

Mathematics: Grade 3

Operations and Algebraic Thinking **OA**

- 1** Describe a context in which a total number of objects can be expressed as product of two one-digit numbers. **LC.3.OA.A.1**

- 2** Describe a context in which a number of shares or a number of groups can be expressed as a division problem. **LC.3.OA.A.2**

- 3a** Use objects to model multiplication and division situations involving up to 5 groups with up to 5 objects in each group and interpret the results. **LC.3.OA.A.3A**

- 3b** Use objects to model multiplication and division situations involving up to 10 groups with up to 5 objects in each group and interpret the results. **LC.3.OA.A.3B**

- 4a** Find total number inside an array with neither number in the columns or rows larger than 10. **LC.3.OA.A.4A**

- 4b** Determine how many objects go into each group when given the total number of objects and the number of groups where the number in each group or number of groups is not greater than 10. **LC.3.OA.A.4B**

- 5** Apply properties of operations as strategies to multiply and divide. **LC.3.OA.B.5**

- 6a** Determine how many objects go into each group when given the total number of objects and the number of groups where the number in each group or number of groups is not greater than 5. **LC.3.OA.B.6A**

- 6b** Determine the number of groups given the total number of objects and the number of objects in each group where the number in each group and the number of groups is not greater than 5. **LC.3.OA.B.6B**

- 7a** Find the total number of objects when given the number of identical groups and the number of objects in each group, neither number larger than 5. **LC.3.OA.C.7A**

- 7b** Find the total number inside an array with neither number in the columns or rows larger than 5. **LC.3.OA.C.7B**

- 7c** Solve multiplication problems with neither number greater than 5. **LC.3.OA.C.7C**

- 8a** Use rounding to solve word problems. **LC.3.OA.D.8A**

- 8b** Solve or solve and check one or two step word problems requiring addition, subtraction or multiplication with answers up to 100. **LC.3.OA.D.8B**

9a Describe the rule for a numerical pattern (e.g., increase by 2, 5 or 10). LC.3.OA.D.9A

9b Select or name the three next terms in a numerical pattern where numbers increase by 2, 5 or 10. LC.3.OA.D.9B

9c Identify multiplication patterns in a real word setting. LC.3.OA.D.9C

Numbers and Operations in Base Ten NBT

1 Use place value to round to the nearest 10 or 100. LC.3.NBT.A.1

2a Use the relationships between addition and subtraction to solve problems. LC.3.NBT.A.2A

2b Solve multi-step addition and subtraction problems up to 100. LC.3.NBT.A.2B

2c Solve multi-digit addition and subtraction problems up to 1000. LC.3.NBT.A.2C

3 Multiply a multiple of 10 in the range of 10-90 by a one digit whole number. LC.3.NBT.A.3

Number and Operations – Fractions NF

1a Identify the number of highlighted parts (numerator) of a given representation (rectangles and circles). LC.3.NF.A.1A

1b Identify the total number of parts (denominator) of a given representation (rectangles and circles). LC.3.NF.A.1B

1c Identify the fraction that matches the representation (rectangles and circles; halves, fourths, thirds, eighths). LC.3.NF.A.1C

1d Identify that a part of a rectangle can be represented as a fraction that has a value between 0 and 1. LC.3.NF.A.1D

1e Select a model of a given fraction (halves, thirds, fourths, sixths, eighths). LC.3.NF.A.1E

1f Using a representation, decompose a fraction into multiple copies of a unit fraction (e.g., $\frac{3}{4} = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$). LC.3.NF.A.1F

2a Locate given common unit fractions (i.e., $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$) on a number line 2 4 8 or ruler. LC.3.NF.A.2A

2b Locate fractions on a number line. LC.3.NF.A.2B

2c Order fractions on a number line. LC.3.NF.A.2C

3a Use =, <, or > to compare two fractions with the same numerator or denominator. LC.3.NF.A.3A

3b Express whole numbers as fractions. LC.3.NF.A.3B

3c Determine equivalent fractions. LC.3.NF.A.3C

**Multiplication and
Division** MD

1a Solve word problems involving the addition and subtraction of time intervals of whole hours or within an hour (whole hours: 5:00 to 8:00, within hours: 7:15 to 7:45). LC.3.MD.A.1A

1b Determine the equivalence between number of minutes and the fraction of the hour (e.g., 30 minutes = $\frac{1}{2}$ hour). LC.3.MD.A.1B

1c Determine the equivalence between the number of minutes and the number of hours (e.g., 60 minutes = 1 hour). LC.3.MD.A.1C

2a Add to solve one-step word problems. LC.3.MD.A.2A

2b Estimate liquid volume. LC.3.MD.A.2B

**2c Select appropriate units for measurement(liquid volume, mass). LC.3.MD.A.2d
Select appropriate tools for measurement(liquid volume, mass). LC.3.MD.A.2e
Determine whether a situation calls for a precise measurement or an estimation.** LC.3.MD.A.2C

3a Collect data, organize into picture or bar graph. LC.3.MD.B.3b Select the appropriate statement that describes the data representations based on a givens scaled picture or bar graph. LC.3.MD.B.3A

4a Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. LC.3.MD.B.4A

4b Measure to solve problems using number lines and ruler to 1 inch, $\frac{1}{2}$ inch, or $\frac{1}{4}$ of an inch. LC.3.MD.B.4B

4c Organize measurement data into a line plot. LC.3.MD.B.4C

5a Select a square from pictures as the appropriate unit for measuring area. LC.3.MD.C.5A

5b Select a picture which correctly shows how to place squares to measure the area of a rectangle. LC.3.MD.C.5B

6 Measure area of rectangles by counting squares. LC.3.MD.C.6

7a Use tiling and addition to determine area. LC.3.MD.C.7A

7b Multiply side lengths to find the area of a rectangle with whole number side lengths to solve problems. LC.3.MD.C.7B

7c Use tiling and multiplication to determine area. LC.3.MD.C.7C

7d Apply the distributive property to solve problems with models. LC.3.MD.C.7D

8a Identify a figure as getting larger or smaller when the dimensions of the figure change. LC.3.MD.D.8A

8b Use addition to find the perimeter of a rectangle. LC.3.MD.D.8B

8c Solve real world problems involving perimeter. LC.3.MD.D.8C

9 Solve word problems using bills greater than one dollar, quarters, dimes, nickels, or pennies. LC.3.MD.E.9

Geometry G

1 Identify shared attributes of shapes. LC.3.G.A.1

2 Partition rectangles into equal parts with equal area. LC.3.G.A.2