [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70598](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70598) (Shape Clues)
- [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/62545](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/62545) (Calling All Quads!)

ILLUSTRATIVE MATHEMATICS: [https://www.illustrativemathematics.org/content-standards/5/G/B/3/tasks/1941](https://www.illustrativemathematics.org/content-standards/5/G/B/3/tasks/1941) (Always, Sometimes, Never)

LEARNZILLION: [https://learnzillion.com/lesson_plans/2689-8-organize-shapes-into-a-hierarchy-fp/](https://learnzillion.com/lesson_plans/2689-8-organize-shapes-into-a-hierarchy-fp/) (Organize Shapes into a Hierarchy)

---

### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>MAFS.5.G.2.AP.3a:</strong></td>
<td>Recognize properties of simple plane figures using polygon-shaped manipulatives.</td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| **EUs**                | **Concrete:**  
|                        | • Use models and manipulatives to show properties of plane figures (i.e., two-dimensional figures).  
|                        | • Sort shapes by a single attribute (e.g., shapes that have 3 sides vs. shapes that have 4 sides; shapes that have straight edges vs. shapes that have curved edges).  
| **Representation:**    | • Understand the following vocabulary and concepts of plane figure properties: simple plane figure (i.e., rectangle, square, trapezoid, triangle, rhombus, octagon, pentagon, hexagon), angles, sides, lines, vertices, edges, curve, and straight.  
|                        | • Use two-dimensional shapes to point out properties of plane figures (find a right angle in this figure).  
| **Resources**          | Element Card 5th: [Click here](#)  
|                        | Content Module Coordinate Plane: [Click here](#)  
|                        | Curriculum Resource Guide Measurement and Geometry: [Click here](#)  
|                        | UDL Unit Middle School Measurement: [Click here](#)  
|                        | Equals Lesson 1.A.2 and 1.A.3  

**MAFS.5.G.2.4:** Classify and organize two-dimensional figures into Venn diagrams based on the attributes of the figures

| **Resources**          | Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
|                        | CPALMS: [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70622](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70622) (Where do They Belong)  
|                        | [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70628](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70628) (Classifying Shapes)  
|                        | [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70605](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70605) (Classifying Quadrilaterals)  
|                        | [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70616](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70616) (Trapezoids)  
|                        | [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49718](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49718) (Where in the Venn Are The Quadrilaterals)  
|                        | ILLUSTRATIVE MATHEMATICS: [https://www.illustrativemathematics.org/content-standards/5/G/B/4/tasks/1505](https://www.illustrativemathematics.org/content-standards/5/G/B/4/tasks/1505) (What is a Trapezoid? Part 2)  
|                        | [https://www.illustrativemathematics.org/content-standards/5/G/B/4/tasks/1943](https://www.illustrativemathematics.org/content-standards/5/G/B/4/tasks/1943) (What do These Shapes Have in Common)  

**Related Access Points**

<table>
<thead>
<tr>
<th><strong>Description</strong></th>
<th><strong>Date(s) Instruction</strong></th>
</tr>
</thead>
</table>

34
**MAFS.5.G.2.AP.4a:** Use polygon-shaped manipulatives to classify and organize two-dimensional figures into Venn diagrams based on the attributes of the figures.

**EUs**

**Concrete:**
- Use models and manipulatives to show properties of plane figures.
- Sort two-dimensional figures based upon their properties.
- Place sorted two-dimensional figures onto Venn diagram template (e.g., create a Venn diagram from hula hoops).

**Representation:**
- Understand the following vocabulary and concepts of plane figure properties: simple plane figure (i.e., rectangle, square, trapezoid, triangle, rhombus, octagon, pentagon, hexagon) angles, sides, lines, vertices, edges, curve, straight, and Venn diagram.
- Match plane figures to figures with like properties and add matched figures to the Venn diagram.

**Resources**
- Element Card 5th: [Click here](#)
- Content Module Coordinate Plane: [Click here](#)
- Equals Lesson 1A2, 1A3, 1D2, 1D3, 1D4, 3D2, and 9C5

**MAFS.K12.MP.3.1:** Construct viable arguments and critique the reasoning of others.

---

**Topic 12: Solving problems with fractional quantities**

March 12 – April 4

**MAFS.5.MD.2.2:** Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.*

**Resources**

**LAKESHORE:** [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
- (Teachers Guide pp 20-21; Reproducible p 4; Daily Math Practice Journal pp 51, 53, 55, 57, 59, 61, 63; Pick a Problem pp70-74; How did you Solve it pp 62-63)
- CPALMS:
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62839](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62839) (Rock Measurement Part One)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62840](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62840) (Rock Measurement Part Two)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62842](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62842) (Bulk Candy Part One)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62843](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/62843) (Bulk Candy Part Two)
  - [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73102](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73102) (Line Plotting With Fractions Chicago Pizza Style)
  - [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49716](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49716) (What in The Plot)
  - [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73039](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73039) (April Showers Bring May Flowers – Line Plots)
- ILLUSTRATIVE MATHEMATICS:
  - [https://www.illustrativemathematics.org/content-standards/5/MD/B/2/tasks/1563](https://www.illustrativemathematics.org/content-standards/5/MD/B/2/tasks/1563) (Fractions on a Line Plot)
LEARNZILLION:  
https://learnzillion.com/lesson_plans/7584/ (Solve Multi-Step Problems using Information in a Line Plot)  
https://learnzillion.com/lesson_plans/3960/?card=53610 (Using Data From a Line Plot to Solve Real World Problems)  
https://learnzillion.com/lesson_plans/3742/ (Represent and Interpret Data on Line Plot)

<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.MD.2.AP.2a:</td>
<td>Collect and graph fractional data on a line plot (e.g., length of each person’s pencil in classroom, hours of exercise each week).</td>
<td></td>
</tr>
</tbody>
</table>
|                       | **Concrete:**  
|                       | • Identify a data set based on a single attribute (e.g., pencils vs. markers).  
|                       | • Identify items for a data set with more than one or less than one (e.g., this bar represents a set with more than one).  
|                       | • Organize the data on the line plots using objects that represent one piece of data (e.g., Use tools to measure the length of students’ hands. Using objects, plot measurement data on a line plot.) |
|                       | **Representation:**  
|                       | • Organize collected data on a line plot (e.g., Use tools to measure the length of students’ hands. Plot measurement data on a line plot.)  
|                       | • Identify data set with some number (e.g., how many students’ hands were 5 1/4 inches long?). |

**EUs**

**Resources**

Element Card 5th: [Click here](https://learnzillion.com)  
Equals Lesson 10A1 and 10A3

MAFS.5.NF.1.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $25 + 12 = 37$, by observing that $37 < 12$.  

Remarks/Examples:  
Examples of Opportunities for In-Depth Focus  
When students meet this standard, they bring together the threads of fraction equivalence (grades 3–5) and addition and subtraction (grades K–4) to fully extend addition and subtraction to fractions.

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
</tr>
</thead>
</table>

| Date(s) Instruction |
|---------------------|-------------|
|                     |-------------|

36
### Solve word problems involving the addition and subtraction of fractions using visual fraction models.

**Concrete:**
- Match the vocabulary in a word problem to an action.
- Use manipulatives to model the context of the word problem.
- Count to find the answer.
- To add, use fraction manipulatives (each piece may be labeled with the corresponding unit fraction) to model each fraction and join them to find the sum (e.g., \(\frac{1}{4} + \frac{2}{4} = \frac{3}{4}\)).
- To subtract, use fraction manipulatives (each piece may be labeled with the corresponding unit fraction) to model the first fraction in the expression and remove manipulatives that represent the fraction being subtracted (e.g., \(\frac{3}{4} - \frac{2}{4} = \frac{1}{4}\)).

**Representation:**
- Create a pictorial representation of the word problem.
- Use context clues to interpret the concepts, symbols, and vocabulary for addition and subtraction.
- To add, use a visual representation of a whole divided into equal pieces (each piece may be labeled with the corresponding unit fraction). Shade each unit to represent the fractions in the expression and count the shaded units to find the sum.
- To subtract, use a visual representation of the first fraction in the expression. Cross out the piece(s) that represent the fraction being subtracted. Count the remaining piece(s) to find the remainder.

**Resources**
- Content Module Fractions and Decimals: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
- Curriculum Resource Guide Fractions and Decimals: [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63180)  
- Element Card 5th: [Click here](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63180)  

### Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

**Resources**
- LAKESHORE:  
  https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx  
  (Daily Math Practice Journal pp 32, 34, 37, 38, 41, 42, 49; Pick a Problem pp 50-57; How do you solve it pp 53-54; Daily Dose of Fractions and Decimals pp 71-73)  
- CPALMS:  
  http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/63180 (Pizza Party)
<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NF.2.AP.6a:</td>
<td>Multiply a fraction by a whole or mixed number using visual fraction models.</td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Place fraction manipulatives in groups as indicated by the whole number in a given multiplication expression (e.g., $2 \times \frac{1}{3} = 2$ groups of $\frac{1}{3}$ or $3 \times \frac{1}{4}= 3$ groups of $\frac{1}{4}$).
- Use repeated addition/skip counting to find the product (e.g., $\frac{1}{3} + \frac{1}{3} = 2/3$ or $1/4+ 1/4+ 1/4= 3/4$).

**Representation:**
- Use a visual representation of a whole divided into equal pieces (each piece may be labeled with the corresponding unit fraction). Shade the number of groups of the fraction (e.g., 3 groups of $\frac{1}{5}$) as indicated by the whole number.
- Use repeated addition/skip counting to find the product (e.g., $\frac{1}{5} + \frac{1}{5} + \frac{1}{5} = 3/5$).
- Understand the following vocabulary: numerator, denominator

**Resources**
- Element Card 5th: [Click here](#)
- Equals Lesson 12.C.5

**MAFS.5.NF.2.7:** Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.
a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for \((1/3) \div 4\), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that \((1/3) \div 4 = 1/12\) because \((1/12) \times 4 = 1/3\).

b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for \(4 \div (1/5)\), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that \(4 \div (1/5) = 20\) because \(20 \times (1/5) = 4\).

Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?

### Resources

<table>
<thead>
<tr>
<th>Lakeshore:</th>
<th><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Teachers Guide pp 18-19; Reproducible pp 13-14; Daily Math Practice Journal pp 41, 43, 45, 47, 49; Pick a Problem pp 50 – 60; How do you Solve it pp 55- 57)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CPALMS:</th>
<th><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64667">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64667</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Whole Numbers Divided by Fractions)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64674">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64674</a></td>
<td>(Bags of Fudge)</td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64673">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64673</a></td>
<td>(Fractions Divided by Whole Numbers)</td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64679">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/64679</a></td>
<td>(Relay Race)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ILLUSTRATIVE MATHEMATICS:</th>
<th><a href="https://www.illustrativemathematics.org/content-standards/5/NF/B/7/tasks/958">https://www.illustrativemathematics.org/content-standards/5/NF/B/7/tasks/958</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Origami Stars)</td>
<td></td>
</tr>
<tr>
<td><a href="https://www.illustrativemathematics.org/content-standards/5/NF/B/7/tasks/1196">https://www.illustrativemathematics.org/content-standards/5/NF/B/7/tasks/1196</a></td>
<td>(Banana Pudding)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Find the Area of a Rectangle with Fractional Side Lengths)</td>
<td></td>
</tr>
<tr>
<td><a href="https://learnzillion.com/lesson_plans/11175-7-solve-problems-involving-non-unit-fractions-a/">https://learnzillion.com/lesson_plans/11175-7-solve-problems-involving-non-unit-fractions-a/</a></td>
<td>(Sole Problems Involving Non-Unit Fractions)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Mini Assessment Multiplying and Dividing Fractions)</td>
<td></td>
</tr>
<tr>
<td><a href="https://achievethecore.org/page/972/banana-pudding">https://achievethecore.org/page/972/banana-pudding</a></td>
<td>(Banana Pudding)</td>
</tr>
</tbody>
</table>

### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.NF.2.AP.7a:</td>
<td>Divide unit fractions by whole numbers and whole numbers by unit fractions using visual fraction models.</td>
</tr>
</tbody>
</table>

### EUs

**Concrete:**
- To show whole numbers divided by unit fractions, use fraction manipulatives to model the wholes. Use a template to guide placement of the unit fractions to illustrate that every whole can be
represented in terms of groups of unit fractions (e.g., $3 \div \frac{1}{2}$ is 3 wholes divided into 6 groups of $\frac{1}{2}$).

Count the number of groups to determine the quotient.

**Representation:**
- Use visual representations to model whole numbers and groups of unit fractions.

**Resources**
- Element Card 5th: [Click here](#)
- Content Module Fractions and Decimals: [Click here](#)

**MAFS.K12.MP.2.1:** Reason abstractly and quantitatively.
**MAFS.K12.MP.5.1:** Use appropriate tools strategically.
<table>
<thead>
<tr>
<th>Resources</th>
<th>Lakeshore: <a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx</a> (Teachers Guide Parenthesis, Brackets, and braces p3; Order of Operation p 3; Reproducible pp 3,4; Daily Math Practice pp 2, 3, 4, 5, 7, 8; Pick a problem p 19-22; How do you Solve it pp 1-7)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CPALEMS:</td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55656">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55656</a> (With or Without Parentheses)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55661">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55661</a> (Evaluating Expressions)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55664">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55664</a> (More Expressions)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55653">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55653</a> (Place the Parentheses)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceUrl/Preview/4997">http://www.cpalms.org/Public/PreviewResourceUrl/Preview/4997</a> (Exploring Krypto (Order of Operation))</td>
</tr>
<tr>
<td>ILLUSTRATIVE MATHMATICS:</td>
<td><a href="https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/555">https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/555</a> (Watch Out for Parentheses)</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/969">https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/969</a> (Bowling for Numbers)</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/1596">https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/1596</a> (Using Operation and Parentheses)</td>
</tr>
<tr>
<td>LEARNZILLION:</td>
<td><a href="https://learnzillion.com/lesson_plans/6481/">https://learnzillion.com/lesson_plans/6481/</a> (Determine if The Parentheses change the Value of an expression)</td>
</tr>
</tbody>
</table>

**Unit 4**

**Pacing: April 5 – May 31**

**Topic 13: Representing algebraic thinking**

**Pacing: April 5 – 16**

**MAFS.5.OA.1.1:** Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.OA.1.AP.1a:</td>
<td>Evaluate a simple expression involving one set of parenthesis.</td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Identify the operation to be completed first as shown by parenthesis placement.
- Use manipulatives and a frame, jig, or template to model the steps of an expression to find the value.

**Representation:**
- Understand the following concepts and vocabulary for parentheses ( ), equations, =, +, -, ÷, ×.
- Use visual representation to model expressions.

**Resources**

Element Card 5th: [Click here](Click here)
Curriculum Resource Guide Equations: [Click here](Click here)
Equals Lesson 10C1

**MAFS.5.OA.1.2:** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product.

**Resources**

AIMS:  
[https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/PicturingClues.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/PicturingClues.pdf) (Picture Cueing)  
(Partially Aligned)  
[https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/WhoHasSetTwo.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/WhoHasSetTwo.pdf) (Who Has)  
Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
(Teachers Guide Order of Operation p 3; Reproducible p 4; Daily Math Practice Journal pp 2, 4-9; Pick a Problem pp 19-22)  
CPALMS:  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55678](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55678) (Brayden’s Video Games)  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55682](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55682) (Write the Expression)  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55667](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55667) (Comparing Product)  
[http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55675](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55675) (How Much Greater is The product)  
ILLUSTRATIVE MATHEMATICS:  
[https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/139](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/139) (Comparing Products)  
[https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/556](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/556) (Words to Expressions 1)  
[https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/590](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/590) (Video Game Scores)  
[https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/1222](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/1222) (Seeing is Believing)  
LEARNZILLION:  
[https://learnzillion.com/lesson_plans/5230/](https://learnzillion.com/lesson_plans/5230/) (Write a Numerical Expression to Represent a Verbal Description of a Calculation)

42
### MAFS.5.OA.1.AP.2a:

**Description:** Write a simple expression for a calculation.

**Concrete:**
- Use manipulatives and a frame, jig, or template to express the calculation (i.e., “add 8 and 7”).

**Representation:**
- Understand the following concepts and vocabulary for parentheses ( ), equations, =, +, -, +, x.
- Use visual representation to model an expression.

**Resources**
- Element Card 5th: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/JustDropIt.pdf) (Just Drop it)
- Equals Lesson 10C1
- [AIMS](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/WillieWheelMan.pdf) (Willie the Wheel Man)
- Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx) (Teachers Guide p 4; Daily Math Practice Journal pp 2, 5, 6, 9; Pick a Problem 16, 17, 18, 19, 20, 82)
- CPALMS:
  - [Generating Two Patterns](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56259)
  - [Exploring related Patterns](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56260)
  - [Comic Books](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56262)
  - [Choo Choo Trains Company](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56263)
  - [Cool School](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46840)

### MAFS.K12.MP.6.1:

Atten to precision.

### Topic 14: Exploring Coordinate plane

*MAFS.5.OA.2.3: Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*

**AIMS:**
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/JustDropIt.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/JustDropIt.pdf) (Just Drop it)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/WillieWheelMan.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/WillieWheelMan.pdf) (Willie the Wheel Man)
- [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx) (Teachers Guide p 4; Daily Math Practice Journal pp 2, 5, 6, 9; Pick a Problem 16, 17, 18, 19, 20, 82)

**Resources**
- [CPALMS](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56259) (Generating Two Patterns)
- [CPALMS](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56260) (Exploring related Patterns)
- [CPALMS](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56262) (Comic Books)
- [CPALMS](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56263) (Choo Choo Trains Company)
- [CPALMS](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46840) (Cool School)

**ILLUSTRATIVE MATHEMATICS:**
<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.OA.2.AP.3a:</strong></td>
<td>Given two pattern descriptions involving the same context (e.g., collecting marbles), determine the first five terms and compare the values.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>![Day</td>
<td>Joe</td>
</tr>
<tr>
<td></td>
<td>![Day</td>
<td>Joe</td>
</tr>
<tr>
<td></td>
<td>![Day</td>
<td>Joe</td>
</tr>
</tbody>
</table>
| EUs                   | **Concrete:**  
|                       |  • Use manipulatives to complete a pattern in a table. |                     |
|                       | **Representation:**  
|                       |  • Identify a numeric pattern given a data set in a table. |                     |
| Resources             | **Element Card 5th:**  
|                       | ![Click here](https://www.illustrativemathematics.org/content-standards/5/OA/B/3/tasks/1895) |                     |

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.OA.2.AP.3b:</strong></td>
<td>Graph ordered pairs on a coordinate plane when given a table that follows patterns rules.</td>
<td></td>
</tr>
</tbody>
</table>
| EUs                  | **Concrete:**  
|                       |  • Continue a pattern on a graph when the first two sets of ordered pairs are graphed. |                     |
|                       | **Representation:**  
|                       |  • Demonstrate an understanding of the concepts, symbols and vocabulary of graph, +, -.  
|                       |  • Write the ordered pairs from information provided in the table.  
|                       |  • Graph ordered pairs from a provided table. |                     |
MAFS.5.G.1.1: Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).

<table>
<thead>
<tr>
<th>Resources</th>
<th>Element Card 5th: <a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">Click here</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lakeshore: <a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">Click here</a></td>
<td></td>
</tr>
<tr>
<td>(Teachers Guide p 23; Reproducible p 4; Daily Math Practice pp 65, 67, 69, 71)</td>
<td></td>
</tr>
<tr>
<td>CPALMS: <a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70430">Click here</a> (What do the Coordinates Mean)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70464">Click here</a> (Understanding Coordinates)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70384">Click here</a> (Properties of Coordinate Planes)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70458">Click here</a> (Coordinates)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/44987">Click here</a> (&quot;Design a Town&quot; Coordinates)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46504">Click here</a> (Quadrant Shuffle)</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/49870">Click here</a> (Human Ordered Pairs)</td>
<td></td>
</tr>
<tr>
<td>ILLUSTRATIVE MATHEMATICS: <a href="https://www.illustrativemathematics.org/content-standards/5/G/A/1/tasks/489">Click here</a> (Using Battleship Grid Paper)</td>
<td></td>
</tr>
<tr>
<td>Learnzillion: <a href="https://learnzillion.com/lesson_plans/4178/">Click here</a> (Locate and Name Points on a Coordinate Plane)</td>
<td></td>
</tr>
<tr>
<td><a href="https://learnzillion.com/lesson_plans/9662/">Click here</a> (Identify and Plot Ordered Pairs on a Coordinate Plane)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.G.1.AP.1a:</td>
<td>Locate the x- and y-axis on a coordinate plane.</td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Identify the x- and y-axes on a tactile (i.e., raised gridlines) graph.
- Identify the origin (i.e., point of intersection of the x- and y-axes) on a tactile graph.

**Representation:**
- Understand the following concepts and vocabulary: x-axis, y-axis, graph, origin, point of intersection, horizontal, and vertical.
- Identify the x- and y-axes on a graph.

**Resources**

Content Module Coordinate Plane: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
Curriculum Resource Guide Data Analysis: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
Curriculum Resource Guide Measurement and Geometry: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
Element Card 5th: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)
Equals Lesson 10B4
<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s)</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.G.1.AP.1b:</td>
<td>Locate points on a coordinate plane.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Identify the x- and y-axes.
- Identify the origin (i.e., point of intersection of perpendicular lines).
- Locate a given point on a coordinate plane (e.g., show me point A).
- Use tools (e.g., use craft sticks to extend the point to the axis) to identify an ordered pair as an x-coordinate followed by a y-coordinate.

**Representation:**
- Understand the following concepts and vocabulary: origin, axis, grid, point, x-axis, y-axis, point of intersection.
- Identify an ordered pair as an x-coordinate followed by a y-coordinate.

**Resources**

- Content Module Coordinate Plane: [Click here](#)
- Curriculum Resource Guide Data Analysis: [Click here](#)
- Curriculum Resource Guide Measurement and Geometry: [Click here](#)
- Element Card 5th: [Click here](#)
- Equals Lesson 10B4

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s)</th>
<th>Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.G.1.AP.1c:</td>
<td>Graph ordered pairs (coordinates).</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EUs**

**Concrete:**
- Identify the x- and y-axes.
- Identify the origin (i.e., point of intersection of perpendicular lines).
- Complete concrete graphing of ordered pairs (e.g., use a manipulative to move 3 spaces across the x-axis, then 2 spaces up the grid; mark the point).
- Identify that an ordered pair:
  - The first coordinate is the location on the x-axis.
  - The second coordinate is the location on the y-axis.
  - The coordinates are written in parentheses and separated by a comma (3,2).

**Representation:**
- Understand the following concepts and vocabulary: coordinates, ordered pair, origin, axis, grid, point, parentheses, and comma.
- Graph ordered pairs on a coordinate plane.

**Resources**

- Content Module Coordinate Plane: [Click here](#)
- Curriculum Resource Guide Data Analysis: [Click here](#)
- Curriculum Resource Guide Measurement and Geometry: [Click here](#)
- Element Card 5th: [Click here](#)
**MAFS.5.G.1.2:** Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.

| Resources | AIMS:  
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/PlottingPlanes.pdf">https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/PlottingPlanes.pdf</a> (Plotting Planes)</td>
</tr>
<tr>
<td></td>
<td><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/HurkleHideAndSeek.pdf">https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/HurkleHideAndSeek.pdf</a> (Hurkle Hide and Seek)</td>
</tr>
<tr>
<td></td>
<td><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/CaptainKidsGrid.pdf">https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/CaptainKidsGrid.pdf</a> (Captain Kids Grid Space Shuttle Coordinates)</td>
</tr>
<tr>
<td></td>
<td><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Lakeshore.pdf">https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/Lakeshore.pdf</a> (Lakeshore: Space Shuttle Coordinates)</td>
</tr>
<tr>
<td></td>
<td><a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/MarkMyWords.pdf">https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%205/MarkMyWords.pdf</a> (Mark My Words)</td>
</tr>
<tr>
<td></td>
<td>Lakeshore: <a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx</a></td>
</tr>
<tr>
<td></td>
<td>(Teachers Guide p 23; Reproducible p 4; Daily Math Practice Journal pp 65, 67, 69, 71; Pick a problem pp 86, 87, 88, 89, 90, 91, 92, 93; How did you Solve it pp 75, 76, 77, 78, 79, 80)</td>
</tr>
</tbody>
</table>
|           | CPALMS:  
|           | http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70489 (Name The Ordered Pairs) |
|           | http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70509 (On the Coordinate Plane) |
|           | http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70496 (Mowing the Lawn) |
|           | http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/70505 (Making Bracelets) |
|           | http://www.cpalms.org/Public/PreviewResourceLesson/Preview/72259 (Graphy Graphy) |
|           | http://www.cpalms.org/Public/PreviewResourceLesson/Preview/46616 (Map it Out) |
|           | http://www.cpalms.org/Public/PreviewResourceLesson/Preview/51161 (Property Picking Pickle) |
|           | ILLUSTRATIVE MATHEMATICS:  
|           | https://www.illustrativemathematics.org/content-standards/5/G/A/2/tasks/1516 (Meerkat Coordinate Plane Task) |
|           | LEARNZILLION:  
|           | https://learnzillion.com/lesson_plans/9665/ (Interpret Coordinate Values of Points in the Context of a Situation) |
|           | https://learnzillion.com/lesson_plans/9666/ (Represent and Solve real World and Mathematical Problems by Graphing Points in the Coordinate Plane) |

<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.G.1.AP.2a</td>
<td>Find a location on a map using given coordinates.</td>
<td></td>
</tr>
</tbody>
</table>

**EUs**  
**Concrete:**  
- Identify the x- and y-axes on a map.  
- Identify the origin (i.e., point of intersection of perpendicular lines) on a map.  
- Locate a given point on a map (e.g., show me point A on the map).  
- Use tools (e.g., use craft sticks to extend the point to the axis) to identify an ordered pair as an x-coordinate followed by a y-coordinate.

**Representation:**
- Understand the following concepts and vocabulary: coordinates, ordered pair, origin, axis, grid, point, up, down, over
- Given a visual diagram, locate the coordinate values of an item.
- Use a map to find a given location.

**Resources**

<table>
<thead>
<tr>
<th>Curriculum Resource Guide Data Analysis: <a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">Click here</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>MASSI: <a href="https://learnzillion.com/lesson_plans/2649-3-multiplication-from-partial-products-to-standard-algorithm-fp/#lesson">Click here</a></td>
</tr>
<tr>
<td>Element Card 5th: <a href="https://learnzillion.com/lesson_plans/2654-7-using-the-standard-algorithm-iterating-groups-and-comparisons-a/">Click here</a></td>
</tr>
</tbody>
</table>

**MAFS.K12.MP.6.1:** Attend to precision.  
**MAFS.K12.MP.7.1:** Look for and make use of structure.

### Topic 15: Revising multiplication and division with whole numbers  
**Pacing:** May 1 - 16

**MAFS.5.NBT.2.5:** Fluently multiply multi-digit whole numbers using the standard algorithm.  
**Fluency Expectations or Examples of Culminating Standards**  
5.NBT.2.5 Students fluently multiply multi-digit whole numbers using the standard algorithm.

| Resources | Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
(Daily math Practice pp 11, 12, 13, 17, 21, 22, 23, 25, 29) |
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>CPAFLMS: <a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58068">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58068</a> (Multiplying Using Standard Algorithm)</td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58072">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58072</a> (More Multiplication Using the standard Algorithm)</td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58070">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58070</a> (Complete the Multiplication Problem)</td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58067">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/58067</a> (Find the Multiplication error)</td>
</tr>
<tr>
<td><a href="http://www.cpalms.org/Public/PreviewResourceLesson/Preview/51102">http://www.cpalms.org/Public/PreviewResourceLesson/Preview/51102</a> (Cameras on Campus)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Related Access Points</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.NBT.2.AP.5a:</strong></td>
<td>Fluently multiply two-digit numbers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EUs</th>
<th>Concrete:</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Use base ten blocks to perform repeated addition</td>
<td></td>
</tr>
<tr>
<td>- Use objects or manipulatives to create arrays.</td>
<td></td>
</tr>
</tbody>
</table>

**Representation:**
- Use visual representations to solve problems.
- Understand the process of carrying and borrowing when adding and subtracting.
- Understand the following concepts, symbols, and vocabulary for +, -, =.

| Resources | Element Card 5th: [Click here](#) Equals Lesson 11B2, 11B3, 11B4, and 11B5 |

**MAFS.5.NBT.2.6:** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

**Examples of Opportunities for In-Depth Focus**
The extension from one-digit divisors to two-digit divisors requires care. This is a major milestone along the way to reaching fluency with the standard algorithm in grade 6 (6.NS.2).


<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
</table>

<p>| 49 |</p>
<table>
<thead>
<tr>
<th><strong>MAFS.5.NBT.2.AP.6a:</strong></th>
<th>Find whole number quotients up to two dividends and two divisors.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concrete:</strong></td>
<td>Decompose (÷) with concrete objects; use counting to get the answers.</td>
</tr>
<tr>
<td></td>
<td>Match the action of decomposing with vocabulary (i.e., divide or separate into groups).</td>
</tr>
<tr>
<td></td>
<td>Understand concept of division: Sharing or grouping numbers into parts.</td>
</tr>
<tr>
<td><strong>Representation:</strong></td>
<td>Understand the following concepts symbols and vocabulary of division, part, whole, divisor, quotient, ÷, =, —).</td>
</tr>
<tr>
<td></td>
<td>Use a visual representation of dividends and divisors.</td>
</tr>
<tr>
<td><strong>EUs</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>Curriculum Resource Guide Ratio and Proportions: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>Element Card 5th: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>MASSI: <a href="#">Click here</a></td>
</tr>
<tr>
<td></td>
<td>Equals Lesson 11C3 and 11D3</td>
</tr>
</tbody>
</table>

**MAFS.K12.MP.1.1:** Make sense of problems and persevere in solving them.  
**MAFS.K12.MP.8.1:** Look for and express regularity in repeated reasoning.

---

<table>
<thead>
<tr>
<th><strong>Topic 16: Revising expressions and exponents</strong></th>
<th><strong>Pacing:</strong> May 17 - 31</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.OA.1.1:</strong> Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.</td>
<td></td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>Lakeshore: <a href="https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx">https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx</a> (Parenthesis, Brackets, and Braces p 3; Order of Operation p 3; Reproducible p 3, 4; Daily Math Practice Journal pp 2, 3, 4, 5, 7, 8; Pick a Problem pp19 -22)</td>
</tr>
<tr>
<td></td>
<td>CPALMS:</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55664">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55664</a> (More Expressions)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55653">http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55653</a> (Place the Parentheses)</td>
</tr>
<tr>
<td></td>
<td><a href="http://www.cpalms.org/Public/PreviewResourceUrl/Preview/7892">http://www.cpalms.org/Public/PreviewResourceUrl/Preview/7892</a> (Everything Balances Out in the End: Balancing Algebraic Understanding)</td>
</tr>
<tr>
<td></td>
<td>ILLUSTRATIVE MATHEMATICS:</td>
</tr>
<tr>
<td></td>
<td><a href="https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/1596">https://www.illustrativemathematics.org/content-standards/5/OA/A/1/tasks/1596</a> (Bowling for Numbers Using Operations and Parentheses)</td>
</tr>
<tr>
<td></td>
<td>LEARNZILLION:</td>
</tr>
<tr>
<td></td>
<td><a href="https://learnzillion.com/lesson_plans/2095">https://learnzillion.com/lesson_plans/2095</a> (Using Grouping Symbols to Make an Equation True)</td>
</tr>
</tbody>
</table>
### Related Access Points

<table>
<thead>
<tr>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MAFS.5.OA.1.AP.1a:</strong> Evaluate a simple expression involving one set of parenthesis.</td>
<td></td>
</tr>
</tbody>
</table>

### EUs

- **Concrete:**
  - Identify the operation to be completed first as shown by parenthesis placement.
  - Use manipulatives and a frame, jig, or template to model the steps of an expression to find the value.

- **Representation:**
  - Understand the following concepts and vocabulary for parentheses ( ), equations, =, +, -, ÷, ×.
  - Use visual representation to model expressions.

### Resources

- **Element Card 5th:** [Click here](#)
- **Curriculum Resource Guide Equations:** [Click here](#)
- **Equals lesson 10C1**

---

### MAFS.5.OA.1.2:

Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.

### Resources

- **AIMS:**
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/PicturingClues.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/PicturingClues.pdf) (Picturing Clues (Partially Aligned))
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/WhoHasSetTwo.pdf](https://intranet.volusia.k12.fl.us/departments/elementarymath/AIMS%204/WhoHasSetTwo.pdf) (Who Has?)
  - [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx) (Lakeshore)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55678](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55678) (Brayden’s Video Game)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55682](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55682) (Write the Expression)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55667](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55667) (Comparing Products)
  - [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55675](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/55675) (How Much Greater is the Product)

- **ILLUSTRATIVE MATHEMATICS:**
  - [https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/139](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/139) (Comparing Products)
  - [https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/556](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/556) (Words to Expressions 1)
  - [https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/590](https://www.illustrativemathematics.org/content-standards/5/OA/A/2/tasks/590) (Video Game Scores)

- **LEARNZILLION:**
  - [https://learnzillion.com/lesson_plans/5230/](https://learnzillion.com/lesson_plans/5230/) (Write a Numerical Expression to Represent a Verbal Description of a Calculation)
<table>
<thead>
<tr>
<th>Related Access Point</th>
<th>Description</th>
<th>Date(s) Instruction</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAFS.5.OA.1.AP.2a:</td>
<td>Write a simple expression for a calculation.</td>
<td></td>
</tr>
</tbody>
</table>
| EUs                  | **Concrete:**  
  • Use manipulatives and a frame, jig, or template to express the calculation (i.e., “add 8 and 7”).  
  **Representation:**  
  • Understand the following concepts and vocabulary for parentheses ( ), equations, =, +, -, ÷, ×.  
  • Use visual representation to model an expression. | |
| Resources            | Element Card 5th: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
  Equals Lesson 10C1 | |
| **MAFS.5.NBT.1.2:**  | Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. | |
| Resources            | Lakeshore: [https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx)  
  (Daily Math Practice Journal p 27)  
  CPALMS:  
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56825](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56825) (Multiplying by Ten Three Times)  
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56844](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56844) (How Many Zeros)  
  [http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56845](http://www.cpalms.org/Public/PreviewResourceAssessment/Preview/56845) (Using Whole Number Exponents)  
  [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47989](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/47989) (Seeking Patterns Using Base 10 and Powers of 10)  
  [http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73414](http://www.cpalms.org/Public/PreviewResourceLesson/Preview/73414) (What Happens When You Multiply By Powers of 10) | |
| Related Access Point | Description | Date(s) Instruction |
| MAFS.5.NBT.1.AP.2a:  | Identify what an exponent represents (e.g., $10^3 = 10 \times 10 \times 10$). | |
| EUs                  | **Concrete:**  
  • Locate the exponent on a given number.  
  • Use manipulatives or objects to demonstrate exponents.  
  **Representation:**  
  • Use repeated addition or multiplication to solve for the total value of a number with an exponent.  
  • Understand the following concepts, symbols, and vocabulary for exponents: ×, exponent. | |
| Resources            | Element Card 5th: [Click here](https://intranet.volusia.k12.fl.us/departments/elementarymath/Pages/Lakeshore-5th-Grade.aspx) | |
| Related Access Point | Description | Date(s) Instruction |
| MAFS.5.NBT.1.AP.2b:  | Identify the direction the decimal point will move when multiplying or dividing by a multiple of 10. | |
| EUs                  | **Concrete:**  
  • Understand left and right. | |
• Understand the structure of a decimal, including the place value patterns.
• Count to 100.

**Representation:**
• Understand the following concepts, symbols, and vocabulary for exponents: $\times$, exponent.
• Understand place value to the hundreds and hundredths.
• Understand where to write a decimal point.
• Understand the following concepts, symbols, and vocabulary: decimal, decimal point, tens place, hundreds place, tenths place, hundredths place.

**Resources**
Element Card 5th: [Click here](#)

**MAFS.K12_MP.2.1:** Reason abstractly and quantitatively.
**MAFS.K12_MP.7.1:** Look for and make use of structure.
**MAFS.K12_MP.8.1:** Look for and express regularity in repeated reasoning
**MAFS.K12.MP.1.1:**
**Make sense of problems and persevere in solving them.**
Mathematically proficient students start by explaining to themselves the meaning of a problem and looking for entry points to its solution. They analyze givens, constraints, relationships, and goals. They make conjectures about the form and meaning of the solution and plan a solution pathway rather than simply jumping into a solution attempt. They consider analogous problems, and try special cases and simpler forms of the original problem in order to gain insight into its solution. They monitor and evaluate their progress and change course if necessary. Older students might, depending on the context of the problem, transform algebraic expressions or change the viewing window on their graphing calculator to get the information they need. Mathematically proficient students can explain correspondences between equations, verbal descriptions, tables, and graphs or draw diagrams of important features and relationships, graph data, and search for regularity or trends. Younger students might rely on using concrete objects or pictures to help conceptualize and solve a problem. Mathematically proficient students check their answers to problems using a different method, and they continually ask themselves, “Does this make sense?” They can understand the approaches of others to solving complex problems and identify correspondences between different approaches.

**MAFS.K12.MP.2.1:**
**Reason abstractly and quantitatively.**
Mathematically proficient students make sense of quantities and their relationships in problem situations. They bring two complementary abilities to bear on problems involving quantitative relationships: the ability to decontextualize—to abstract a given situation and represent it symbolically and manipulate the representing symbols as if they have a life of their own, without necessarily attending to their referents—and the ability to contextualize, to pause as needed during the manipulation process in order to probe into the referents for the symbols involved. Quantitative reasoning entails habits of creating a coherent representation of the problem at hand; considering the units involved; attending to the meaning of quantities, not just how to compute them; and knowing and flexibly using different properties of operations and objects.

**MAFS.K12.MP.3.1:**
**Construct viable arguments and critique the reasoning of others.**
Mathematically proficient students understand and use stated assumptions, definitions, and previously established results in constructing arguments. They make conjectures and build a logical progression of statements to explore the truth of their conjectures. They are able to analyze situations by breaking them into cases, and can recognize and use counterexamples. They justify their conclusions, communicate them to others, and respond to the arguments of others. They reason inductively about data, making plausible arguments that take into account the context from which the data arose. Mathematically proficient students are also able to compare the effectiveness of two plausible arguments, distinguish correct logic or reasoning from that which is flawed, and—if there is a flaw in an argument—explain what it is. Elementary students can construct arguments using concrete referents such as objects, drawings, diagrams, and actions. Such arguments can make sense and be correct, even though they are not generalized or made formal until later grades. Later, students learn to determine domains to which an argument applies. Students at all grades can listen or read the arguments of others, decide whether they make sense, and ask useful questions to clarify or improve the arguments.

**MAFS.K12.MP.4.1:**
**Model with mathematics.**
Mathematically proficient students can apply the mathematics they know to solve problems arising in everyday life, society, and the workplace. In early grades, this might be as simple as writing an addition equation to describe a situation. In middle grades, a student might apply proportional
reasoning to plan a school event or analyze a problem in the community. By high school, a student might use geometry to solve a design problem or use a function to describe how one quantity of interest depends on another. Mathematically proficient students who can apply what they know are comfortable making assumptions and approximations to simplify a complicated situation, realizing that these may need revision later. They are able to identify important quantities in a practical situation and map their relationships using such tools as diagrams, two-way tables, graphs, flowcharts and formulas. They can analyze those relationships mathematically to draw conclusions. They routinely interpret their mathematical results in the context of the situation and reflect on whether the results make sense, possibly improving the model if it has not served its purpose.

MAFS.K12.MP.5.1: Use appropriate tools strategically.
Mathematically proficient students consider the available tools when solving a mathematical problem. These tools might include pencil and paper, concrete models, a ruler, a protractor, a calculator, a spreadsheet, a computer algebra system, a statistical package, or dynamic geometry software. Proficient students are sufficiently familiar with tools appropriate for their grade or course to make sound decisions about when each of these tools might be helpful, recognizing both the insight to be gained and their limitations. For example, mathematically proficient high school students analyze graphs of functions and solutions generated using a graphing calculator. They detect possible errors by strategically using estimation and other mathematical knowledge. When making mathematical models, they know that technology can enable them to visualize the results of varying assumptions, explore consequences, and compare predictions with data. Mathematically proficient students at various grade levels are able to identify relevant external mathematical resources, such as digital content located on a website, and use them to pose or solve problems. They are able to use technological tools to explore and deepen their understanding of concepts.

MAFS.K12.MP.6.1: Attend to precision.
Mathematically proficient students try to communicate precisely to others. They try to use clear definitions in discussion with others and in their own reasoning. They state the meaning of the symbols they choose, including using the equal sign consistently and appropriately. They are careful about specifying units of measure, and labeling axes to clarify the correspondence with quantities in a problem. They calculate accurately and efficiently, express numerical answers with a degree of precision appropriate for the problem context. In the elementary grades, students give carefully formulated explanations to each other. By the time they reach high school they have learned to examine claims and make explicit use of definitions.

MAFS.K12.MP.7.1: Look for and make use of structure.
Mathematically proficient students look closely to discern a pattern or structure. Young students, for example, might notice that three and seven more is the same amount as seven and three more, or they may sort a collection of shapes according to how many sides the shapes have. Later, students will see $7 \times 8$ equals the well remembered $7 \times 5 + 7 \times 3$, in preparation for learning about the distributive property. In the expression $x^2 + 9x + 14$, older students can see the 14 as $2 \times 7$ and the 9 as $2 + 7$. They recognize the significance of an existing line in a geometric figure and can use the strategy of drawing an auxiliary line for solving problems. They also can step back for an overview and shift perspective. They can see complicated things, such as some algebraic expressions, as single objects or as being composed of several objects. For example, they can see $5 - 3(x - y)^2$ as 5 minus a positive number times a square and use that to realize that its value cannot be more than 5 for any real numbers $x$ and $y$.

MAFS.K12.MP.8.1: Look for and express regularity in repeated reasoning.
Mathematically proficient students notice if calculations are repeated, and look both for general methods and for shortcuts. Upper elementary students might notice when dividing 25 by 11 that they are repeating the same calculations over and over again, and conclude they have a repeating decimal. By paying attention to the calculation of slope as they repeatedly check whether points are on the line through $(1, 2)$ with slope
3, middle school students might abstract the equation \((y - 2)/(x - 1) = 3\). Noticing the regularity in the way terms cancel when expanding \((x - 1)(x + 1)\), \((x - 1)(x^2 + x + 1)\), and \((x - 1)(x^3 + x^2 + x + 1)\) might lead them to the general formula for the sum of a geometric series. As they work to solve a problem, mathematically proficient students maintain oversight of the process, while attending to the details. They continually evaluate the reasonableness of their intermediate results.