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<th>Grade-Level Standard</th>
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| M.6.NS.1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem | M.EE.6.NS.1 Compare the relationships between two unit fractions | **Initial Precursor**
- Recognize wholeness
- Recognize a unit
- Recognize parts of a given whole or unit

**Distal Precursor**
- Model equal part
- Partition any shape into equal parts

**Proximal Precursor**
- Recognize fraction
- Explain unit fraction
- Recognize numerator
- Recognize denominator

**Target**
- Explain relationships between unit fractions

**Successor**
- Explain numerator
- Explain denominator
- Compare fractions using models
- Decompose a fraction into a sum of unit fractions with the same denominator
- Add fractions with common denominators

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<th>How is the Initial Precursor related to the Target?</th>
<th>How is the Distal Precursor related to the Target?</th>
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<td><strong>Initial Precursor:</strong> In order to compare unit fractions, students need to gain experience with parts and wholes. This concept can be taught in every area of mathematics (i.e., sets, number sense, counting, operations, patterns, measurement, data analysis, geometry, and algebra). Educators can start by having students work with sets, taking whole sets and breaking them into parts based on attributes. When counting, label what has been counted (e.g., two balls, one marker, three CDs), count the items, label it again, and encourage students to use numerals to label and count the separate sets. Use tools like the ten-frame to point out whole and parts (e.g., a row of 5 dots and a row of 4 dots are parts or subsets of 9).</td>
<td><strong>Distal Precursor:</strong> As students begin to develop the understanding of sets and numbers, educators highlight the differences between sets on the basis of overall area or discrete number using the words &quot;more,&quot; &quot;less,&quot; and &quot;equal.&quot; Provide students with multiple opportunities to count and compare a wide variety of sets with an increasing number of items, label the sets (e.g., 8 balls, 12 bears, 15 blocks), and move items in and out of the sets, labeling and counting them again (e.g., &quot;You just said this set has 11 cubes; if I take two cubes, how many will you have?&quot;). Being able to partition shapes requires students to recognize a unit and recognize when basic objects are in whole and part forms. Work on this understanding by giving students an opportunity to observe, feel, or otherwise interact with objects and shapes in their whole and part forms. The general goal is to explore the differences between whole units or objects and parts of units or objects. As students explore shapes, label them and describe them as whole or part. Have students build (construct) and take apart (deconstruct) shapes.</td>
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A diagram showing the relationship of nodes in the mini-map appears below.

*Key to map codes in upper right corner of node boxes:*

- **IP** - Initial Precursor
- **SP** - Supporting
- **DP** - Distal Precursor
- **S** - Successor
- **PP** - Proximal Precursor
- **UN** - Untested
- **T** - Target
M.EE.6.NS.1 Compare the relationships between two unit fractions