

SMS STANDARDS

Grade Level 5th Grade

Subject Mathematics-Numbers & Operations and Algebra

Standards

5.2.1 - Apply understanding of models for division (e.g., equal-sized groups, arrays, area models, equal intervals on the number line) and the relationship of division to multiplication to solve problems.

5.2.2 - Apply concepts of place value and the properties of operations to solve problems involving division.

5.2.3 - Select and use appropriate estimation strategies for division problems (e.g., use benchmarks, overestimate, round) to calculate mentally based on the problem situation when computing with whole numbers.

5.2.4 - Develop and use accurate, efficient, and general methods to find quotients for multi-digit division problems.

5.2.5 - Develop fluency with efficient procedures for dividing whole numbers and justify why the procedures work on the basis of place value and number properties.

5.2.6- Determine the most appropriate form of the quotient and interpret the remainder in a problem situation.

Blooms Level/Skills	Concepts
<p style="text-align: center;">5.2.1</p> <ul style="list-style-type: none"> • Apply • Understanding to solve problems 	<ul style="list-style-type: none"> • Models for division • Equal-sized groups • Arrays • Area models • Equal intervals on the number line • Relationship of division to multiplication
<p style="text-align: center;">5.2.2</p> <ul style="list-style-type: none"> • Apply concepts • Solve 	<ul style="list-style-type: none"> • Place value • Properties of operations • Problems involving division

<p>5.2.3</p> <ul style="list-style-type: none"> • Select • Use • Calculate mentally • Computing 	<ul style="list-style-type: none"> • Estimation strategies for division • Benchmarks • Overestimate • Underestimate • Round • Problem situation • Whole numbers
<p>5.2.4</p> <ul style="list-style-type: none"> • Find • Use • Develop 	<ul style="list-style-type: none"> • Quotients for Multi-digit division • Methods that are accurate and efficient
<p>5.2.5</p> <ul style="list-style-type: none"> • Develop • Fluency • Efficient procedures • Justify why procedures work • Using 	<ul style="list-style-type: none"> • Division of whole number • Place value • Number properties
<p>5.2.6</p> <ul style="list-style-type: none"> • Determine • Appropriate • Interpret 	<ul style="list-style-type: none"> • Forms of a quotient • Remainder
<p>Big Ideas</p>	
<ul style="list-style-type: none"> • Similar models can be used when we multiply and divide whole numbers. • Estimation, fluency, and efficiency in computation are essential to understanding higher level mathematics. 	
<p>Essential Questions</p>	
<ul style="list-style-type: none"> • What are strategies we can use to multiply and divide whole numbers? • How can we model the division of whole numbers? • Why is place value important when multiplying and dividing multi-digit whole numbers? • When do we see a remainder as a whole number or part(s) of a whole? • What does the quotient represent? • What are some efficient methods for division? Why are they efficient? • How can estimation help when multiplying and dividing multi-digit numbers? 	

SMS STANDARDS

Grade Level 5th Grade

Subject Mathematics-Numbers & Operations and Data Analysis

Standard

5.1.1- Use fraction models to represent the addition and subtraction of fractions with unlike denominators.

5.1.2 -Use decimals models, place value, and number properties to add and subtract decimals (to the thousandths).

5.1.3- Select and use appropriate strategies to estimate fraction and decimal sums and differences.

5.1.4- Develop fluency with efficient procedures for adding and subtracting fractions and decimals and justify why the procedures work.

5.1.5 -Solve problems involving the addition and subtraction of fractions and decimals.

Blooms Level	Skills
5.1.1 <ul style="list-style-type: none"> • Represent • Use 	<ul style="list-style-type: none"> • Fraction models • Addition of fractions • Subtraction of fractions • Unlike denominators
5.1.2 <ul style="list-style-type: none"> • Use • Add • Subtract 	<ul style="list-style-type: none"> • Decimal models • Place value • Number properties • Decimals - To thousandths •
5.1.3 <ul style="list-style-type: none"> • Select and Use 	<ul style="list-style-type: none"> • Strategies • Fraction sums and differences • Decimal sums and differences • Estimation

<p>5.1.4</p> <ul style="list-style-type: none"> • Develop fluency • Efficient procedures • Justify 	<ul style="list-style-type: none"> • Adding and subtracting • Fractions and Decimals • Procedures
<p>5.1.5</p> <ul style="list-style-type: none"> • Solve 	<ul style="list-style-type: none"> • Problems • Addition and subtraction • Fractions • Decimals
<p>Big Ideas</p>	
<ul style="list-style-type: none"> • Similar models can be used to identify fractions and decimals. • Fractions and decimals both represent parts of a whole. • Fluency, estimation, and efficiency in computation are essential to understanding higher level mathematics. 	
<p>Essential Questions</p>	
<ul style="list-style-type: none"> • How can we model the value of fractions and decimals? • How do we add and subtract fraction with different denominators? • How do we add and subtract decimals and round to the nearest thousandth? • Why is place value important when adding and subtracting decimals? • Why is addition and subtraction of fractions with common denominators easier than those with unlike denominators? • What are some strategies for estimating fractions and decimals? 	

SMS STANDARDS

Grade Level 5th Grade

Subject Mathematics-Geometry, Measurement, and Algebra

Standard

5.3.1 Identify and classify triangles by their angles (acute, right, obtuse) and sides (scalene, isosceles, equilateral).

5.3.3 Describe three-dimensional shapes (triangular and rectangular prisms, cube, triangular-and square-based pyramids, cylinder, cone, and sphere) by the number of edges, faces, and/or vertices as well as types of faces.

Blooms Level	Skills
<p style="text-align: center;">5.3.1</p> <ul style="list-style-type: none"> • Identify • Classify 	<ul style="list-style-type: none"> • Triangles by angles • Angles Acute, Right, and Obtuse • Sides Scalene, Isosceles, and Equilateral
<p style="text-align: center;">5.3.3</p> <ul style="list-style-type: none"> • Describe 	<ul style="list-style-type: none"> • <i>3-D Shapes</i> • Triangular • Rectangular prism • Cube • Triangular 7 square-based pyramids • Cylinder • Cone • Sphere • <i>Number of Edges</i> • Faces • Vertices • Types of face

Big Ideas

- Two and three dimensional shapes can be identified by basic attributes.

Essential Questions

- What attributes can be used to identify and classify shapes?

SMS STANDARDS

Grade Level 5th Grade

Subject Mathematics-Geometry, Measurement, and Algebra

Standard

5.3.4 -Recognize volume is an attribute of three-dimensional space.

5.3.5- Determine volume by finding the total number of same-sized unit of volumes that fill a three dimensional shape without gaps or overlaps.

5.3.6 -Recognize a cube that is one unit on an edge as the standard unit for measuring volume.

5.3.7 -Determine the appropriate units, strategies, and tools for solving problems that involve estimating or measuring volume.

Blooms Level	Skills
5.3.4 <ul style="list-style-type: none"> • Recognize 	<ul style="list-style-type: none"> • Volume • Attribute of 3D space
5.3.5 <ul style="list-style-type: none"> • Determine • Find • Fill 	<ul style="list-style-type: none"> • Volume • Number (same size) Units of volume <ul style="list-style-type: none"> • 3-D shape
5.3.6 <ul style="list-style-type: none"> • Recognize 	<ul style="list-style-type: none"> • Cube • Standard of unit for measuring volume

<p>5.3.7</p> <ul style="list-style-type: none">• Determine• Solve	<ul style="list-style-type: none">• Units• Tools• Strategies • <i>Problems involving volumes using</i>• Estimation• Measuring
Big Ideas	
<ul style="list-style-type: none">• Volume is an attribute of three dimensional space.• Volume is measured using cubic units.	
Essential Questions	
<ul style="list-style-type: none">• What strategies and tools can be used to estimate and measure volume?• Why is the cube the basic unit for finding volume?	

SMS STANDARDS

Grade Level 5th Grade	
Subject Mathematics-Numbers & Operations and Data Analysis	
<p>Standard</p> <p>5.1.6- Use ordered pairs on coordinate graphs to specify locations and describe paths.</p> <p>5.1.7- Construct and analyze double bar, line and circle graphs to solve problems involving fractions and decimals.</p>	
Blooms Level	Skills
<p style="text-align: center;">5.1.6</p> <ul style="list-style-type: none"> • Use • Ordered pairs • Coordinate graphs 	<ul style="list-style-type: none"> • Specify location • Describe paths
<p style="text-align: center;">5.1.7</p> <ul style="list-style-type: none"> • Construct • Analyze • Use graphs to solve 	<ul style="list-style-type: none"> • Graphs Double bar Line Circle Graphs • Problems-fractions and decimals
Big Ideas	
<ul style="list-style-type: none"> • Graphs can be useful in solving problems relating to fractions and decimals. 	
Essential Question	
<ul style="list-style-type: none"> • How can fractions and decimals be helpful when graphing? 	

SMS STANDARDS

Grade Level 5th Grade	
Subject Mathematics-Geometry, Measurement, and Algebra	
<p>Standard</p> <p>5.3.2 -Find and justify relationships among the formulas for the areas of triangles and parallelograms.</p> <p>5.3.8 -Decompose three-dimensional shaped and find surface areas and volumes of triangular and rectangular prisms.</p> <p>5.3.9 -Identify and measure necessary attributes of shapes to use area, surface area, and volume formulas to solve problems (e.g., to find which of two gift boxes needs the most wrapping paper or has the greater volume?).</p>	
Blooms Level	Skills
<p style="text-align: center;">5.3.2</p> <ul style="list-style-type: none"> • Find • Justify 	<ul style="list-style-type: none"> • Relationships among formulas • Area of triangles • Area of parallelograms
<p style="text-align: center;">5.3.8</p> <ul style="list-style-type: none"> • Decompose • Find 	<ul style="list-style-type: none"> • 3-D shape • Surface area • Volume • Triangular and rectangular prisms
<p style="text-align: center;">5.3.9</p> <ul style="list-style-type: none"> • Identify and measure • Solve 	<ul style="list-style-type: none"> • Attributes of area • Surface area • Volume formulas • Problems
Big Ideas	
<ul style="list-style-type: none"> • Area is useful when finding surface area and volume of 3D shapes. 	
Essential Questions	
<ul style="list-style-type: none"> • How are the area formulas for triangles and parallelograms similar? • How can area be useful in finding the volume of 3D shapes? 	

