



SOUTHERN LEHIGH SCHOOL DISTRICT
5775 Main Street
Center Valley, PA 18034

Planned Course for Mathematics

Course: Grade 1 Mathematics

Standards:

This course is aligned to all standards within the follow Domains of the PA Core Standards:

- 1.OA Operations and Algebraic Thinking
- 1.NBT Number & Operations in Base Ten
- 1.MD Measurement & Data
- 1.G Geometry

Course Description:

The K-12 mathematics program within Southern Lehigh School District will provide opportunities for all students to develop the ability to independently apply mathematical knowledge and skills to real-world situations. A robust and coherent curriculum will prepare students to think and reason mathematically while requiring them to demonstrate a deep understanding of mathematics. Students will develop critical thinking, problem solving, innovation, collaboration, and communication skills. A focus will be placed on using mathematics as a key to understanding the world, in order to meet the challenges of a dynamic society.

The majority of instructional time in Grade 1 Mathematics will focus on four critical areas: (1) developing understanding of addition, subtraction, and strategies for addition and subtraction within 20; (2) developing understanding of whole number relationships and place value, including grouping in tens and ones; (3) developing understanding of linear measurement and measuring lengths as iterating length units; and (4) reasoning about attributes of, and composing and decomposing geometric shapes. Students will develop strategies for adding and subtracting whole numbers based on their prior work with small numbers. Emphasis will be placed on building their understanding of the relationship between addition and subtraction. Students will build number sense through activities that involve counting and comparing numbers as well as composing numbers in terms of tens and ones. They will begin developing methods to add, subtract, and compare numbers within 100. Additionally, students will describe the attributes of shapes as well as combine shapes to be able to recognize them from different perspectives and orientations. Students will compare shapes to develop the background for measurement and for initial understandings of properties such as congruence and symmetry.

Measurable objectives to be attained by students:

Specific objectives for this course are aligned to the Pennsylvania Core Standards for Mathematics and the Common Core State Standards for Mathematics as outlined in the Scope and Sequence for Grade 1 Mathematics.

Instructional Strategies:

Below is a list of suggested strategies for high-quality instruction in mathematics:

- Instructional components outlined in the *Framework for Teaching* by Charlotte Danielson
- Use Concrete Representational Abstract (CRA) representations
- Promote productive struggle
- Promote mathematical discourse
- Use precise mathematical language

Estimated Instructional Time:

75 minutes per day

Forms of Assessment to Measure Attainment of Course Objectives:

- Universal Screener
- Progress Monitoring
- Diagnostic Assessments
- Curriculum-based measures
- Benchmark Assessments
- Formative Assessments
- Summative Assessments

Resources:

Text Resources:

- Charles, Randall I., et al. *enVisionmath2.0. Assessment Sourcebook*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Student Edition, Volume 1 & 2*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Teacher's Edition, Overview, Volume 1 & 2*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Problem-Solving Reading Activity Guide*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Teacher's Resource Masters, Volume 1 & 2*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Today's Challenge Teacher's Guide*, Grade 1, Pearson, 2016.

Technology:

- Charles, Randall I., et al. *enVisionmath2.0. PA Student Edition, Digital Courseware*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Teacher Edition, Digital Courseware*, Grade 1, Pearson, 2016.
- District approved supplemental technology

Other Resources:

- Charles, Randall I., et al. *enVisionmath2.0. Math Diagnosis and Intervention System 2.0*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Mathematical Practice Posters*, Grade 1, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Quick-And-Easy Centers Kit For Differentiated Instruction*, Grade 1, Pearson, 2016.
- Manipulatives
- Teacher created resources
- District approved supplemental resources

Spanish Immersion:

Grade 1 Mathematics for Spanish Immersion is aligned to this course. Resources for Spanish Immersion are in Spanish.