## Grade 5 Math Topics

The core math topics covered in grade 5 typically are:

## Numbers and Operations

- multiplying and dividing by powers of ten
- multiplying and dividing large whole numbers in columns
- rectangular arrays
- add and subtract fractions with unlike denominators
- multiply fractions by fractions and / or whole numbers
- divide fractions by whole numbers
- reading, writing and comparing decimals
- add, subtract, multiply and divide decimals
- use of parenthesis in expressions
- word problems involving fractions and decimals
- exponents and powers of ten


## Geometry

- rectangular prisms
- volumes of 3 dimensional shapes
- coordinate planes
- categorizing 2D shapes by various attributes


## Measurement

- convert measurements between different types of units (metric and customary)
- multi-step word problems in measurement


## Data Analysis

- create line plots to display data
- solve real world word problems by referring to line plots

The common core math standards for grade 5 are also worth reviewing.

Grade 5 Literature to Foster the Love of Math

| Title | Author | Topic |
| :--- | :--- | :--- |
| Flatland | Abbot, Edwin. | Geometry |
| Mr. Archimedes' Bath | Allen, Pamela | Geometry |


| Who Sank the Boat? |  | Geometry |
| :---: | :---: | :---: |
|  | Allen, Pamela |  |
|  |  | Patterns and Algebra Concepts |
| Anno's Magic Seeds | Anno, Mitsumasa |  |
| Anno's Multiplying Jar | Anno, Mitsumasa and Masaichiro Anno | Addition, Subtraction, Multiplication, and Division |
| The King's Chessboard | Birch, David | Addition, Subtraction, Multiplication, and Division |
|  |  | Data, Chance, and Probability |
| Jim and the Beanstalk | Borden, Louise |  |
| Spaghetti and Meatballs for All | Burns, Marilyn | Addition, Subtraction, Multiplication, Division, Fractions |
|  |  | Number and Order |
| Counting on Frank | Clement, Rod |  |
|  |  | Data, Chance, and Probability |
| Do You Wanna Bet? | Cushman, Jean |  |
|  |  | Data, Chance, and Probability |
| Esio Trot | Dahl, Roald |  |
| Fourscore and 7: Investigating Math in American History | Franco, Betsy | Fractions, Decimals, and Percents; Rates and Proportions |
|  |  | Geometry |
| A Cloak for the Dreamer | Friedman, Aileen |  |
| Less Than Nothing is Really Something | Froman, Robert | Addition, Subtraction, Multiplication, and Division |
|  |  | Number and Order |
| Speed Mathematics | Handley, Bill |  |
| Only One | Harshman, Marc | Fractions, Decimals, and Percents; Rates and Proportions |


| The Librarian Who Measured the Earth Lasky, Kathryn | Geometry |  |
| :--- | :--- | :--- |
| Fraction Action | Leedy, Loreen | Fractions, Decimals, and Percents; Rates <br> and Proportions |
| Gator Pie | Matthews, Louise | Fractions, Decimals, and Percents; Rates <br> and Proportions |
| Eating Fractions | McMillan, Bruce | Fractions, Decimals, and Percents; Rates |
| and Proportions |  |  |

Longitude

Grandfather Tang's Story

Jumanji

Mummy Math: An Adventure in Geometry
Fraction in Disguise

Sobel, Dava

Geometry
Tompert, Ann
Geometry
Van Allsburg, Chris

Cindy Neuschwander Geometry
Einhorn, Edward, Clark, David Fractions

