



# Key Topics by Grade with Massachusetts Learning Standards



## 3rd Grade

- |                                     |                          |
|-------------------------------------|--------------------------|
| 1. Place Value to 10,000            | 3.N.1<br>3.N.2           |
| 2. Multi-Digit Addition             | 2.N.10<br>2.N.11         |
| 3. Multi-Digit Subtraction          | 2.N.10<br>2.N.11         |
| 4. Multiplication by a Single Digit | 3.N.6<br>3.N.9<br>3.N.10 |
| 5. Division by a Single Digit       | 3.N.6                    |
| 6. Geometry—Identifying Shapes      | 3.G.1-3                  |
| 7. Basic Fractions                  | 3.N.3                    |

## 4th Grade

- |   |                                   |
|---|-----------------------------------|
| 1. Place Value to 1,000,000                   | 4.N.1<br>4.N.2<br>5.N.2           |
| 2. Multi-Digit Multiplication                 | 4.N.11<br>4.N.12<br>4.N.14        |
| 3. Long Division w/Single Digit Divisor       | 4.N.13<br>4.N.15                  |
| 4. Geometry—Area and Perimeter                | 4.M.4                             |
| 5. Algebra—Find the Missing Number or Sign    | 4.P.2<br>4.P.3                    |
| 6. Add/Subtract Fractions w/Like Denominators | 4.N.18                            |
| 7. Basic Decimals—Add/Subtract Decimals       | 4.N.5<br>4.N.6<br>5.N.2<br>5.N.12 |

## 5th Grade

- |  |                  |
|--|------------------|
| 1. Graphing Coordinates                          | 5.G.4<br>6.G.4   |
| 2. Long Division w/Multi-Digit Divisors          | 5.N.12           |
| 3. Multiply/Divide Decimals                      | 6.N.13           |
| 4. Geometry—Area of Parallelograms and Triangles | 5.M.1<br>6.M.4   |
| 5. Add/Subtract Integers                         | 6.N.10<br>6.N.15 |
| 6. Add/Subtract Fractions w/Unlike Denominators  | 5.N.13           |
| 7. Decimals, Fractions, and Percents             | 5.N.7            |

## 6th Grade

- |  |                         |
|--|-------------------------|
| 1. Factoring Numbers, GCF, and LCM                 | 6.N.8                   |
| 2. Geometry—Circumference/Area of a Circle         | 6.M.5<br>7.M.3          |
| 3. Add/Subtract Mixed Numbers                      | 6.N.14                  |
| 4. Ratios and Proportions                          | 6.N.4<br>7.N.2          |
| 5. Multiply/Divide Integers                        | 7.N.7                   |
| 6. Algebra—Solve One-Step Equations                | 7.P.4                   |
| 7. Compare/Order Fractions, Decimals, and Integers | 5.N.6<br>6.N.6<br>6.N.7 |

## 7th Grade

- |  |                 |
|--|-----------------|
| 1. Order of Operations                     | 6.N.11<br>7.N.5 |
| 2. Multiply/Divide Fractions               | 6.N.14<br>7.N.7 |
| 3. Powers, Exponents, and Roots            | 6.N.1<br>7.N.5  |
| 4. Algebra—Solve Two-Step Equations        | 7.P.4           |
| 5. Graphing Using the Slope Formula        | 7.P.5<br>8.P.5  |
| 6. Simplifying Fractions w/Variables       | AI.P.8          |
| 7. Pythagorean Theorem and Right Triangles | 8.G.4           |

## 8th Grade

- |                                       |                  |
|---------------------------------------|------------------|
| 1. Algebra—Solve Multi-Step Equations | 8.P.7<br>AI.P.10 |
| 2. Add/Subtract Polynomials           | AI.P.7           |
| 3. Multiply/Divide Polynomials        | AI.P.7           |
| 4. FOIL                               | AI.P.7           |
| 5. Factoring Polynomials              | AI.P.8           |
| 6. Graph Linear Equations             | AI.P.5           |
| 7. Quadratic Formula                  | AI.P.9           |