HOLLISTON Public Schools

Grade 3- Module 5 - Fractions as Numbers

Massachusetts Learning Standards Taught in this Unit

- **3.NF.A.1** Understand a fraction 1/*b* as the quantity formed by 1 part when a whole (a single unit) is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*.
- **3.MD.B.4** Generate measurement data by measuring lengths of objects using rulers marked with halves and fourths of an inch. Record and show the data by making a line plot (dot plot), where the horizontal scale is marked off in appropriate units—whole numbers, halves, or fourths.
- **3.G.A.2** Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into four parts with equal areas and describe the area of each part as ¼ of the area of the shape.
- **3.NF.A.2.a** Represent a unit fraction, 1/*b*, on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the fraction 1/*b* is located 1/*b* of a whole unit from 0 on the number line.
- **3.NF.A.2.b** Represent a fraction *a*/*b* on a number line diagram by marking off *a* lengths 1/*b* from 0. Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line.
- **3.NF.A.3.a** Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
- **3.NF.A.3.b** Recognize and generate simple equivalent fractions, e.g., 1⁄2 = 2⁄4, 4⁄6 = 2⁄3. Explain why the fractions are equivalent, e.g., by using a visual fraction model.
- **3.NF.A.3.c** Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.
  For example, express 3 in the form 3 = 3⁄1; recognize that 6⁄1 = 6; locate 4⁄4 and 1 at the same point of a number line diagram.
- **3.NF.A.3.d** Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.