### LINCOLN PUBLIC SCHOOLS

**Mathematics Learning Expectations: Grade 6** 

## Massachusetts Standards

The 2011 Massachusetts
Curriculum Framework for
Mathematics incorporates
the common core standards
and a select number of
additional standards unique
to Massachusetts.

# Critical Areas for Instructional Focus:

- Ratio and rate
- Division of fractions
- Variables in expressions and equations
- Basic statistics

See 2011
Massachusetts
Curriculum
Frameworks for
Mathematics:
Grade 6 Introduction
for more detail.

## **Content Domains and Key Outcomes**

#### **Ratios and Proportional Relationships**

• Use ratio concepts and ratio reasoning to solve problems

#### **The Number System**

- Apply and extend previous understandings of multiplication and division to divide fractions by fractions
- Multiply and divide multi-digit numbers and find common factors ar multiples
- Apply and extend previous understandings of numbers to the system of rational numbers

#### **Expression and Equations**

- Apply and extend previous understandings of arithmetic to algebraic expressions
- Reason about and solve one-variable equations and inequalities
- Represent and analyze quantitative relationships between dependent and independent variables

## Geometry

 Solve real-world and mathematical problems involving area, surface area and volume

#### **Statistics and Probability**

- Use measures of central tendency and variability to analyze data sets
- Display, summarize and describe data sets

See 2011 Massachusetts Curriculum Frameworks for Mathematics: Grade 6 for more detail.

#### **Standards for Mathematical Practice**

- 1. Make sense of problems and persevere in solving them.
- 2. Reason abstractly and quantitatively.

- 3. Construct viable arguments and critique the reasoning of others.
- 4. Model with mathematics.
- 5. Use appropriate tools strategically.
- 6. Attend to precision.
- 7. Look for and make use of structure.
- 8. Look for and express regularity in repeated reasoning.

See 2011 Massachusetts Curriculum Frameworks for Mathematics: pp.15-17 for more detail on the use of these standards in all domains.