|  |  |
| --- | --- |
| **Teacher: Ann Neely** | **School Year: 2014-15** |
| **Course:** Math | **Intended Grade Level:** Fifth |
| **Course Summary:** The fifth grade students will be working toward mastering mathematical skills, concepts, and practices aligned with the Pennsylvania Common Core Standards.  The following are the main content areas we will be working on throughout the year: Numbers and Operations in Base Ten, Numbers and Operations – Fractions, Operations and Algebraic Thinking, Geometry, Measurement and Data. The standards of practice address the following areas: reasoning and explaining, modeling and using tools, and seeing structure and generalizing.  |
| **Course Outcomes:*****By the end of the course, students will know:*** *the place-value system, fractions, numerical expressions and number patterns, two-dimensional geometry, units of measure; representation of data, and the concept of volume.****By the end of the course, students will be able to:*** *perform operations with multi-digit numbers with decimals to the hundredths and fractions; write and interpret numerical expressions; analyze patterns and relationships;**graph points on a coordinate plane; classify two-dimensional figures; convert measurements; represent and interpret data; and relate volume to multiplication and addition.* |
| **Standards Targeted[[1]](#footnote-1)****PA Core - Math** |
| **Units of Study** |
| **Units Topic** | **Primary Learning Outcome** |
| **Numbers and Operations in Base Ten** | **Apply place-value concepts to show an understanding of operations and rounding as they pertain to whole numbers and decimals.****Extend an understanding of operations with whole numbers to perform operations including decimals.** |
| **Numbers and Operations - Fractions** | **Use the understanding of equivalency to add and subtract fractions.** **Apply and extend previous understandings of multiplication and division to multiply and divide fractions.** |
| **Operations and Algebraic Thinking** | **Interpret and evaluate numerical expressions using order of operations.****Analyze patterns and relationships using two rules.** |
| **Geometry**  | **Graph coordinates in the first quadrant on the coordinate plane and interpret these points when solving real world and mathematical problems.****Classify two-dimensional figures into categories based on an understanding of their properties.** |
| **Measurement and Data** | **Solve problems using conversions within a given measurement system.****Represent and interpret data using appropriate scale.****Apply concepts of volume to solve problems and relate volume to multiplication and to addition.** |
| **Advanced Learner Recommendations** |
| Advanced learners who have already mastered specific course requirements will be able to apply these skills and concepts when completing teacher-designed projects. Study Island may also be used as a way of extending learning, when appropriate. |
| **Struggling Learner Recommendations** |
| Students will work on mastering foundational skills that will prepare them to work on grade level skills and concepts. Students will have access to tools that assist them while working on grade level material – graphic organizers, number grids, anchor charts/notebook pages with reminders for steps to take when solving problems. |

1. Indicate primary Standards emphasis:

PA Core - Math / ELA / Science & Technology / History & Social Studies

National Content Standards (Name and Type)

Industry Recognized Standards (Name and Type) [↑](#footnote-ref-1)