

# Skills and Concepts from Everyday Mathematics – First Grade

B = Beginning, D = Developing, S = Secure

## NUMERATION

### Whole Numbers

- \* Read and write numbers to 20 (D)
- Read and write 2-digit numbers (B-D)
- Read and write 3-digit numbers (B)
- Read and write 4-digit numbers (B)
- Read and write ordinal numbers (B)
- Order numbers to 20 (D)
- Order 2-digit numbers (B-D)
- Order 3-digit numbers (B)
- Compare numbers to 20 (D)
- Compare 2-digit numbers (B-D)
- Compare 3-digit numbers (B)
- Compare numbers using the symbols  $<$ ,  $>$ , and  $+$  (B)
- Perform rote counting (D)
- Perform rational counting (S)
- Skip count by 2's, 5's, and 10's (D)
- Count by 25's (B)
- Count using a calculator repeat key (B)
- Identify even and odd numbers (D)
- Find equivalent names for numbers (B-D)
- Make and solve number-grid puzzles (B)
- Explore place value using a number grid (D-S)
- Identify place value in 2-digit numbers (B-D-S)
- Identify place value in 3-digit numbers (B-D)
- Identify place value in 4-digit numbers (B)
- Make exchanges among place values (B)
- Find complements of 10 (D)
- Display and read numbers on a calculator (B)

### Money and Decimals

- Use cents notation (D-S)
- Use dollars-and-cents notation (B-D)
- Identify equivalencies and make coin exchanges (B-D)
- Identify equivalencies and make coin/bill exchanges (B)
- Show money amounts with coins (B-D-S)
- Show money amounts with coins/bills (D)
- Compare money amounts using  $>$ ,  $<$ , and  $=$  symbols (B)
- Identify pennies and dimes as fractional parts of a dollar (D)
- Calculate the value of coin/bill combinations (D)

### Fractions

- Understand the meaning of fractions (B)
- Identify numerator and denominator (B)
- Shade and identify fractional parts of a region (D)
- Shade and identify fractional parts of a set (B)
- Find equivalent fractions (B)
- Compare and order fractions (B)
- Explore uses of fractions (B)
- Use fractions in number stories (B)

## OPERATIONS AND COMPUTATION

### Addition and Subtraction

- Understand meaning of addition/subtraction (B-D-S)
- Solve addition/subtraction number stories (B-D-S)
- Make up addition/subtraction number stories (B-D)
- Find and use complements of 10 (D)
- Solve change-to-more and change-to-less number stories/diagrams (B-D)
- Solve parts-and-total number stories/diagrams (B-D)
- Solve comparison number stories (B)
- Find patterns in addition/subtraction facts (B-D-S)
- Add/subtract using a number line (D)
- Add/subtract using a number grid (D-S)
- Add/subtract using a calculator (B-D)
- Find sums of even and odd numbers (B)
- Practice basic facts (B-D)
- Use mental arithmetic to add/subtract (B-D)
- Investigate relationships between addition and subtraction (B)
- Add/subtract multiples of 10 (B)
- Add/subtract money amounts/decimals (B-D)
- Add 3 or more 1-digit numbers (B-D)
- Add/subtract 2-digit numbers (B)
- Investigate properties of addition/subtraction (B)
- Use an Addition/Subtraction Facts Table (B)
- Make change (B-D)
- Use estimation to add/subtract (B)

### Multiplication and Division

- Understand meaning of multiplication/division (B)
- Solve multiplication/division number stories (B)

## PATTERNS, FUNCTIONS, AND ALGEBRA

### Visual Patterns

- Create patterns with 2-dimensional shapes (B)
- Sort and identify shapes/objects by attributes (B-D)
- Explore and extend visual patterns (D)
- Find patterns in the real world (B)
- Find common attributes in objects and people (B)

### Number Patterns

- Count up and back on a number grid (B)
- Investigate even and odd number patterns (D)
- Identify and use patterns on a number grid (B-D)
- Add and subtract using a number grid (D-S)
- Find patterns in addition and subtraction facts (B-D-S)
- Find equivalent names for numbers (B-D)
- Explore patterns in doubling numbers (D)

### Sequences

- Count up and back on a number line (B-D)
- Make/complete a number line (B)
- Count by 2's, 5's, and 10's (B-D)
- Count by numbers greater than 10 (B)
- Complete number sequences (B)
- Solve frames and arrows problems with one rule (B-D)

## Functions

- Solve "What's My Rule?" (function machine problems) (B)

## Number Sentences

- Use symbols  $=$ ,  $-$ ,  $+$  (B-D-S)
- Write/solve addition and subtraction number sentences (B-D-S)
- Write/solve number sentences with missing addends (B)

## Inequalities

- Compare numbers  $<$ ,  $>$  symbols (B)

## GEOMETRY

### 2-Dimensional Shapes (Polygons)

- Identify 2-dimensional shapes (B-D)
- Create/extend designs with 2-dimensional shapes (B-D)
- Make 2-dimensional shapes on a geoboard (B)
- Record geoboard shapes on dot paper (B)
- Draw triangles and quadrilaterals (B)
- Explore shape relationships (B)
- Identify characteristics of 2-dimensional shapes (B)
- Compare 2-dimensional shapes (B)
- Construct 2-dimensional shapes (B)
- Solve 2-dimensional-shapes problems (B)
- Record designs with 2-dimensional shapes (B)
- Compare polygons and non-polygons (B)
- Complete shape patterns (B)
- Sort shapes by attributes (D)
- Explore similarities and differences among quadrilaterals (B)
- Form shapes by combining polygons (B)
- Classify and name polygons (B)
- Construct models of polygons with straws (B)

### 3-dimensional shapes

- Identify 3-dimensional shapes (B)
- Identify characteristics of 3-dimensional shapes (B)
- Construct 3-dimensional shapes (B)
- Explore similarities and differences among 3-dimensional shapes (B)

### Symmetry

- Fold and cut symmetrical shapes (B)
- Create/complete a symmetrical design (B)
- Identify symmetrical figures (B)
- Identify lines of symmetry (B)

### Points, Lines, and Angles

- Draw line segments with a straightedge (B)

**MEASUREMENT AND REFERENCE FRAMES;  
MEASUREMENT**

**Length**

- Estimate and compare distances (B)
- Estimate and compare lengths/heights of objects (B)
- Measure lengths with nonstandard units (B)
- Measure lengths with nonstandard units (B)
- Measure to the nearest foot (D)
- Measure to the nearest inch (B-D-S)
- Investigate the yard (B)
- Measure to the nearest centimeter (B-D)
- Investigate the meter (B-D)
- Solve length/height number stories (B)
- Measure to the nearest yard (B)
- Name tools used to measure length (B)
- Measure to the nearest meter (B)

**Capacity and Volume**

- Compare capacities of containers (B)

**Weight**

- Use a pan balance (B)
- Solve weight number stories (B)
- Estimate and compare weights (B)

**MEASUREMENT AND REFERENCE FRAMES**

**Perimeter and Area**

- Investigate area (B)

**Money**

- Recognize pennies and nickels (D-S)
- Use cents notation (D-S)
- Calculate the value of coin combinations (D)
- Recognize dimes (D-S)
- Use dollars-and-cents notation (B-D)
- Compare values of sets of coins (B-D)
- Recognize quarters (B-D-S)
- Show money amounts with coins (D-S)
- Show money amounts with coins/bills (B)
- Recognize dollars (B)
- Solve money number stories (B-D)
- Make change (B-D)
- Calculate the value of bill combinations (B)
- Identify equivalencies and make coin exchanges (B-D)
- Identify equivalencies and make bill exchanges (B)
- Add money amounts (B)
- Subtract money amounts (B)
- Identify pennies and dimes as fractional parts of a dollar (D)

**Time**

- Use the calendar (D)
- Compare the hour and minute hands (D)
- Tell time on the hour (D-S)
- Investigate A.M. and P.M.(B)
- Estimate the duration of a minute (B-D)
- Investigate the duration of an hour (B)
- Tell time on the half-hour (D-S)
- Tell time on the quarter-hour (D-S)
- Use digital notation (B-D)

- Tell time to the nearest 5 minutes (B-D)
- Investigate the second hand (B)
- Solve time number stories (B)
- Investigate 1-minute intervals (B)
- Calculate elapsed time (B)
- Show days/events on a timeline (B)
- Number and name the months of the year (B)
- Write today's date (B)

**Temperature**

- Use the Fahrenheit temperature scale (B-D)
- Use a thermometer (B-D)
- Solve temperature number stories (B)
- Use a weather map (B)
- Use the Celsius temperature scale (B)

**DATA AND CHANCE**

**Collecting Data**

- Collect data by counting (B)
- Make predictions about data (B)
- Conduct a survey (B)

**Recording/Displaying Data**

- Make a tally chart (D)
- Make a bar graph (B)
- Record data in a table/chart (B)
- Make a frequency table (B)
- Make a line plot (B)

**Evaluating Data**

- Find the range (B)
- Find the mode (B)
- Find the median (B)
- Compare two sets of data (B)
- Find the minimum/maximum of a data set (B)
- Read tables, graphs, and maps (B)
- Use data in problem solving (b)
- Summarize and interpret data (B)
- Predict outcomes (B)
- Conduct experiments (B)
- Explore fair and unfair games (B)