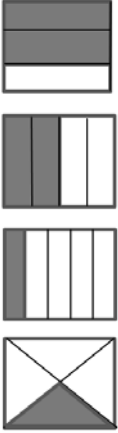
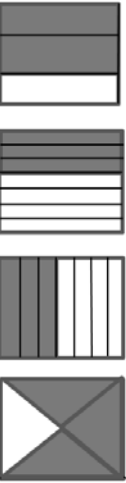



Content Standard	<p>MAFS.3.NF <i>Number and Operations — Fractions</i> MAFS.3.NF.1 <i>Develop understanding of fractions as numbers.</i></p> <p>MAFS.3.NF.1.1 Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.</p>
Assessment Limits	<p>Denominators limited to 2, 3, 4, 6, and 8. Combining or putting together unit fractions rather than formal addition or subtraction of fractions. Maintain concept of a whole as one entity that can be equally partitioned in various ways when working with unit fractions. Limit usage of the words “numerator” and “denominator” in items—focus should not be on assessing vocabulary terms. Fractions a/b can be improper fractions and students should not be guided to put fractions in lowest terms or to simplify. Items may not use number lines (MAFS.3.NF.1.2).</p>
Calculator	No
Acceptable Response Mechanisms	<p>Equation Response Graphic Response – Drag and Drop, Drawing/Graphing, Hot Spot Multiple Choice Response Multi-Select Response Table Response</p>
Context	Allowable
Example	
Context	<p>Equally partitioned whole objects with any orientation:</p> <ul style="list-style-type: none"> • Unit fractions or non-unit fractions less than one with denominators 2, 3, 4, 6, and 8 • Non-unit fractions greater than one limited to halves and fourths
Context easier	<p>Identify unit fractions using:</p> <ul style="list-style-type: none"> • Easy to distinguish models such as $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$
Context more difficult	<p>Identify fractions using a variety of complex models that may include:</p> <ul style="list-style-type: none"> • Any fraction (not necessarily unit) less than 1 or other fractions greater than 1 with denominator 3, 6 or 8 • Within a context • Repeated unit fractions

Sample Item Stem	Response Mechanism	Notes, Comments
<p>Each model shown has been shaded to represent a fraction. Which model shows $\frac{1}{4}$ shaded?</p> 	<p>Multiple Choice Response</p>	
<p>Each model shown has been shaded to represent a fraction. Which model shows $\frac{3}{4}$ shaded?</p> 	<p>Multiple Choice Response</p>	

<p>The model shown represents one whole.</p> <p>Use the triangles to see how many equal parts the model can be divided into. Place numbers in the boxes to show the fraction of the whole each triangle represents.</p>	<p>Graphic Response – Drag and Drop</p>	
<p>Each shape shown represents $\frac{1}{2}$ of a whole. Drag the shapes into the box to show $\frac{5}{2}$.</p>	<p>Graphic Response – Drag and Drop</p>	
<p>Each shape shown represents $\frac{1}{2}$ of a whole.</p> <p>How many shapes should be put together to make $\frac{5}{2}$?</p>	<p>Equation Response</p>	

<p>Jan and Laura have a total of 3 same-sized cookies they want to divide equally between the two of them. They divide each cookie in half as shown.</p>  <p>What fraction of the cookies should each girl receive?</p>	<p>Equation Response</p>	
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