Abington Heights School District
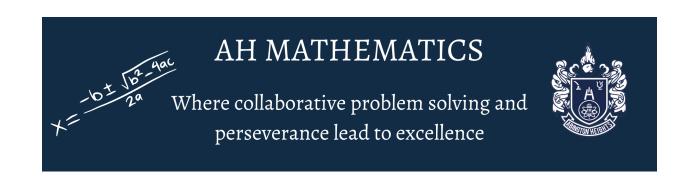# Grade 2 Mathematics Curriculum

In Second Grade, students develop their numeracy skills through the following areas of study:

1. Numbers and Operations in Base Ten
2. Operations and Algebraic Thinking
3. Geometry
4. Measurement and Data

Board Approval Date: 5/3/2023
Adoption: 2023 - 2024 SY
Review Date:

AH MATHEMATICS

Where collaborative problem solving and
perseverance lead to excellence

Abington Heights Math Framework

Stakeholders	Actions
Students	★ Engage in mathematical discussions, share their ideas openly, be inquisitive, seek to understand and learn more about mathematical concepts, and try their best daily. ★ Exhibit creativity and curiosity in problem solving individually and collaboratively. ★ Persevere in engaging and challenging daily mathematical practice. ★ Come prepared to learn every day.
Teachers	★ Create a safe and collaborative classroom environment where students feel vested in a shared vision for mathematical excellence. ★ Develop high quality instruction that meets the needs of all learners through differentiation. ★ Use a variety of 21st century methodologies to advance learning. ★ Partner with parents and guardians to support student success. ★ Establish a collaborative community within the building and amongst grade levels to ensure a cohesive level of instruction.
Building Leaders	★ Deeply understand the needs of teachers, students, the instructional materials being used, programs being implemented, and the expectations for state-level assessment scores ○ Knowledgeable about program and grade level standards ○ Ensure consistent and equal access to high-quality instructional materials and resources, building. ★ Be partners with teachers, students and families: ○ Provide guidance and support to the mathematical community. ○ Understand needs of teachers, students and families. ★ Trust the educators to make professional decisions based on program, student, and district needs.
Central Admin	★ Effectively communicate to the school board and community specific areas of need and how to support teachers and building leaders in a quest for mathematical excellence ★ Deeply understand the needs of teachers, students, the instructional materials being used, programs being implemented, and the expectations for state-level assessment scores ○ Have a common metric for mathematical excellence. ○ Ensure consistent and equal access to high-quality instructional materials and resources, district. ○ Re-examine best practices/curriculum routinely (6 years). ★ Support a culture of collaboration between the other stakeholder groups to maintain the standard of excellence of the Abington Heights ★ Trust the educators to make professional decisions based on program, student, and district needs.
Parents/ Community	★ Be a strong support system and contribute by building a positive math community for students. ★ Encourage a positive math mindset. ★ Have conversations with their children about school and ask what they are learning about in school. ★ Be open, receptive to the district's ideas about student learning and reach out to teachers/school to learn more about how they can support. ★ Trust the educators to make professional decisions based on program, student, and district needs.
School Board	★ Provide the fiscal resources to support: ○ Highly qualified professionals for mathematics ○ High-quality instructional materials ○ Effective and efficient math interventions for remediation ○ Professional development for math content and instructional practices ★ Trust the educators to make professional decisions based on program, student, and district needs.

Abington Heights Grade 2 Mathematics Curriculum

PA Core Standards	Everyday Mathematics Grade 2 Lessons
Numbers and Operations in Base Ten	
CC.2.1.2.B.1 Use place-value concepts to represent amounts of tens and ones and to compare three digit numbers.	Routines 1, 2; 2-1, 4-4, 4-5, 4-6, 4-7, 6-7, 6-8, 7-1, 9-5, 9-6, 9-7
CC.2.1.2.B.2 Use place-value concepts to read, write, and skip count to 1000	Routines 1, 2, 3, 5; 1-1, 1-2, 1-3, 1-4, 1-5, 1-6, 1-7, 1-8, 1-10, 1-12, 2-1, 2-8, 2-10, 2-11, 2-12, 3-4, 4-2, 4-4, 4-5, 4-6, 4-7, 5-2, 5-3, 5-4, 5-6, 5-10, 6-1, 6+-4, 6-8, 6-10, 7-8, 8-8, 8-9, 8-10, 9-5, 9-6, 9-7, 9-8, 9-11
CC.2.1.2.B.3 Use place-value understanding and properties of operations to add and subtract within 1000	Routines 1, 2, 3, 5, 6; 1-2, 1-4, 1-5, 1-6, 1-12, 2-1, 2-4, 2-5, 2-6, 2-7, 2-8, 2-10, 2-11, 2-12, 3-2, 3-3, 3-4, 3-6, 3-7, 4-7, 4-11, 5-3, 5-4, 5-6, 5-7, 5-8, 5-9, 5-10, 5-11, 6-2, 6-3, 6-4, 6-5, 6-6, 6-7, 6-8, 6-9, 7-1, 7-2, 7-3, 7-7, 7-8, 9-6, 9-7, 9-8, 9-9, 9-11
Operations and Algebraic Thinking	
CC.2.2.2.A.1 Represent and solve problems involving addition and subtraction within 100	Routines 1, 2, 3, 5, 6; 2-2, 2-7, 3-2, 3-7, 3-8, 3-9, 5-7, 5-8, 5-9, 5-10, 6-2, 6-3, 6-4, 6-5, 6-9, 7-2, 8-8, 8-9, 9-9, 9-10, 9-11
CC.2.2.2.A.2 Use mental strategies to add and subtract within 20.	Routines 1, 2; 1-2, 1-6, 1-7, 1-11, 1-12, 2-2, 2-3, 2-4, 2-5, 2-6, 2-7, 2-8, 2-9, 2-10, 2-11, 3-1, 3-2, 3-3, 3-4, 3-5, 3-6, 3-8, 3-9, 3-10, 3-11, 4-11, 5-1, 5-9, 7-1, 7-2, 9-10
CC.2.2.2.A.3 Work with equal groups of objects to gain foundations for multiplication.	Routines 1, 2, 3, 5; 1-9, 2-8, 2-9, 4-11, 5-5, 6-10, 8-8, 8-9, 8-10, 9-10
Geometry	
CC.2.3.2.A.1 Analyze and draw two and three-dimensional shapes having specified attributes.	1-12, 2-8, 3-11, 5-5, 6-10, 7-9, 8-1, 8-2, 8-3, 8-4, 8-5, 8-6, 8-7, 8-11
CC.2.3.2.A.2 Use the understanding of fractions to partition shapes into halves, quarters, and thirds.	2-8, 8-11, 9-1, 9-2, 9-3
Measurement and Data	

PA Core Standards	Everyday Mathematics Grade 2 Lessons
CC.2.4.2.A.1 Measure and estimate lengths in standard units using appropriate tools.	4-8, 4-9, 4-10, 4-11, 6-4, 6-10, 7-4, 7-5, 7-6, 7-8, 7-9, 9-4
CC.2.4.2.A.2 Tell and write time to the nearest five minutes using both analog and digital clocks.	Routine 6; 4-1, 4-2, 4-3, 5-5
CC.2.4.2.A.3 Solve problems and make change using coins and paper currency with appropriate symbols.	Routine 1; 1-3, 1-8, 1-11, 2-1, 3-11, 5-2, 5-3, 5-4, 5-11, 9-8
CC.2.4.2.A.4 Represent and interpret data using line plots, picture graphs, and bar graphs.	Routines 3, 4, 6; 4-8, 4-9, 6-1, 7-6, 7-7, 7-8, 7-9
CC.2.4.2.A.6 Extend the concepts of addition and subtraction to problems involving length.	Routines 1, 3, 4; 1-1, 1-2, 2-8, 3-9, 3-10, 5-7, 6-1, 6-2, 6-3, 6-4, 7-7, 7-8, 9-2, 9-4

Portrait of an Abington Heights 2nd Grade Mathematician

By the end of 2nd Grade, students will:

Numbers & Operations in Base Ten	Operations and Algebraic Thinking	Geometry	Measurement and Data
☐ Count to 1,000 ☐ Skip count by 5s, 10s, & 100s ☐ Read and write numbers to 1,000 using base-ten numerals, number names, and expanded form ☐ Compare three-digit numbers using <, >, = using place value concepts ☐ Mental math (add and subtract within 100) ☐ Mental math (add 10 or 100 to or subtract from 100 to 900) ☐ Add up to 4 two-digit numbers ☐ Add and subtract within 1,000 (with regrouping/decomposing a 10 or 100)	☐ Represent and solve problems involving addition and subtraction within 100 ☐ Fluently add and subtract within 20 ☐ Determine whether group of objects (up to 20) has an odd or even number of members ☐ Work with equal groups of objects to gain foundations for multiplication (add arrays of objects up to 5 rows and 5 columns and create equation to represent the sum of equal addends)	☐ Reason with triangles, quadrilaterals, pentagons, hexagons, and cubes and their attributes ☐ Divide shapes into 2, 3, and 4 equal shares and use vocabulary of *halves, thirds, fourths, half of, a third of, a fourth of* ☐ Partition rectangles into columns and rows of equal shares and count to find the parts of the whole	☐ Measure by selecting and using appropriate tools (ruler, yardstick, meter stick, measuring tape) ☐ Estimate lengths using inches, feet, centimeters, and meters ☐ Represent whole number sums and differences within 100 on a number line diagram ☐ Tell and write time to the nearest 5 minutes (am/pm) ☐ Recognize the value of a penny, nickel, dime, quarter, half-dollar, and dollar bill ☐ Find the values of combinations of pennies, nickels, dimes, quarters, half-dollars, and dollar bills ☐ Demonstrate the many ways to represent a given amount of money ☐ Solve word problems involving dollars and cents ☐ Represent and interpret data using line plots, picture graphs, and bar graphs

Notes: