

## *Fractions & Decimals Student Clinical Interview*

<b>Fractions Learning Pathway</b>	<b>Curricular Connection</b>	<b>QUESTION/PROMPT/VISUAL</b>	<b>Anticipated Response</b>	<b>Notes</b>
<p><b>Unit Fractions</b></p> <p>Unit A Use proportional reasoning to make reasonable estimates</p>	<p><b>Grade 2</b> – determine, through investigation using concrete materials, the relationship between the number of fractional parts of a whole and the size of the fractional parts</p> <p><b>Grade 3</b> – divide whole objects and sets of objects into equal parts, and identify the parts using fractional names (e.g., one half; three thirds; two fourths or two quarters), without using numbers in standard fractional notation</p>	<p><b>Which represents a half?</b></p> <p><i>Materials to be provided:</i></p> <ul style="list-style-type: none"> <li>- <math>\frac{1}{2}</math> (standard notation)</li> <li>- Coloured tiles blue &amp; green separated <math>\frac{1}{2}</math> (area)</li> <li>- Measuring cup <math>\frac{1}{2}</math> (volume)</li> <li>- 2 quarters w 2 blank spaces (set)</li> <li>- Hundreds chart 50/100 (area)</li> <li>- Box of crayons/markers with one removed (set)</li> <li>- Cuisenaire rod (brown &amp; two green) (linear)</li> </ul>		
<p><b>Unit Fractions</b></p> <p>Unit E Use unit fractions to compose and decompose fractions with models and symbols.</p>	<p><b>Grade 4</b> – represent fractions using concrete materials, words, and standard fractional notation, and explain the meaning of the denominator as the number of the fractional parts of a whole or a set, and the numerator as the number of fractional parts being considered</p>	<p><b>Show <math>\frac{1}{2}</math> in as many ways as you can?</b></p> <p><i>Materials to be provided:</i></p> <ul style="list-style-type: none"> <li>- Drawing paper w pencil (area)</li> <li>- Pattern blocks (area)</li> <li>- Connecting cubes (volume)</li> <li>- Counters (set)</li> <li>- Geoboard (area)</li> <li>- Coloured tiles (area)</li> <li>- Hundreds chart (area)</li> <li>- Cuisenaire rods (linear)</li> </ul>		
<p><b>Unit Fractions</b></p> <p>Unit B Equally partition area, linear and set models</p>	<p><b>Grade 4</b> – represent fractions using concrete materials, words, and standard fractional notation, and explain the meaning of the denominator as the number of the fractional parts of a whole or a set, and the numerator as the number of fractional parts being considered – count forward by halves, thirds, fourths, and tenths to beyond one whole, using concrete materials and number lines</p>	<p><b>How could you use this number line to count up by thirds? Mark the fractions as you count on the line.</b></p> <p><i>(Have 0 to 1 marked on a number line.)</i></p>		

<p><b>Unit Fraction</b></p> <p>Unit B Equally partition area, linear and set models</p>	<p><b>Grade 5</b> – represent, compare, and order fractional amounts with like denominators, including proper and improper fractions and mixed numbers, using a variety of tools</p>	<p><b>How could you use this number line to count up by thirds?</b> <b>Mark the fractions as you count on the line.</b></p> <p><i>(Have numbers 4 to 6 marked on a number line)</i></p>		
<p><b>Unit Fraction &amp; DECIMALS</b></p>	<p>Grade 4 – represent, compare, and order decimal numbers to tenths, using a variety of tools</p>	<p><b>Show 0.1</b></p> <p><i>(Give student a 10x10 grid)</i></p>		
<p><b>Comparing Fractions</b></p> <p>Comp B Compare familiar fraction quantities with and without benchmark referents</p>	<p>Grade 4 – compare fractions to the benchmarks of 0, <math>\frac{1}{2}</math> and 1</p>	<p><b>Is this closer to 0, <math>\frac{1}{2}</math>, or 1?</b></p> <p><math>\frac{1}{4}</math></p> <p><math>\frac{3}{8}</math></p> <p><b>Explain your thinking.</b></p> <p><i>(Give number line with benchmarks listed. Give fractions written on post-its to be placed. Prompt to use manipulatives if needed)</i></p>		
<p><b>Comparing Fractions</b></p> <p>Comp A Generate and recognize equivalent fractions using models and symbols</p>	<p>Grade 4 – demonstrate and explain the relationship between equivalent fractions, using concrete materials</p>	<p><b>Are <math>\frac{2}{6}</math> equivalent to <math>\frac{1}{3}</math>?</b></p> <p><b>Use the manipulatives or draw to explain.</b></p>		
<p><b>Comparing Fractions</b></p> <p>Comp E Compare fractions with unlike numerators and unlike denominators using models and symbols</p>	<p>Grade 5 – represent, compare, and order fractional amounts with like denominators, including proper and improper fractions and mixed numbers, using a variety of tools</p>	<p><b>Which is greater?</b></p> <p><b><math>1\frac{1}{2}</math> or <math>\frac{5}{4}</math></b></p> <p><b>Show how you know.</b></p>		

<p><b>Comparing Fractions &amp; DECIMALS</b></p> <p>Comp E Compare fractions with unlike numerators and unlike denominators using models and symbols</p>	<p>Grade 5 – represent, compare, and order fractional amounts with like denominators, including proper and improper fractions and mixed numbers, using a variety of tools (e.g., number lines) and using standard fractional notation – represent, compare, and order whole numbers and decimal numbers from 0.01 to 100 000, using a variety of tools (e.g., number lines with appropriate increments)</p>	<p><b>Where would these go on the number line?</b></p> <p><b>90/100, 0.3, <math>\frac{1}{2}</math>, 0.75</b></p> <p><b>Explain.</b></p> <p><i>(Provide a number line with benchmarks: 0, <math>\frac{1}{2}</math>, 1. Have the fractions and decimals on post-its for students to place)</i></p>		
<p><b>Operation with Fractions: Addition &amp; Subtraction</b></p> <p>OP C Add and subtract fractions with like denominators using models and symbols</p>	<p>Grade 7 – add and subtract fractions with simple like and unlike denominators, using a variety of tools and algorithms</p>	<p><b>Give the answer:</b></p> <p><math>\frac{1}{4} + \frac{1}{4} =</math></p>		
<p><b>Operation with Fractions: Addition &amp; Subtraction</b></p> <p>OP D Add and subtract fractions with friendly but unlike denominators (e.g., 2 and 10) using models and symbols</p>	<p>Grade 7 – add and subtract fractions with simple like and unlike denominators, using a variety of tools and algorithms</p>	<p><b>Give the answer:</b></p> <p><math>\frac{1}{2} + \frac{1}{4} =</math></p>		
<p><b>Operation with Fractions: Addition &amp; Subtraction</b></p> <p>OP E Add and subtract fractions with unlike denominators (e.g., 2 and 7) using models and symbols</p>	<p>Grade 7 – add and subtract fractions with simple like and unlike denominators, using a variety of tools and algorithms</p>	<p><b>Estimate the answer:</b></p> <p><b><math>\frac{12}{13} + \frac{1}{8}</math></b></p> <p><b>A. 1</b> <b>B. 2</b> <b>C. 19</b> <b>D. 21</b></p>		

General Notes:





