

LINCOLN PUBLIC SCHOOLS
Mathematics Learning Expectations: Grade 3

**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:**

- Multiplication and division
- Unit fractions
- Area
- 2-dimensional shapes

*See 2011
Massachusetts
Curriculum
Frameworks for
Mathematics:
Grade 3 Introduction
for more detail.*

Content Domains and Key Outcomes

Operations and Algebraic Thinking

- Represent and solve story problems involving multiplication and division within 100
- Multiply and divide fluently within 100
- Solve 2-step problems involving the four operations, using a letter for the unknown
- Identify and explain patterns in addition and multiplication

Number and Operations in Base 10

- Add and subtract within 1000
- Use place value understanding and properties of operations to perform multi-digit arithmetic

Number and Operations Fractions

- Represent fractions as parts of wholes and as numbers on a number line
- Compare fractions by reasoning about their size

Measurement and Data

- Solve problems involving time
- Solve problems involving measurement and estimation of length, liquid volume and mass
- Represent and interpret data in scaled picture, bar graphs and line plots
- Solve problems involving geometric measurement of area and perimeter

Geometry

- Classify shapes using their attributes
- Partition shapes into fractional parts with a numerator of 1

See 2011 Massachusetts Curriculum Frameworks for Mathematics: Grade 3 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 an 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.*