HAZLETON AREA SCHOOL DISTRICT

GRADE 1

Math Curriculum 2023

What is a Curriculum Framework?

A Curriculum Framework is an organized plan or set of standards that defines the content to be learned in terms of clear, definable standards of what the student should know and be able to do.

A Curriculum Framework is part of standards aligned system. The framework is the first step, defining clear, high standards which will be achieved by **all** students. The curriculum is then aligned to the standards, and students are assessed against the standards. When the standards are reached, there will be no achievement gap where some groups are allowed to score lower than others. All will meet world class standards and be career and college ready.

A Curriculum Framework includes the **Enduring Understandings**, which will lead to life-long learning; **Focus Questions** that guide student learning; **Grade Level Skills** that students are to master in order to meet the overarching standards; **Resources and Materials** for teachers and students to utilize to develop, master, and practice the skills, and **Assessments**, or opportunities, for students to demonstrate their level of achieving the standards.

A Curriculum Framework is not a textbook. A textbook is one tool or resource used to deliver a Curriculum Framework. Likewise, a series is one of many resources used to develop students' skills and understanding of the world around them. From the Curriculum Framework, teachers create lessons and units to meet each individual student's needs. A Curriculum Framework should allow a teacher to include differentiation through multiple resources, learning opportunities, and assessments. Choice and creativity for teachers and students are very important, and a Curriculum Framework should allow for both, yet focus on the standards.

A Curriculum Framework is a living document that must grow and develop with time and experience. Administrators, teachers, parents, and students will continue to revise the Curriculum Framework to continue to meet the needs of the students in the Hazleton Area School District.

Aligning with PA Core Standards, this Math curriculum focuses on the four key objectives of math: Algebraic Concepts, Measurement and Data, Geometry, and Numbers and Operations.

Students demonstrate their understanding of the content and mastery of the math skills through assessments. This framework allows for continuity between all classrooms and content area.

PA Core Standards for First Grade

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Operations and Algebraic Thinking

CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20.
CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.

Numbers and Operations in Base 10

CC.2.1.1.B.1 Extend the counting sequence to read and write numerals to represent objects.
CC.2.1.1.B.2 Use place value concepts to represent amounts of tens and ones and to compare two-digit numbers.
CC.2.1.1.B.3 Use place-value concepts and properties of operations to add and subtract within 100

Measurement and Data

CC.2.4.1.A.1 Order lengths and measure them both indirectly and by repeating length units.

CC.2.4.1.A.2 Tell and write time to the nearest half hour using both analog and digital clocks.

CC.2.4.1.A.4 Represent and interpret data using tables/charts.

Geometry

CC.2.3.1.A.1 Compose and distinguish between two and three-dimensional shapes based on their attributes.

CC.2.3.1.A.2 Use the understanding of fractions to partition shapes into halves and quarters.

Algebraic Concepts

Quarter 1	Unit	PA Standard	Contents and Competencies The learner will:	Tier 2 & 3 Vocabulary
	Unit 1- Math Is…(Review) (Approx. 10 days)		• Math is Mine • Math is Exploring and Thinking • Math is in My World • Math is Explaining and Sharing • Math is Finding Patterns • Math is Ours	• Problem • Equation tool • Attribute • Vertices • Pattern
	Unit 4- Addition within 20: Facts and Strategies (Approx. 17 Days)	CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	• Relate Counting to Addition • Count On to Add • Doubles • Near Doubles • Make a 10 to Add • Choose Strategies to Add • Use Properties • Add Three Numbers • Find an Unknown Number in an Addition Equation • Understand the Equal Sign • True Addition Equations	• Add • Addend • Sum • Doubles • Ten-frame • Unknown □ • Equal sign • Equation • How many in all • Altogether • Have now • True • False • Addition sentence • Number sentence

	Unit 5- Subtraction within 20 (Approx. 17 Days)	CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	• Relate Counting to Subtraction • Count Back to Subtract • Count On to Subtraction • Make a 10 to Subtract • Use Near Doubles to Subtract • Use Addition to Subtract • Use Fact Families to Subtract • Find An Unknown in a Subtraction Equation • True Subtraction Equation	• Difference • Subtract • Total • Number line • Doubles • Unknown addend □ • Fact family • Fact triangle • Related facts • Equal sign • How many left • Compare • How many now • How many more • Count back • Subtraction Sentence

Algebraic Concepts and Numbers and Operations				
Quarter 2	**Unit**	**PA Standard**	**Contents and Competencies** **The learner will:**	**Tier 2 & 3 Vocabulary**
	Unit 7- Meaning of Addition (Approx. 10 days)	CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	• Represent and Solve Add To Problems • Represent and Solve More Add To Problems • Represent and Solve Put Together Problems • Represent and Solve More Put Together Problems • Represent and Solve Addition Problems with Three Addends • Solve Addition Problems	• Addend • Sum • Total • Unknown ☐ • Word problem • Part • Whole • Represent • Solve
	Unit 8- Meaning of Subtraction (Approx. 12 Days)	CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	• Represent and Solve Take from Problems • Represent and Solve • More take From Problems • Represent and Solve Take Apart Problems • Represent and Solve More Take Apart Problems • Solve Problems Involving Subtraction • Solve more Problem	• Difference • Part • Total • Unknown ☐ • Word problem • Whole • Represent • Solve

			Involving Subtraction • Solve Problems Involving Addition and Subtraction	
	Unit 10- Compare Using Addition and Subtraction (Approx. 8 Days)	CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	• Represent and Solve Compare Problems • Represent and Solve Compare Problems Using Addition • Represent and Solve More Compare Problems • Solve Compare Problems Using Addition and Subtraction	• Addend • Compare • Difference • Equation • Unknown $\square$ • Word problem • Sum • Solve • Represent • How many in all • Altogether • How many left • How many now
	Unit 2- Number Patterns **(Approx. 9 Days)**	CC.2.1.1.B.1 Extend the counting sequence to read and write numerals to represent objects.	• Counting Patterns to 100 • Patterns on a Number Chart to 120 • Patterns on a	• Count • Ones • Pattern • Tens • Column

			Number Line • Patterns When Reading and Writing Numbers • Patterns When Representing Objects in a Group	• Number Chart • Row • Number line • Hundreds • Base ten blocks • Place value chart • Place value

Numbers and Operations				
Quarter 3	**Unit**	**PA Standard**	**Contents and Competencies** **The learner will:**	**Tier 2 & 3 Vocabulary**
	Unit 3- Place Value (Approx. 14 days)	CC.2.1.1.B.2 Use place value concepts to represent amounts of tens and ones and to compare two-digit numbers. CC.2.1.1.B.3 Use place-value concepts and properties of operations to add and subtract within 100	• Numbers 11-19 • Understand Tens • Represent Tens and Ones • Represent 2-Digit Numbers • Represent 2-Digit Numbers in Different Ways • Compare Numbers • Compare Numbers on a Number Line • Use Symbols to Compare Numbers	• Group of ten • Ones • Teen number • Ten- Frame • Tens • Place value • Place-value chart • Equal to (=) • Greater Than (>) • Less than (<) • Compare • Number line
	Unit 9- Addition within 100 (Approx. 14 Days)	CC.2.1.1.B.3 Use place-value concepts and properties of operations to add and subtract within 100	• Use Mental Math to Find 10 More • Represent Adding Tens • Represent Adding Tens and Ones • Decompose Addends to Add • Use an Open Number Line to Add within 100 • Decompose to Add on an Open Number Line • Regroup to Add • Add 2-Digit Numbers	• 2-digit number • Addend • Digit • Equation • Tens place • Ones place • Sum • Tens • Add • Total • In all

				• Altogether • Regroup
	Unit 11- Meaning of Subtraction (Approx. 12 Days)	CC.2.2 1.A.1 Represent and solve problems involving addition and subtraction within 20. CC.2.2.1.A.2 Understand and apply properties of operations and the relationship between addition and subtraction.	• Represent and Solve Take From Problems • Represent and Solve • More take From Problems • Represent and Solve Take Apart Problems • Represent and Solve More Take Apart Problems • Solve Problems Involving Subtraction • Solve more Problem Involving Subtraction • Solve Problems Involving Addition and Subtraction	• Difference • Part • Total • Unknown □ • Word problem • Whole • Represent • Solve • Subtract • Place value chart

Geometry, Measurement and Data				
Quarter 4	**Unit**	**PA Standard**	**Contents and Competencies** **The learner will:**	**Tier 2 & 3 Vocabulary**
	Unit 6- Shapes and Solids (Approx. 10 days)	CC.2.3.1.A.1 Compose and distinguish between two and three-dimensional shapes based on their attributes.	• Understanding Defining Attributes of Shapes • Understand Non-Defining Attributes • Compose Shapes • Build New Shapes • Understand Attributes of Solids • Build New Solids	• 2-dimensional (2-D) Shape • Attribute • Closed defining attribute • Side • Vertex/vertices • 3-dimensiosl (3-D) shapes • Edge • Face • Rectangular Prism • Base • Closed figure • Open figure • Cube • Cylinder • Cone • Sphere

	Unit 12- Measurement and Data (Approx. 16 Days)	CC.2.4.1.A.1 Order lengths and measure them both indirectly and by repeating length units. CC.2.4.1.A.2 Tell and write time to the nearest half hour using both analog and digital clocks. CC.2.4.1.A.4 Represent and interpret data using tables/charts.	• Compare and Order Lengths • More Ways to Compare Lengths • Strategies to Measure Lengths • More Strategies to Measure Lengths • Tell Time to the Hour • Tell Time to the Half Hour • Organize Data • Represent Data • Interpret Data • Solve Problems Involving Data	• Compare • Length • Longer • Longest • Shorter • Shortest • Measure • Unit • Non-Standard Measurement • Analog clock • Digital clock • Hour • Hour hand • Minute • Minute hand • O'clock • Half hour • Half past • Colon • Data • Tally chart • Tally marks • Category

	Unit 13- Equal Shares (Approx. 10 Days)	C.C.2.3.1.A.1 Compose and distinguish between two and three-dimensional shapes based on their attributes. C.C.2.3.1.A.2 Use the understanding of fractions to partition shapes into halves and quarters	• Understand Equal Shares • Partition Shapes into Halves • Partition Shapes into Fourths • Describe the Whole • Describe Halves and Fourths of Shapes	• Equal • Equal shares • Whole • Half (halves) • Half of • Fourth • Fourth of • Quarter • Quarter of • Partition