

Pacing Guide for Second Grade Everyday Mathematics

August - September Lessons 1.1 – 2.4

October Lessons 2.5 – 3.5

November Lessons 3.6 – 4.2

Assessment for December report card takes place during the second week of November.

December Lessons 5.1 – 6.2

January Lessons 6.3 – 7.4

February Lessons 7.5 – 8.6

March Lessons 8.7 – 9.11

Assessment for March report card takes place during the first week of March.

April Lessons 10.1 – 10.12

May Lessons 11.1 – 11.10

Assessment for report card takes place during the fourth week of May.

June Lessons 12.1 – 12.8

Topics and Vocabulary – by unit

Unit One - **Establishing Routines**

1. Count by 5s to 40+ (developing)
2. Count by 2s to 40 (developing)
3. Write numbers from 1-20 (developing) According to the GLCE, this skill must be secure for numbers to 110 by the end of the year.
4. Compare pairs of numbers less than 16 (developing)
5. Write and count tallies (developing) Not a first grade GLCE.
6. Count up and back by ones to 20 (secure)
7. Count up to 20 objects – one to one correspondence (secure)

Vocab: number line, pattern blocks, pattern block template, slate, base 10 blocks, geoboard, more and less, before and after, tally mark, calendar, date, thermometer, mercury, degree, temperature, Fahrenheit, number story

Unit Two - **Everyday Uses of Numbers**

1. Calculate the value of combinations of pennies and nickels (developing)
2. Find complements of 10 (developing)
3. Solve simple + and – number stories (developing)
4. Count up and back by 1s on the number grid (secure)
5. Tell time to the nearest hour (secure)
6. Exchange pennies for nickels (secure)
7. Count by 2s to 40, count by 5s to 50 (secure) According to the GLCE, children must be able to count by 1s, 2s, and 5s to 110, by 10s and 100s to 500, and backward by 1s from 100 by the end of the year.

Vocab: number grid, ruler, math boxes, units, analog clock, hour and minute hands, estimate, clockwise, midnight, noon, AM and PM, penny, cent, nickel, exchange, add, plus, number model, subtract, minus

****Additional Note:** First grade has added drill pages of addition and subtraction (One Minute Math) to our Everyday Math program to give our students more practice of basic facts. These pages are used all year, beginning with the addition pages in Sept or Oct when we first discuss adding and subtracting.

Unit Three - **Visual Patterns, Number Patterns, and Counting**

1. Complete Frames-and-Arrows (counting) diagrams (developing)
2. Identify and complete patterns (developing) According to the GLCE, children must create and describe patterns, and know the difference between repeating and growing patterns.
3. Solve simple + and – problems by using the number line or number grid (developing)
4. Identify numbers as even or odd (developing) Not a first grade GLCE.
5. Know the value of combinations of pennies, nickels, and dimes (developing)
6. Tell time to the nearest half-hour (developing)
7. Solve simple number stories (developing)

Vocab: pattern, even and odd numbers, column, diagonal, row, half-past, between, Frames and Arrows diagram, rule box, frame, arrow, dime, dollars and cents notations, decimal point, line plot

Unit Four - **Measurement and Basic Facts**

1. Use standard units for measuring length (begin/developing) A second grade GLCE. For first grade, the GLCE reads non-standard and correct use of comparison words: shorter, longest, tall, etc.
2. Find simple sums and missing addends (developing)
3. Calculate the value of coin combinations (developing)
4. Solve simple number stories (developing)
5. Order and compare numbers to 22 (dev / secure) According to the GLCE, children must order and compare numbers to 110 by the end of the year.
6. Tell time to the nearest half-hour (dev / secure)

Vocab: digit, measure, length, hand span, yard, arm span, shorter, taller, about, compare, foot, inch, nearest, tape measure, typical, bar graph, quarter after or quarter past, quarter before or quarter to, timeline, number scroll, longs and cubes (tens and ones), addition facts, sum, fact power

Unit Five - **Place Value, Number Stories, and Basic Facts**

1. Find missing numbers and/or missing rule in “What’s my Rule?” problems (beginning)
2. Understand place value for longs and cubes / tens and ones (developing) According to the GLCE, children must be able to compose and decompose numbers to 30.
3. Compare numbers using greater than and less than symbols (developing) According to the GLCE, children must also be able to determine the difference between the two numbers.
4. Know +1, +0, doubles, and sums of 10 additions facts (developing)
5. Solve simple number stories (developing)

Lesson 5.6 has a section on ordinal numbers and showing position in sequence. The warm-up for lesson 5.11 reinforces this. We need to emphasize these because they are a GLCE for first grade.

Vocab: tens place, ones place, flat, hundreds, hundreds place, digit, greater than, less than, area, pan balance, weight, pounds, difference, multiple of 10, turn around fact, doubles fact, function machine, rule

Unit Six - **Developing Fact Power**

1. Measure objects to the nearest cm (beginning) A second grade GLCE.
2. Understand digital notation for time (beginning) A second grade GLCE.
3. Learn simple addition facts (beg / developing)
4. Calculate the value of coin combinations – P, N, D, and Q (developing)
5. Find many names for a number (developing) According to the GLCE, children must be able to list # facts or “partners inside of #s” for 2 to 10. Ex: $8=7+1=6+2=5+3=4+4$, etc.

Vocab: addition/subtraction facts table, equivalent names, name-collection boxes, fact family, fact triangle, centimeter, line segment, quarter, digital clock, second, second hand, range, middle value

Unit Seven - **Geometry and Attributes**

1. Identify 3-D shapes and know their characteristics (beginning)
2. Identify symmetrical figures (beginning) Not a first grade GLCE.
3. Sort and identify objects by attributes (beg / developing)
4. Identify polygons and know their characteristics (beg / developing)
Not a first grade GLCE.
5. Know addition facts (developing) According to the GLCEs, children must be able to model + and – for numbers less than 20, know addition facts up to $10+10$, and know the related subtraction facts fluently.

Vocab: triangle, square, rectangle, hexagon, circle, attribute, trapezoid, rhombus, side, corner, square corner, polygon, sphere, cylinder, rectangular prism, surface, face, pyramid, cone, cube, symmetrical, symmetry

Unit Eight - Mental Arithmetic, Money, and Fractions

1. Make change for amounts less than \$1.00 (beginning) Not a first grade GLCE.
2. Identify fractional parts of regions and sets with focus on unit fractions (beg / developing) A second grade GLCE.
3. Count sets of Qs, Ds, Ns, and Ps (developing) According to the GLCE, in c to \$1.00 and in \$s to \$100, using c and \$ signs correctly.
4. Solve number stories (developing)
5. Understand place value for 10s and 1s (dev / secure) According to the GLCE, only to 30. Children must be able to describe a number using 10s and 1s. Ex: $24 = 2 \text{ tens and } 4 \text{ ones}$ or $10+10+4$ or 24 ones.
6. Know addition facts for +1, +0, doubles, and sums of ten (dev / secure) According to the GLCE, children must know addition facts up to $10+10$ and be able to solve the related subtraction facts. They must also be able to add three 1-digit numbers.

Vocab: decimal point, money notation, making change, whole, equal parts, halves, thirds, fourths, fraction, fractional part, near double

Unit Nine - **Place Value and Fractions**

1. Solve 2-digit addition and subtraction problems (beginning)
According to the GLCE, “using # facts and strategies, but no formal algorithm”. They must also mentally calculate a 2-digit number + or – a 1-digit number without regrouping and a 2- digit number + or – a multiple of 10.
2. Compare fractions less than 1 (beginning) A second grade GLCE.
3. Find equivalent fractions (beginning) A second grade GLCE.
4. Identify fractional parts of a region (beg / developing) A second grade GLCE.
5. Identify and use patterns on the number grid (developing) According to a GLCE, children must know +/- 1 and +/- 10 for any number to 100.

Vocab: number grid puzzles, numerator, denominator

Unit Ten - **End of Year Review and Assessment**

1. Make a line plot of a set of data and find the mode and median of a set of data.
2. Review telling time on an analog clock and writing times in digital notation; practice alternate ways of naming times; calculate elapsed times.
3. Review showing amounts of money with coins and solve number stories involving addition of 2-digit numbers.
4. Solve comparison number stories and calculate amounts of change from purchases.
5. Review the names and some of the characteristics of polygons and the names of the basic 3-D shapes.
6. Review temperature readings in degrees F and use the information on a map to find temperature differences.
7. Review place value through hundreds.

There are a couple of GLCEs which are not covered very well by Everyday Math. These are:

1. describing position with words like above, below, in front, etc. This skill will be addressed in language lessons.
2. pictographs:
 - a. collecting and organizing data
 - b. making graphs – vertical and horizontal
 - c. reading and interpreting

There are a few lessons throughout the program with sections about making different kinds of graphs. We will be sure to do these even though they aren't the main focus of the lesson. We will also incorporate making and interpreting pictographs in other subject areas, especially social studies and calendar routine.