## Portrait of an Abington Heights 5th Grade Mathematician

By the end of 5th Grade, students will:

| Numbers \& Operations in Base Ten |  <br> Operations - Fractions | Operations and Algebraic Thinking | Geometry | Measurement and Data |
| :---: | :---: | :---: | :---: | :---: |
| Fluently multiply multi-digit whole numbers (not to exceed 3 -digit by 3 -digit) Find whole number quotients of whole numbers with up to four-digit dividends and two-digit divisors Read, write, and compare decimals to the thousandths Add, subtract, multiply, and divide decimals to the hundredths (no divisors with decimals) Use place value understanding to round decimals to thousandths | $\square$ Add, subtract, multiply, and divide fractions with unlike denominators, including mixed numbers <br> $\square$ Solve problems involving fractions and the four operations, and use benchmark fractions and number sense to assess the reasonableness of answers | Write and evaluate simple expressions using parentheses, brackets, or braces Analyze and explain multiple patterns and relationships (ex. Rules of coordinate pairs; placement of decimal point when multiplying or dividing by a power of 10) | Graph points on the coordinate plane to solve real-world and mathematical problems (only in Quadrant I) Classify two-dimensional figures into categories based on their properties | Make conversions within a measurement system (ex. 4 cm to 0.04 m ) Represent and interpret data on bar or line graphs Use operations on fractions to solve problems with information presented in line plots Apply the formulas $V=l \times w \times h$ and $V=B \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths Find volumes of solid figures composed of two non-overlapping right rectangular prisms |

