



Grade 2 Expectations in Mathematics

Learning Standards from the MA Mathematics Curriculum Framework for the end of Grade 2 are numbered and printed in bold. The Franklin Public School System's grade level expectations for Grade 2 are bulleted below each learning standard. If there are no bulleted items after the MA Learning Standard, that standard is the grade level expectation. All students are expected to master all grade level expectations.

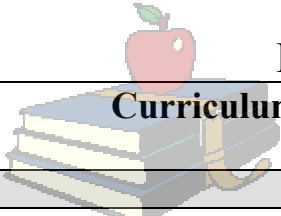
Number Sense and Operations

| Curriculum Framework Learning Standard | Everyday Math Reference/Notes |
|--|---|
| 1. Compare whole numbers using terms and symbols, e.g., greater than, equal to, less than. | D |
| 2. Identify and distinguish among multiple uses of numbers, including cardinal (to tell how many) and ordinal (to tell which one) numbers, and numbers as labels and as measurements. | |
| <ul style="list-style-type: none"> Identify and distinguish among multiple uses of numbers, including cardinal (to tell how many) and ordinal (to tell which one) numbers, and numbers as labels and as measurements up to 20. | S: Part of routines; Minute Math Book, Lesson 1.1, Math All Around Counting Ordinal #'s-Lesson 1.3 |
| 3. Name and write in numerals whole numbers to 1000, identify the values of the digits, and order the numbers. | |
| <ul style="list-style-type: none"> Name and write in numerals whole numbers to 1000. Identify the values of the digits in whole numbers to 1000. Order whole numbers to 1000. Write whole numbers to 1000. | D: "Equivalent Names", Base-10 Structures, Place Value Book 10.9, Unit 11 |
| 4. Identify the value of all U.S. coins and \$1, \$5, \$10, \$20 bills. Find the value of a collection of coins and dollar bills and different ways to represent an amount of money up to \$5. Use appropriate notation e.g., 69¢, \$1.35 | S |
| 5. Describe various meanings of addition and subtraction, e.g., addition as combinations (plus, combined with, more); subtraction as comparison (how much less, how much more), equalizing (how many more are needed to make these equal), and separation (how much remaining). | D |
| 6. Know addition facts (addends to 10) and related subtraction facts, and use them to solve problems. | S: Practice facts nightly Games 3x/week |



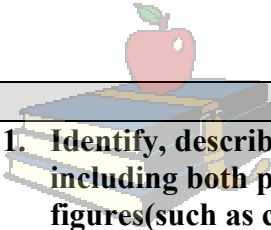
Number Sense and Operations Continued

| Curriculum Framework Learning Standard | Everyday Math Reference/Notes |
|---|--|
| 7. Demonstrate the ability to add and subtract three-digit numbers accurately and efficiently. | Unit 12, Journal 2 pgs. 320, 303, 316, MB 12.3 |
| 8. Demonstrate an understanding of and the ability to use the conventional algorithm for addition (two 3-digit numbers and three 2-digit numbers) and subtraction (two 3-digit numbers). | Use conventional algorithms as strategies. Trades First is very similar, Partial Sums addresses place value. Conventional algorithm NOT required for MCAS. |
| 9. Identify and represent common fractions (1/2, 1/3, 1/4) as parts of wholes, parts of groups, and numbers on a number line. | |
| <ul style="list-style-type: none"> Identify common fraction (1/3) as part of a whole and part of a group. | S: Parts of region D: Parts of a collection |
| 10. Understand and use the inverse relationship between addition and subtraction (e.g., $8 + 6 = 14$ is equivalent to $14 - 6 = 8$) to solve problems and check solutions. | S: Fact Families |
| 11. Estimate, calculate, and solve problems involving addition and subtraction of two-digit numbers. Describe differences between estimates and actual calculations. | D: Estimate S: Calculate and solve |



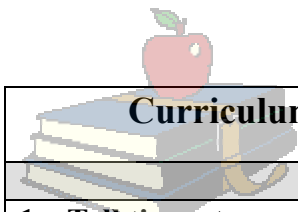
Patterns, Functions, and Algebra

| Curriculum Framework Learning Standard | Everyday Math Reference/Notes |
|---|--|
| 1. Describe and create addition and subtraction number patterns. | S: 1 rule Frames & Arrows |
| 2. Construct and solve open sentences that have variables, e.g., $\Delta + 7 = 10$. | S: MB 5.4, 6.3, 6.6, 6.10, 7.3, 7.4 Dollar Rummy, TRM pgs.88,89 |
| 3. Solve function problems with tables of data, e.g., input-output function machines. | D: Franklin Standard only |
| 4. Describe functions related to trading, including coin trades (e.g., pennies for nickels, nickels for dimes) and measurement trades (e.g., cups for quarts). | S: Coins D: Measurement |
| 5. Skip count by twos, fives, & tens up to 100 starting at any multiple. | S |
| 6. Identify different patterns on the hundreds chart. | S |
| 7. Write number sentences using +, -, =, <, and/or >, to represent math relationships in everyday situations. | D |



Geometry

| | |
|---|---|
| 1. Identify, describe, draw, and compare two-dimensional shapes, including both polygonal (up to six sides) and curved figures (such as circles). | |
| <ul style="list-style-type: none"> Identify, describe, draw, and compare two-dimensional shapes: polygons up to hexagon and ovals. | S: Identify D: Draw B: Compare |
| 2. Describe attributes and parts of two- and three-dimensional shapes, e.g., number and length of sides, number of corners, edges, and faces. | |
| | B: Describe attributes & parts S: Name |
| 3. Predict the results of putting shapes together and taking them apart. | |
| <ul style="list-style-type: none"> Predict the results of putting polygons together and taking them apart. Do the same for curved figures. | D: Lessons 8.2, 9.7, 10.7 |
| 4. Recognize congruent shapes. | |
| | This term is found in Teacher Reference Book, page 124, and the state (MCAS) expects students to know it. |
| 5. Relate geometric ideas to numbers, e.g., seeing rows in an array as a model of repeated addition. | |
| | D |



Measurement

| Curriculum Framework Learning Standard | Everyday Math Reference/Notes |
|---|---|
| 1. Tell time at quarter-minute intervals on analog and digital clocks using a.m. and p.m. | S |
| 2. Make and use estimates of measurement, including time, volume, weight, and area. | B |
| 3. Measure common objects using metric and customary units of length measurement, e.g., centimeter, inch. | |
| <ul style="list-style-type: none"> • Measure and compare common objects using metric units of length, e.g., centimeter. | S |
| 4. Select and correctly use appropriate measurement tools, e.g., ruler, balance scale, and thermometer. | B/D |
| 5. Compare the length, weight, and volume of two or more objects by using direct comparison. | |
| <ul style="list-style-type: none"> • Compare the weight, area, and volume of two or more objects by using direct comparison. | D: Unit 8- Exploration C, Lesson 9.9 |

Data Analysis, Statistics, and Probability

| Curriculum Framework Learning Standard | Everyday Math Reference/Notes |
|---|--|
| 1. Organize, classify, represent, and interpret data using tallies, charts, tables, bar graphs, pictographs, and Venn diagrams; interpret the representations. | S: Tallies D: All other skills |
| 2. Formulate inferences (draw conclusions) and make educated guesses (conjectures) about a situation based on information gained from data . | Discuss during Lessons 3.5, 6.3, 7.7, 7.8, 12.6, 12.7 |
| 3. Decide which outcomes of experiments are most likely. | B: Lesson 3.5; Conduct experiments using spinners, counters, dice; play Games; Teacher Reference Book pp. 120-123 |

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