Southern York County School District

One Warrior at a Time

Course/Subject: Math Comprehensive	Grade Level: 5

Textbook(s)/Materials Used: Ready Pennsylvania Math Instruction, Practice Problem Solving, Assessment, i-Ready Diagnostic & Instruction

Month(s): August - September	Unit 1

Number and Operations in Base Ten

Big Idea	Standard	Eligible Content	Essential Questions & Lesson Essential Question	Concepts	Vocabulary	Competencies
Mathematical relationships among numbers can be represented, compared, and communicated. Mathematical relationships can be represented as expressions, equations, and inequalities in mathematical situations Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.	**Lesson 0** Think-Share-Compare Routine **Online only** 4.NBT.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using <, =, and > symbols to record the results of comparisons. 4.NF.C.5		**Lesson 0** **Routine Objectives** Use best practices during a *Ready* mathematics lesson. Identify and explain models or strategies used to solve problems. Critique and compare solution strategies of others and those provided in *Ready*. Use math talk practices to efficiently share and compare strategies for solving problems. Apply math knowledge and modeling techniques to new, similar problems. **Math Objectives** Compare multi-digit numbers in order to solve word problems.	Place Value and Properties of Operations Decimals	Greater Than Symbol Less Than Symbol Tenths Hundredths Equivalent Fractions Base Ten Decimal Place Value Exponent Power of Ten Inverse Operations Tenth	

Patterns exhibit relationships that can be extended, described, and generalized.	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. 4.NF.C.5 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. CC.2.1.5.B.1 Apply place-value concepts to show an understanding of operations and rounding as they	M05.A-T.1.1.1 Demonstrate an understanding that in a multi-digit number, a digit in one place represents 1/10 of what it represents in the place to its left.	Add two fractions with denominators of 10 and 100. Solve word problems involving comparisons of tenths and hundredths decimals. **Lesson 1** **Content Objectives** Recognize that place value in a decimal number is based on the same base-ten concepts as whole numbers. Identify the value of a digit in a number as 10 times the value it would have in the place to its right and 1/10 the value it would have in the place to its left. **Language Objectives** Name the place value of each digit in decimals to the thousandths place. Show decimal numbers with base ten blocks or diagrams. Tell how the value of a digit changes when it moves one place to the left or right. Write a decimal number with a value that is 10 times a given number, or 1/10 of a given number.		Hundredth Thousandth Expanded Form To Estimate Compare Greater Than Symbol (>) Less Than Symbol (<) Place Value Distributive Property Factor Product Partial Products Division Divisor Dividend Quotient	

	pertain to whole numbers and decimals. CC.2.1.5.B.2 Extend an understanding of operations with whole numbers to perform operations including decimals.	M05.A-T.1.1.2 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.	**Lesson 2** **Content Objectives** Explain the relationship between the values of numbers when multiplying or dividing by powers of 10. Explore the placement of the decimal point when multiplying or dividing a decimal by a power of 10. Use exponents to denote powers of 10. **Language Objectives** Record and extend place-value patterns using models and equations. Use language of equivalent fractions to describe equivalent decimals. Record decimals in place-value charts to show the effect of multiplying or dividing by a power of 10. Read powers of 10 written with exponents. Write powers of 10 using exponents.		Partial Quotient Sum Difference Equation	
		M05.A-T.1.1.3 Read and write decimals to thousandths	**Lesson 3** **Content Objectives** Read decimals to the thousandths place using base-			

		using base-ten numerals, word form, and expanded form.	ten numerals, number names, and expanded form. Write decimals to the thousandths place using base-ten numerals, number names, and expanded form. Language Objectives Read aloud decimals to the thousandths place written with base-ten numerals, number names, and expanded form. Write decimals to the thousandths place using base-ten numerals, number names, and expanded form. Read decimals in real-world problem situations. Justify conclusions and communicate the conclusions to others.		
		M05.A-T.1.1.4 Compare two decimals to thousandths based on meanings of the digits in each place using >,=, and < symbols. M05.A-T.1.1.5 Round decimals to any place	**Lesson 4** **Content Objectives** Use >, <, and = to compare decimals to the thousandths place. Use place-value relationships to round decimals to the nearest thousandth, hundredth, tenth, and whole number. **Language Objectives**		

		(limit rounding to ones, tenths, hundredths, or thousandths place).	Compare two decimals to the thousandths place using a variety of strategies. Write inequality statements to compare two decimals using >,<, and = symbols. Write decimals rounded to the nearest thousandth, hundredth, tenth, and whole number.			
		M05.A-T.2.1.1	**Lesson 5** **Content Objectives** Multiply three-digit numbers by two- and three-digit numbers. Use the distributive property to break apart factors in order to solve multi-digit multiplication problems. Use the standard algorithm to solve multi-digit multiplication problems with whole numbers. **Language Objectives** Define partial products and use the term in a discussion with a partner. Draw an area model to represent a multi-digit multiplication problem and discuss its relationship problem and discuss its			

			relationship to the partial products and product.			
		M05.A-T.2.1.2 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors.	**Lesson 6** **Content Objectives** Divide three- and four-digit dividends by two-digit divisors. Use the relationship between multiplication and division to estimate quotients. Divide whole numbers using area models and strategies such as place-value understanding, properties of operations, estimating quotients, and finding partial quotients. **Language Objectives** Explain the relationship between multiplication and division. Define partial products and use the term in a discussion with a partner. Draw an area model to represent a multi-digit division problem and discuss the model's relationship to the partial quotients and quotient. Construct arguments using objects, diagrams, and models.			

| | | M05.A-T.2.1.3 Add, subtract, multiply, and divide decimals to hundredths (no divisors with decimals). | **Lesson 7**
Content Objectives
Add decimals to hundredths.

Subtract decimals to hundredths.

Explain how to add and subtract decimals to hundredths.

Language Objectives
Draw base-ten models to show decimal addition and subtraction.

Explain a model's relationship to the decimal addition or subtraction problem and to the result.

Orally discuss adding or subtracting like place values of decimal numbers using expanded word form of the numbers.

Lesson 8

Content Objectives
Multiply decimals to hundredths.

Explain how to multiply decimals to hundredths.

Language Objective
Draw an area model to multiply decimals and explain the model's relationship to the factors and the product. | | | |

			Estimate the product of decimals and justify using place value reasoning. Predict the relationship between an estimated product and a calculated product. **Lesson 9** **Content Objectives** Divide decimals to hundredths. Explain how to divide decimals to hundredths. **Language Objectives** Describe orally how use multiplication to understand a division problem. Estimate the quotient of decimals and justify using place value reasoning. Predict the relationship between an estimated quotient and a calculated quotient. How is mathematics used to quantify, compare, represent, and model numbers? How can mathematics support effective communication? How are relationships represented mathematically?			

			What does it mean to estimate or analyze numerical quantities?			
			When is it is appropriate to estimate versus calculate?			
			What makes a tool and/or strategy appropriate for a given task?			
			How can patterns be used to describe relationships in mathematical situations?			

Month(s): October - November			**Unit 2**			

Number and Operations - Fractions

Big Idea	**Standard**	**Eligible Content**	**Essential Questions & Lesson Essential Question**	**Concepts**	**Vocabulary**	**Competencies**
Mathematical relationships among numbers can be represented, compared, and communicated. Mathematical relationships can be represented as expressions, equations, and inequalities in mathematical situations. Numerical	CC.2.1.5.C.1 Use the understanding of equivalency to add and subtract fractions.	M05.A-F.1.1.1 Add and subtract fractions (including mixed numbers) with unlike denominators. (May include multiple methods and representa-tions.)	**Lesson 10** **Content Objectives** Given two fractions with unlike denominators, write equivalent fractions with a common denominator. Use visual models to represent adding and subtracting fractions with unlike denominators. Use equivalent fractions to add and subtract fractions and mixed numbers with unlike denominators.	Fractions	Numerator Denominator Equivalent Fractions Common Denominator Benchmark Fraction Fraction Quotient Unit Fraction	Add, Subtract, Multiply and Divide fractions to solve problems. Explain operations as they pertain to fractions.

quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools.			**Language Objectives** Define common denominator and use the term in a discussion with a partner. Draw area models or number lines to show a sum or difference of fractions with unlike denominators. Rewrites sums or differences of fractions with unlike denominators as sums or differences with like denominators using equivalent fractions. **Lesson 11** **Content Objectives** Add and subtract fractions and mixed numbers with unlike denominators in order to solve word problems. Use benchmark fractions to estimate fraction sums and differences. Use estimation to check whether a solution is reasonable. **Language Objectives** Draw diagrams or write equations to represent word problems involving fraction addition or subtraction. Estimate sums and differences of fractions and justify by		Product Factor Area Scaling Perimeter	

			comparing the addends to benchmark fractions.			
			Tell whether a solution is reasonable by comparing the result to an estimate.			
	CC.2.1.5.C.2	M05.A-F.2.1.1	**Lesson 12**			
	Apply and extend previous understandings of multiplication and division to multiply and divide fractions.	Solve word problems involving division of whole numbers leading to answers in the form of fractions (including mixed numbers).	**Content Objectives** Use visual fraction models to represent a fraction as divisions. Solve word problems involving division of whole numbers in which the quotient is a fraction or mixed number. Understand a fraction as a way to represent division where the numerator is divided by the denominator. **Language Objectives** Create a visual fraction model to represent a fraction as a division of two whole numbers and explain the relationship of the model to the fraction. Draw a visual model and write an equation to represent word problems involving a quotient of whole numbers where the quotient is a fraction.			
		M05.A-F.2.1.2	**Lesson 13**			
		Multiply a fraction	**Content Object**			

| | | | (including mixed numbers) by a fraction. | Understand what multiplying by a fraction means.

Use visual fraction models to multiply a whole number by a fraction.

Orally explain terms such as one half of or one fourth of as multiplying by ½ or ¼.

Create area models to illustrate the meaning of multiplying fractions and explain the model's relationship to both factors and the product.

Critique other students reasoning about fraction multiplication.

Lesson 14

Content Objectives
Find the area of rectangles with fractional side lengths by tiling the area with unit squares.

Find the area of rectangles with fractional side lengths by multiplying side lengths.

Show that the number of unit squares that tile a rectangle with fractional side lengths is the same as the product of the side lengths.

Language Objectives | | | |

				Compare the results of finding the area of a rectangle with fractional side lengths by tiling and by multiplying the side lengths.			
				Draw area models to represent the product of two fractions.			
				Write equations to represent area models showing a product of fractions.			
			M05.A-F.2.1.3

Demonstrate an understanding of multiplication as scaling (resizing). | **Lesson 15**

Content Objectives
Understand a multiplication expression as a quantity and a resizing factor.

Recognize that multiplying a whole number or fraction by a number greater than 1 result in a product greater than the whole number or fraction and multiplying by a number less than 1 results in a product less than the whole number or fraction.

Reason about the size of a product when a number is multiplied by 1, by a factor greater than 1, and by a factor less than 1, without calculating.

Language Content
Demonstrate the concept of scaling using area models. | | | |

			Predict how the size of the factors will affect the product, and explain why this makes sense. Predict the results of multiplying a number by 1, by a factor greater than 1, and by a factor less than 1. **Lesson 16** **Content Objectives** Represent real-world problems involving multiplication of fractions and mixed numbers using visual models and equations. Solve real-world problems involving multiplication of fractions and mixed numbers using visual models and equations. **Language Objectives** Draw pictures to represent word problems involving multiplication of fractions and mixed numbers. Write equations to represent word problems involving multiplication of fractions. Compare a visual model and an equation that both represent the same problem situation.			

| | | M05.A-F.2.1.4 Divide unit fractions by whole numbers and whole numbers by unit fractions. | **Lesson 17**

Content Objectives
Identify situations that involve dividing a unit fraction by a whole number.

Identify situations that involve dividing a whole number by a unit fraction.

Use a visual fraction model to find the quotient of a unit fraction divided by a whole number or the quotient of a whole number divided by a unit fraction.

For a given division equation with a unit fraction and a whole number, use the relationship between multiplication and division to write a related multiplication equation.

Language Objectives
Divide a whole number by a unit fraction using common denominators.

Draw a model to illustrate using multiplication to find the quotient of a whole number and a unit fraction.

Lesson 18
Represent and solve real-world problems involving division of unit fractions by whole numbers using visual fraction models and equations. | | | |

			Represent and solve real-world problems involving division of whole numbers by unit fractions using visual fraction models and equations. **Language Objectives** Draw visual models to represent word problems involving division with unit fractions. Write equations to represent word problems involving division with unit fractions. Describe the relationship between a visual model and an equation that both represent the same problem situation. How is mathematics used to quantify, compare, represent, and model numbers? How can mathematics support effective communication? How are relationships represented mathematically? What does it mean to estimate or analyze numerical quantities? What makes a tool and/or strategy appropriate for a given task?			

Month(s): December - January			Unit 3			
Operations and Algebraic Thinking						
Big Idea	**Standard**	**Eligible Content**	**Essential Questions & Lesson Essential Question**	**Concepts**	**Vocabulary**	**Competencies**
Mathematical relationships among numbers can be represented, compared, and communicated. Mathematical relationships can be represented as expressions, equations, and inequalities in mathematical situations. Patterns exhibit relationships that can be extended, described, and generalized.	CC.2.2.5.A.1 Interpret and evaluate numerical expressions using order of operations. CC.2.2.5.A.4	M05.B-O.1.1.1 Use multiple grouping symbols (parentheses, brackets, or braces) in numerical expressions and evaluate expressions containing these symbols. 5.B-O.1.1.2 Write simple expressions that model calculations with numbers and interpret numerical expressions without evaluating them. M05.B-O.2.1.1	**Lesson 19** **Content Objectives** Evaluate expressions containing grouping symbols. Write numerical expressions containing grouping symbols. Interpret numerical expressions without evaluating them. **Language Objectives** Insert parentheses into an expression to change the value of the expression. Read aloud and evaluate expressions that use grouping symbols. Write numerical expressions based on verbal expressions. Accurately use the key terms evaluate, expression, parentheses, brackets, and braces in discussions with others. **Lesson 20**	Numerical Expressions Orders of Operations Patterns	Evaluate Parentheses Brackets Braces Corresponding Terms Relationship Rule Numerical Expression Ordered Pair Coordinate Plane Origin X-axis Y-axis X-coordinate Y-coordinate	Write and interpret numerical expressions. Evaluate expressions using the order of operations. Generate, analyze, and compare patterns.

| | | Analyze patterns and relationships using two rules. | Generate two numerical patterns using two given rules

M05.B-O.2.1.2 Identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules. | **Content Objectives**
Generate a numerical pattern given a rule.

Identify relationships between corresponding terms of two patterns.

Plot corresponding terms of two patterns as ordered pairs in the first quadrant of the coordinate plane.

Language Objectives
Describe the mathematical relationship between corresponding terms of two number patterns.

Create a sequence of numbers based on a given verbal rule.

Locate on a coordinate plane the point named by an ordered pair of numbers, and name a point on a coordinate plane with an ordered pair of numbers.

How is mathematics used to quantify, compare, represent, and model numbers?

How can mathematics support effective communication?

How can expressions, equations, and inequalities be used to quantify, solve, model, and/or analyze mathematical situations? | | | |

| | | | How can patterns be used to describe relationships in mathematical situations?

How can recognizing repetition or regularity assist in solving problems more efficiently? | | | |

Month(s): February - March			**Unit 4**			
Measurement and Data						

Big Idea	**Standard**	**Eligible Content**	**Essential Questions & Lesson Essential Question**	**Concepts**	**Vocabulary**	**Competencies**
Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization. Numerical quantities, calculations, and measurements can be estimated or analyzed by using appropriate strategies and tools. Measurement attributes can be quantified, and estimated using	CC.2.4.5.A.1 Solve problems using conversions within a given measurement system.	M05.D-M.1.1.1 Convert between different sized measurement units within a given measurement system.	**Lesson 21** **Content Objectives** Convert from a larger unit of measurement to a smaller unit of measurement within the same measurement system. Convert from a smaller unit of measurement to a larger unit of measurement within the same measurement system. Language Objectives List the mathematical relationship between measurement units within the same system: for example cups, pints, quarts, and gallons, or centimeters, meters, and kilometers.	Volume and Three-Dimensional Solids Measurement Data Displays	Convert Metric System Customary System Units of length Units of Capacity (liquid volume) Units of Mass Units of Weight Distribution Line Plot Scale	Apply concepts of volume to solve problems. Relate volume to multiplication and to addition. Solve problems using simple conversions. Organize and display data in order to answer questions. Represent and interpret data using appropriate scale.

customary and non-customary units of measure. Mathematical relations and functions can be modeled through multiple representations and analyzed to raise and answer questions. Data can be modeled and used to make inferences.			Record conversions between different-sized measurement units. **Lesson 22** **Content Objectives** Convert units of measurement within a given measurement system to solve multi-step word problems. **Language Objectives** Draw diagrams or write equations to represent word problems involving different-sized measurement units.		Data Pictograph Symbol Tally Chart X-Axis Y-Axis Range Bar Graph Line Graph	Solve problems involving computations with fractions using information obtained from data displays.
	CC.2.4.5.A.2 Represent and interpret data using appropriate scale. CC.2.4.5.!.4 Solve problems involving computation of fractions using information provided in a line plot.	M05.D-M.2.1.1 Solve problems involving computation of fractions by using information presented in line plots. M05.D-M.2.1.2 Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs, and	**Lesson 23** **Content Objectives** Create a line plot that displays measurement data that has fractional units. Use a line plot to solve word problems about measurement data given in fractional units. Analyze data shown on a line plot. **Language Objectives** Create a line plot to present measurement data. Analyze measurement data shown on a line plot. Communicate precisely with others about conclusions		Plane Figure Solid Figure Volume Cubic Unit Rectangular Prism Area Perimeter Formula Square Unit	

| | | use a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs. | drawn from data shown in line plots.

Lesson 23A

Content Objectives
Choose a scale for a pictograph based on a data set.

Create a pictograph with appropriate scale and symbols.

Use pictographs to solve problems.

Record answers to problems.

Language Objectives
Define the terms pictograph.

Analyze data found in a pictograph.

Communicate accurately and effectively about the conclusions drawn from data in a given pictograph.

Lesson 23B

Content Objectives
Choose x- and y-axes categories for a bar graph based on a data set.

Find appropriate scales for data on bar charts.

Create a bar graph. | | | |

			Use bar graphs to solve word problems.			
			Language Objectives Define the terms bar graph.			
			Describe the use and purpose of a bar graph.			
			Analyze data found in a bar graph.			
			Communicate accurately and effectively about the conclusions drawn from data in a given bar graph.			
			Lesson 23C			
			Content Objectives Make line graphs to display data using titles, appropriate scales, and labels.			
			Interpret data shown on line graphs to solve problems.			
			Language Objectives Read data shown on line graphs.			
			Write titles and label axes on line graphs.			
			Describe trends shown by line graphs.			
	CC.2.4.5.A.5 Apply concepts of volume to solve problems	M05.D-M.3.1.1 Apply the formulas V=l x	**Lesson 24** **Content Objectives**			

	and relate volume to multiplication and to addition.	w x h and V=B x 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.	Understand the concept of volume as an attribute of solid figures. Find the volume of rectangular prisms with whole number side lengths by counting unit cubes. Use addition and multiplication to find the total number of unit cubes in order to find the volume of a rectangular prism. **Language Objectives** Describe orally or in writing the connection between volume, layers, and unit cubes filling a rectangular prism. Summarize similarities and differences between volume and area, and between volume and area, and between cubic units and square units. **Lesson 25** **Content Objectives** Find the volume of a rectangular prism in various cubic units by filling in with unit cubes and counting them or by counting the number of unit cubes in one layer and multiplying by the number of layers. Recognize that the volume of a unit cube depends on the measurement unit used for it dimensions.			

| | | | | Determine the third dimension of a rectangular prism given its volume and two dimensions.

Language Objectives
Describe orally or in writing the connection between volume, layers, and unit cubes filling a rectangular prism.

Summarize similarities and differences between volume and area, and between cubic units and square units.

Discuss the definitions of the mathematical terms cubic unit and volume with a partner.

Lesson 26
Content Objectives
Find the volume of a rectangular prism by multiplying its height by the area of its base.

Find the volume of a rectangular prism using the formula V= l x w x h.

Solve real-world problems involving volumes of rectangular prisms.

Language Objectives
Describe how to use the formulas V=l x w x h and V=B x h. | | | |
|---|---|---|---|---|---|---|---|

				List information related to volume given in diagrams of rectangular prisms.			
				Write an appropriate formula to solve a word problem about volume of rectangular prisms.			
			M05.D-M.3.1.2 Find volumes of solid figures composed of two non-overlapping right rectangular prisms.	**Lesson 27** **Content Objectives** Recognize volume as additive. Use addition to find volumes of solid figures composed of two non-overlapping rectangular prisms. **Language Objectives** Draw lines on diagrams to divide solid figures into two non-overlapping rectangular prisms. Listen to the arguments of others about volume and ask questions to clarify or build on their ideas. How are spatial relationships, including shape and dimension, used to draw, construct, model, and represent real situations or solve problems? How can the application of the attributes of geometric shapes support mathematical reasoning and problem solving?			

			How can geometric properties and theorems be used to describe, model, and analyze situations? What does it mean to estimate or analyze numerical quantities? When is it appropriate to estimate versus calculate? What makes a tool and/or strategy appropriate for a given task? Why does "what" we measure influence "how" we measure? In what ways are the mathematical attributes of objects or processes measured, calculated and/or interpreted? How precise do measurements and calculations need to be? How can data be organized and represented to provide insight into the relationship between quantities? How does the type of data influence the choice of display? How can probability and data analysis be used to make predictions?			

Month(s): April - May			Unit 5			
Geometry						
Big Idea	**Standard**	**Eligible Content**	**Essential Questions & Lesson Essential Question**	**Concepts**	**Vocabulary**	**Competencies**
Geometric relationships can be described, analyzed, and classified based on spatial reasoning and/or visualization. Patterns exhibit relationships that can be extended, described, and generalized.	CC.2.3.5.A.1 Graph points in the first quadrant on the coordinate plane and interpret these points when solving real world and mathematical problems.	M05.C-G.1.1.1 Identify parts of the coordinate plane (x-axis, y-axis, and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant 1l. M05.C-G.1.1.2	**Lesson 28** **Content Objectives** Recognize the coordinate plane as formed by the intersection of a horizontal and vertical number line. Identify the x- and y-coordinates of a point on the coordinate plane Plot a point on the coordinate plane given its x- and y-coordinates. **Language Objectives** Define the key terms coordinate plane, x-axis, y-axis, origin, ordered pair, x-coordinate, y-coordinate and use these terms in discussions. Locate on a coordinate plane the point named by an ordered pair of numbers, and name a point on a coordinate plane with an ordered pair of numbers. **Lesson 29**	Coordinate Plane Two-Dimensional Figures	Coordinate Plane Ordered Pair X-Coordinate Y-Coordinate Origin X-Axis Y-Axis Hierarchy Polygon (Closed Plane Figure) Triangle -Scalene -Isosceles -Equilateral -Obtuse -Right -Acute Quadrilateral Trapezoid	Describe and interpret points given an ordered pair. Plot points in quadrant 1. Describe and interpret points given an ordered pair. Identify parts of a coordinate grid. Classify two-dimensional figures based on their properties.

		Represent real-world and mathematical problems by plotting points in quadrant 1 of the coordinate plane and interpret coordinate values of points in the context of the situation.	**Content Objectives** Interpret coordinate values of points in the context of a problem. Find the horizontal and vertical distances between two points in the first quadrant. Use points in the coordinate plane to solve real world and mathematical problems. **Language Objectives** Tell the meaning of the coordinates of a point in the context of quantities given in a word problem. Plot points in the coordinate plane to represent real world and mathematical problems.		Parallelogram Rectangle Rhombus Square Venn Diagram Convex Polygon Concave Polygon Attributes -Perpendicular -Parallel -Acute angles -Right angles -Obtuse angles -Congruent Symmetry Diagonals Perimeter
	CC.2.3.5.A.2 Classify two-dimensional figures into categories based on an understanding of their properties.	M05.C-G.2.1.1 Classify two-dimensional figures in a hierarchy based on properties.	**Lesson 30** **Content Objectives** Classify two-dimensional figures in a hierarchy based on properties of the figures. Draw and use flow charts, Venn diagrams, and tree diagrams to show the hierarchical relationship of two-dimensional figures. **Language Objectives** Define the key term hierarchy and discuss its meaning with a partner.		

				List relationships among two-dimensional figures shown by flow charts, Venn diagrams, and tree diagrams.			
				Lesson 31			
				Content Objectives Recognize that two-dimensional figures can be categorized based on shared attributes and properties.			
				Use Venn diagrams, flow charts, and tree diagrams to model how attributes are shared by categories of polygons.			
				Language Objectives Discuss the definitions of key terms attributes, property, category, and subcategory with a partner and use the terms in conversation.			
				Draw Venn diagrams, flow charts, and tree diagrams to show properties that are shared by categories of polygons.			
				List inferences about attributes of subcategories of quadrilaterals and triangles shown in hierarchy diagrams.			
				How are spatial relationships, including shape and dimension, used to draw, construct, model, and			

			represent real situations or solve problems? How can geometric properties and theorems be used to describe, model, and analyze situations? How can patterns be used to describe relationships in mathematical situations? How can the applications of the attributes of geometric shapes support mathematical reasoning and problem solving?			