

Unit 1 - Numerical Expressions & Factors

Students will be able to:

1. Write expressions as powers.
2. Find values of powers.
3. Evaluate numerical expressions with whole-number exponents.
4. Prime versus composite
5. Use diagrams to identify common factors.
6. Find greatest common factors.
7. Use diagrams to identify common multiples.
8. Find least common multiples.

Prerequisite Skills:

1. Prime/composite numbers
2. Use divisibility rules
3. Find prime factorizations of numbers
4. Factor Pairs

Timeframe	Resources
Approximately 13 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 1 Guided Notes</li> <li>• Schoology Resources</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Tiles/squares for perfect squares</li> </ul> <p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Thinking Blocks Website</u></a></li> </ul>
<b>Assessments</b>	
<p><u>Unit 1A Test</u> Acquisition Skills 1-3 Early September</p> <p><u>Unit 1B Test</u> Acquisition Skills 4-9 Mid/Late September</p>	

Unit 2 - Fractions

*Students will be able to...*

1. Determine equivalent fractions.
2. Simplify fractions.
3. Convert mixed numbers to improper fractions and improper fractions to mixed numbers.
4. Add and subtract fractions, including mixed numbers, with like denominators.
5. Identify common denominators.
6. Use least common denominators to add and subtract fractions.
7. Multiply fractions.
8. Write reciprocals of numbers.
9. Use models to divide fractions.
10. Divide fractions by fractions.
11. Use models to divide mixed numbers.
12. Divide mixed numbers.

Prerequisite:

1. Determine if a fraction is closer to 1, 0, or  $\frac{1}{2}$ .
2. Use divisibility rules.
3. Use models to multiply fractions.
4. Multiply fractions by fractions.

Timeframe	Resources
Approximately 10 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>● <a href="#">Fraction Resource Packet</a></li> <li>● <a href="#">Schoology Resources</a></li> </ul>
<b>Assessments</b>	<p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>● Multiplication chart</li> <li>● Fraction Magnets</li> <li>● Fraction Manipulatives</li> </ul>
<p><u>2A Quiz</u> Acquisition Skills 1-3 Late September</p>	<p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>● <a href="#">Thinking Blocks Website</a></li> </ul>
<p><u>2B Quiz</u> Acquisition Skills 4-6 Early October</p>	
<p><u>2C Quiz</u> Acquisition Skills 7-12 Mid October</p>	

Unit 3 - Decimals

*Students will be able to...*

1. Identify place value.
2. Round and estimate decimals.
3. Place decimals on the number line.
4. Order decimals from least to greatest.
5. Divide multi-digit numbers.
6. Use models to divide decimals.
7. Divide decimals.
8. Solve real-life problems involving decimals.

Prerequisite:

1. Write decimals in expanded form.
2. Use models to add and subtract decimals.
3. Add and subtract decimals.
4. Use models to multiply decimals.
5. Multiply decimals.

Timeframe	Resources
Approximately 8 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#">All About Decimals Resource Packet</a></li> <li>• Schoology Resources</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• Base 10 Blocks</li> </ul> <p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#">Thinking Blocks Website</a></li> </ul>
Assessments	
<p><u>3A Quiz</u> Acquisition Skills 1-4 Mid/Late October</p> <p><u>3B Quiz</u> Acquisition Skills 5-8 Early November</p>	

Unit 4 - Algebraic Expressions & Properties

*Students will be able to...*

1. Identify parts of an expression (terms, coefficients, constants).
2. Use order of operations to evaluate algebraic expressions.
3. Solve real-life problems involving algebraic expressions.
4. Use variables to represent numbers in algebraic expressions.
5. Write algebraic expressions.
6. Use properties of operations to generate equivalent expressions.
7. Use the Distributive Property to find products.
8. Use the Distributive Property to simplify algebraic expressions.
9. Use the Distributive Property to produce equivalent expressions.
10. Factor expressions.

Timeframe	Resources
Approximately 11 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 3 Guided Notes</li> <li>• List of keywords that signal operation for word problems</li> <li>• Schoology resources</li> <li>• Review Packets for Assessments</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> </ul>
<b>Assessments</b>	
<p><u>4A Assessment</u> Acquisition Skills 1-5 Mid October</p> <p><u>4B Assessment</u> Acquisition Skills 6-10 Late October</p>	

Unit 5 - Ratios & Rates

*Students will be able to...*

1. Understand the concept of a ratio.
2. Use ratios to describe the relationship between two quantities.
3. Solve proportions.
4. Use ratio tables to find equivalent ratios.
5. Solve real-life problems.
6. Understand the concept of rates and unit rates.
7. Write unit rates.
8. Compare ratios.
9. Compare unit rates.
10. Graph ordered pairs to compare ratios and rates.
11. Write percents as fractions with denominators of 100.
12. Write fractions as percents.
13. Find percents of numbers.
14. Find the whole given the part and the percent.
15. Use bar modeling to solve word problems with ratios, rates, percents.
16. Use conversion factors (rates) to convert units of measurement.

Timeframe	Resources
Approximately 19 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 5 Guided Notes</li> <li>• Schoology Resources</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• Base 10 Blocks</li> <li>• Unifix cubes- model ratios</li> <li>• Unifix cubes- model percents</li> </ul> <p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>• <a href="#"><u>Thinking Blocks Website</u></a></li> </ul>
<b>Assessments</b>	
<p><u>5A Assessment</u> Acquisition Skills 1-5</p> <p><u>5B Assessment</u> Acquisition Skills 6-10</p> <p><u>5C Assessment</u> Acquisition Skills 11-16</p>	

## Unit 6 – Integers & the Coordinate Plane

*Students will be able to...*

1. Understand positive and negative integers and use them to describe real-life situations.
2. Graph integers on a number line.
3. Use a number line to compare positive and negative integers.
4. Use a number line to order positive and negative integers for real-life situations.
5. Understand positive and negative numbers and use them to describe real-life situations.
6. Graph numbers on a number line.
7. Find the absolute value of numbers.
8. Use absolute value to compare numbers in real-life situations.
9. Describe the locations of points in the coordinate plane.
10. Plot points in the coordinate plane given ordered pairs.
11. Find distances between points in the coordinate plane.
12. Understand reflections of points in the coordinate plane.

Prerequisite:

1. Use decimal notation for fractions with denominators 10 or 100.
2. Compare two decimals.
3. Recognize equivalent fractions.
4. Plotting points on a coordinate plane (introduced but not assessed).
5. Absolute value (introduced but not assessed).
6. Recognize 4 quadrants of a coordinate plane (introduced but not assessed).

Timeframe	Resources
Approximately 10 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math, Chapter 6- textbook and online resources</li> <li>• Chapter 6 Guided Notes</li> <li>• Schoology Resources</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• Graph paper</li> <li>• Geoboards</li> <li>• Number lines</li> <li>• Coordinate Grids</li> <li>• Reflectors</li> </ul>
Assessments	
<p><u>6A Assessment</u> Acquisition Skills 1-6</p> <p><u>6B Assessment</u> Acquisition Skills 7-12</p>	

Unit 7 - Equations & Inequalities

*Students will be able to...*

1. Write word sentences as equations.
2. Use substitution to check answers.
3. Use addition or subtraction to solve equations.
4. Solve real-life problems involving solving equations.
5. Use multiplication or division to solve equations.
6. Identify independent and dependent variables.
7. Write equations in two variables.
8. Use tables and graphs to analyze the relationship between two variables.
9. Write word sentences as inequalities.
10. Use a number line to graph the solution set of inequalities.
11. Use inequalities to represent real-life situations.
12. Use addition or subtraction to solve inequalities.
13. Use multiplication or division to solve inequalities.

Timeframe	Resources
Approximately 16 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 7 Guided Notes</li> <li>• Schoology Resources</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• Balance with gram cubes</li> <li>• Negative to positive number line</li> <li>• Graph paper</li> <li>• Algebra Tiles</li> </ul> <p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas- Algebra Tiles</li> </ul>
<b>Assessments</b>	
<p><u>7A Assessment</u> Acquisition Skills 1-8</p> <p><u>7B Assessment</u> Acquisition Skills 9-13</p>	

Unit 8 - Statistics & Data Analysis

*Students will be able to...*

1. Recognize statistical questions.
2. Use dot plots to display numerical data.
3. Understand the concept of the data sets.
4. Compare and interpret the means of data sets.
5. Find the missing value given the mean.
6. Identify outliers in a data set.
7. Understand the concept of measure of center.
8. Find the median and mode of data sets.
9. Find the range of data sets.
10. Find the interquartile range of data sets.
11. Check for outliers in data sets.
12. Choose appropriate measures of center to represent data sets.
13. Make and interpret box-and-whisker plots.
14. Compare box-and-whisker plots.
15. Describe shapes of distributions in a box and whisker plot.
16. Understand and interpret the meaning of mean absolute deviation.
17. Find the mean absolute deviation of data sets.
18. Make histograms.
19. Use histograms to analyze data.
20. Describe shapes of distributions in histograms.

Timeframe	Resources
Approximately 24 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 9 &amp; 10 Guided Notes</li> <li>• Schoology Resources</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• Integer chips for making dot plots</li> <li>• Graph paper</li> </ul> <p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>• <u>Big Ideas- Box and Whisker Plots</u></li> </ul>
<b>Assessments</b>	
<p><u>8A Assessment</u> Acquisition Skills 1-8</p>	
<p><u>8B Assessment</u> Acquisition Skills 9-15</p>	
<p><u>8C Assessment</u> Acquisition Skills 16-17</p>	
<p><u>8D Assessment</u> Acquisition Skills 18-19</p>	



Unit 9 - Area of Polygons

*Students will be able to...*

1. Find areas of parallelograms.
2. Solve real-life problems involving polygons.
3. Find areas of triangles.
4. Solve real-life problems involving triangles.
5. Find areas of trapezoids.
6. Find areas of composite figures.
7. Draw polygons in the coordinate plane.
8. Find distances in the coordinate plane.

Timeframe	Resources
Approximately 11 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 4 Guided Notes</li> <li>• Schoology Resources</li> <li>• Guided Review Packets for each assessment</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• Graph Paper</li> </ul>
<b>Assessments</b>	
<p><u>9A Assessment</u> Acquisition Skills 1-3</p> <p><u>9B Assessment</u> Acquisition Skills 1, 3-8</p>	

Unit 10 - Surface Area & Volume

*Students will be able to...*

1. Draw three-dimensional figures.
2. Find the number of faces, edges, and vertices of solids.
3. Use nets to represent prisms.
4. Find the surface area of prisms.
5. Use nets to represent pyramids.
6. Find the surface area of pyramids.
7. Solve real-life problems involving area of three-dimensional figures.
8. Find the volume of prisms with fractional edge lengths by using models.
9. Multiply three fractions.
10. Find the volume of prisms by using formulas.

Timeframe	Resources
Approximately 9 Days	<p><b><u>Digital/Print Resources</u></b></p> <ul style="list-style-type: none"> <li>• Big Ideas Math- textbook and online resources</li> <li>• Chapter 8 Guided Notes</li> <li>• Schoology Resources</li> <li>• Review Packets for each assessment</li> <li>• Supplemental materials needed for instruction about pyramids.</li> </ul> <p><b><u>Materials/Manipulatives</u></b></p> <ul style="list-style-type: none"> <li>• Multiplication chart</li> <li>• 3D to 2D shapes</li> <li>• Foam 3D shapes</li> <li>• Gram cubes to find volume</li> </ul> <p><b><u>Technology Resources</u></b></p> <ul style="list-style-type: none"> <li>• Use of 3D shape creator to look at the faces of 3D shapes</li> </ul>
<b>Assessments</b>	
<p><u>10A Assessment</u> Acquisition Skills 1-7</p> <p><u>10B Assessment</u> Acquisition Skills 8-10</p>	