|  |  |
| --- | --- |
| NF.1 | Standard/Element to be Mastered: |
| **NF.1** Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts (unit fraction) understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$ . For example, $\frac{3}{4}$ means there are three $\frac{1}{4}$ parts, so $\frac{3}{4}$ = $\frac{1}{4}$ + $\frac{1}{4}$ + $\frac{1}{4}$ . |
| Related Learning Target(s) | Yes! | Not yet. |
| I can recognize a unit fraction as one part of a whole.  |  |  |
| I can identify and explain the parts of a written fraction (numerator and denominator). |  |  |
| I can understand and explain how multiple unit fractions can create an $\frac{a}{b}$ fraction.  |  |  |

|  |  |
| --- | --- |
| NF.2a | Standard/Element to be Mastered: |
| **NF.2** Understand a fraction as a number on the number line; represent fractions on a number line diagram. 1. Represent a fraction $\frac{1}{b}$ 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 $\frac{1}{b}$ . Recognize that a unit fraction $\frac{1}{b}$ is located $\frac{1}{b}$ whole units from 0 on the number line.
 |
| Related Learning Target(s) | Yes! | Not yet. |
| I can define the interval from 0 to 1, 1 to 2, 2 to 3, etc. on a number line as a whole |  |  |
| I can partition a whole on a number line into equal parts. |  |  |
| I can recognize that the equal parts between a whole on a number line represent a unit fraction.  |  |  |

|  |  |
| --- | --- |
| NF.2b | Standard/Element to be Mastered: |
| **NF.2** Understand a fraction as a number on the number line; represent fractions on a number line diagram. 1. Represent a non-unit fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths of $\frac{1}{b}$ (unit fractions) from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the non-unit fraction $\frac{a}{b}$ on the number line.
 |
| Related Learning Target(s) | Yes! | Not yet. |
| I can understand and explain how multiple unit fractions can create an $\frac{a}{b}$ fraction on a number line |  |  |
| I can identify and explain the parts of a written fraction (numerator and denominator) on a number line. The numerator is the number of hops and the denominator is the number of equal pieces in the whole.  |  |  |

|  |  |
| --- | --- |
| NF.3a | Standard/Element to be Mastered: |
| **NF.3** Explain equivalence of fractions through reasoning with visual fraction models. Compare fractions by reasoning about their size.1. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.
 |
| Related Learning Target(s) | Yes! | Not yet. |
| I can understand that equivalent fractions have the same amount of selected space in model.  |  |  |
| I can understand that two fractions on a number line are equivalent if they have the same endpoint.  |  |  |
| I can identify when fractions are not equivalent.  |  |  |

|  |  |
| --- | --- |
| NF.3b | Standard/Element to be Mastered: |
| **NF.3** Explain equivalence of fractions through reasoning with visual fraction models. Compare fractions by reasoning about their size.1. Recognize and generate simple equivalent fractions with denominators of 2, 3, 4, 6 and 8, e.g., $\frac{1}{2}$ = $\frac{2}{4}$ , $\frac{4}{6}$ = $\frac{2}{3}$ . Explain why the fractions are equivalent, e.g., by using a visual fraction model.
 |
| Related Learning Target(s) | Yes! | Not yet. |
| I can create an equivalent fraction when given a fraction. |  |  |
| I can recognize when fractions are equivalent or not.  |  |  |
| I can justify why the fractions are equivalent using words and visual models.  |  |  |

|  |  |
| --- | --- |
| NF.3c | Standard/Element to be Mastered: |
| **NF.3** Explain equivalence of fractions through reasoning with visual fraction models. Compare fractions by reasoning about their size.1. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 =* $\frac{6}{2}$ *(3 wholes I equal to six halves); recognize that* $\frac{3}{1}$ *= 3, locate* $\frac{4}{4}$ *and 1 at the same point of a number line diagram.*
 |
| Related Learning Target(s) | Yes! | Not yet. |
| I can recognize when the numerator and denominator are the same the fraction equals one whole.  |  |  |
| I can recognize any time the denominator is one, the numerator determines the number of wholes ($\frac{3}{1}$ *= 3*).  |  |  |
| I can recognize which improper fractions are equivalent to a whole number (*3 =* $\frac{6}{2}$).  |  |  |
| I can write an equivalent fraction to a given whole number.  |  |  |
| I can show any whole number as a fraction using models and number lines.  |  |  |

|  |  |
| --- | --- |
| NF.3d | Standard/Element to be Mastered: |
| **NF.3** Explain equivalence of fractions through reasoning with visual fraction models. Compare fractions by reasoning about their size.1. 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.
 |
| Related Learning Target(s) | Yes! | Not yet. |
| I can understand that to compare fractions they must have the same size whole.  |  |  |
| I can understand that the denominator determines the size of the pieces.  |  |  |
| I can compare two fractions with the same denominator using <, >, or = by comparing the number of selected pieces (numerator). |  |  |
| I can compare two fractions with the same numerator using <, >, or = by comparing the size of the pieces (denominator).  |  |  |
| I can justify my comparisons with words and visual models.  |  |  |

|  |  |
| --- | --- |
| MD.3 | Standard/Element to be Mastered: |
| **MD.3** Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one-and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets. |
| Related Learning Target(s) | Yes! | Not yet. |
| I can answer two and three step “how many more” and “how many fewer/less” questions about a pictograph and a bar graph.  |  |  |
| I can determine the information I can and cannot gather from a given set of data.  |  |  |

|  |  |
| --- | --- |
| MD.4 | Standard/Element to be Mastered: |
| **MD.4** Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.  |
| Related Learning Target(s) | Yes! | Not yet. |
| I can measure and record lengths using rulers marked with halves and fourths of an inch.  |  |  |
| I can show any whole number as a fraction with a denominator of 4, using a ruler as a model.  |  |  |
| I can understand the parts of a line plot.  |  |  |
| I can create an accurate and complete line plot from a given set of data (title, data with x’s and a number line with appropriate intervals).  |  |  |