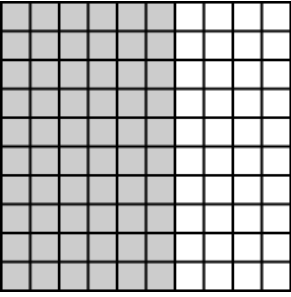


Grade 4 Mathematics Item Specifications
Florida Standards Assessments

Content Standard		<p>MAFS.4.NF <i>Number and Operations - Fractions</i></p> <p>MAFS.4.NF.3 <i>Understand decimal notation for fractions, and compare decimal fractions.</i></p> <p>MAFS.4.NF.3.5 Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. <i>For example, express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.</i></p>	
Assessment Limits		<p>Denominators must be either 10 or 100. Decimal notation is not assessed in this standard. Common denominator and equivalent fractions are acceptable vocabulary words.</p>	
Calculator		No	
Acceptable Response Mechanisms		<p>Equation Response Multiple Choice Response Multi-Select Response Matching Item Response</p>	
Context		Allowable	
Example			
Context		<p>Generally, moderately sized numbers in the numerators (between 3 and 7, between 30 and 70). The final sum may be an improper fraction – use this criterion sparingly for a medium difficulty item.</p>	
Context easier		<p>Generally, smaller numbers in the numerators (≤ 3, ≤ 30). The numerator of the fraction with 100 in the denominator is a multiple of 10.</p>	
Context more difficult		<p>Generally, larger numbers in the numerators (≥ 7, ≥ 70). One of the addends may be an improper fraction – use this criterion sparingly for hard items.</p>	
Sample Item Stem		Response Mechanism	Notes, Comments
Create a fraction with a denominator of 100 that is equivalent to $\frac{2}{10}$.		Equation Response	
Which fraction is equivalent to $\frac{3}{10}$?		Multiple Choice Response	

<p>A fraction model is shown.</p>  <p>The fraction represented by this model can be written in the form of $\frac{?}{10}$.</p> <p>What is the missing number?</p>	<p>Equation Response</p>	
<p>An equation is shown.</p> $\frac{8}{10} + \square = \frac{97}{100}$ <p>What is the missing number?</p>	<p>Equation Response</p>	