



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

Planned Course for Mathematics

Course: Grade 5 Mathematics

Standards:

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

- 5.OA Operations and Algebraic Thinking
- 5.NBT Number & Operations in Base Ten
- 5.NF Number & Operations – Fractions
- 5.MD Measurement & Data
- 5.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 5 Mathematics will focus on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing an understanding of the multiplication of fractions and division of fractions in limited cases; (2) extending division to digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume. Students will apply their understanding of fractions in order to fluently add and subtract fractions with unlike denominators, and understand models and procedures for multiplying and dividing fractions. Students will apply their understanding of models for decimals and decimal notation in order to fluently add, subtract, multiply, and divide decimals to hundredths. They will develop an understanding of why division procedures work based on the meaning of base-ten numerals and properties of operations. Additionally, students will select appropriate units, strategies, and tools for solving real world and mathematical problems that involve estimating and measuring volume.

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 5 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:

90 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 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Student Edition, Volume 1 & 2*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Teacher's Edition, Overview, Volume 1 & 2*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Problem-Solving Reading Activity Guide*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Teacher's Resource Masters, Volume 1 & 2*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Today's Challenge Teacher's Guide*, Grade 5, Pearson, 2016.

Technology:

- Charles, Randall I., et al. *enVisionmath2.0. PA Student Edition, Digital Courseware*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. PA Teacher Edition, Digital Courseware*, Grade 5, Pearson, 2016.
- District approved supplemental technology

Other Resources:

- Charles, Randall I., et al. *enVisionmath2.0. Math Diagnosis and Intervention System 2.0*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Mathematical Practice Posters*, Grade 5, Pearson, 2016.
- Charles, Randall I., et al. *enVisionmath2.0. Quick-And-Easy Centers Kit For Differentiated Instruction*, Grade 5, Pearson, 2016.
- Manipulatives
- Teacher created resources
- District approved supplemental resources

Spanish Immersion:

Grade 5 Mathematics for Spanish Immersion is aligned to this course. Resources for Spanish Immersion are in Spanish.