



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

## **Planned Course for Mathematics**

**Course:** Kindergarten Mathematics

### **Standards:**

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

K.CC	Counting and Cardinality
K.OA	Operations and Algebraic Thinking
K.NBT	Number & Operations in Base Ten
K.MD	Measurement & Data
K.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 Kindergarten Mathematics will focus on two critical areas: (1) representing and comparing whole numbers, initially with sets of objects; and (2) describing their physical world. Students will use numbers to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations. Students will describe their physical world using geometric ideas and vocabulary. They will use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

### **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 Kindergarten 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:**

Half-Day Kindergarten: 30 minutes per day

Full-Day Kindergarten: 45 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*, Kindergarten, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Student Edition, Volume 1 & 2*, Kindergarten, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Teacher's Edition, Overview, Volume 1 & 2*, Kindergarten, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Problem-Solving Reading Activity Guide*, Kindergarten, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Teacher's Resource Masters, Volume 1 & 2*, Kindergarten, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Today's Challenge Teacher's Guide*, Kindergarten, Pearson, 2016.

#### **Technology:**

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

#### **Other Resources:**

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