

<p><b>Topic:</b> Unit Rates, Ratios, Proportions, Constant of Proportionality</p>	<p><b>Standards:</b></p> <ul style="list-style-type: none"> <li>• 7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.</li> <li>• 7. RP.2 Recognize and represent proportional relationships between quantities</li> </ul>
<p><b>Lesson Essential Question:</b></p> <ul style="list-style-type: none"> <li>• In what ways can ratios of fractions be expressed as unit rates?</li> <li>• How would you recognize and represent proportional relationships between quantities measured in like or different units?</li> </ul>	<p><b>Students will be able to....</b></p> <ul style="list-style-type: none"> <li>• Compute unit rates with ratios of fractions.</li> <li>• Compute unit rates with ratios measured in like and different units.</li> <li>• Determine if two quantities are proportional using a variety of methods.</li> <li>• Identify the constant of proportionality in a table, graph, and equation.</li> <li>• Represent a proportional relationship in an equation.</li> </ul>
<p><b>Activating Strategy:</b> BrainPOP video</p>	<p><b>Vocabulary:</b></p> <ul style="list-style-type: none"> <li>• Unit rate, ratios, proper fractions, improper fractions, complex fractions, proportions, proportional relationships, constant of proportionality, x-coordinate, y-coordinate, equivalent ratios, cross-product</li> </ul>

<p><b>Lesson Instruction</b></p>	
<p><b>Learning Activity 1:</b></p> <ul style="list-style-type: none"> <li>• Creating and solving proportions in real-world problems</li> <li>• Determining Proportionality in Tables</li> </ul> <p><b>Assessment Prompt for LA 1:</b></p> <ul style="list-style-type: none"> <li>• Thumbs up-Thumbs down</li> </ul>	<p><b>Graphic Organizer:</b></p> <ul style="list-style-type: none"> <li>• Bubble Concept Map on Constant of Proportionality</li> <li>• Frayer Model</li> </ul>
<p><b>Learning Activity 2:</b></p> <ul style="list-style-type: none"> <li>• Review activity with partner</li> </ul> <p><b>Assessment Prompt for LA 2:</b></p> <ul style="list-style-type: none"> <li>• Review discussion</li> </ul>	
<p><b>Learning Activity 3:</b></p> <ul style="list-style-type: none"> <li>• Test</li> </ul> <p><b>Assessment Prompt for LA 3:</b></p> <ul style="list-style-type: none"> <li>• Test on Unit Rates, Ratios, and Proportions</li> </ul>	
<p><b>Learning Activity 4:</b></p> <ul style="list-style-type: none"> <li>• Constant of Proportionality graphic organizer</li> <li>• Identifying the constant of proportionality in a table, graph, and equations</li> </ul> <p><b>Assessment Prompt for LA 4:</b></p> <ul style="list-style-type: none"> <li>• Classwork problems</li> </ul>	
<p><b>Learning Activity 5:</b></p> <ul style="list-style-type: none"> <li>• Constant of Proportionality Sorting Activity</li> </ul>	

<ul style="list-style-type: none"><li>• Constant of Proportionality Multi-Step Problems</li></ul> <b>Assessment Prompt for LA 5:</b> <ul style="list-style-type: none"><li>• Accuracy of sorting game results</li></ul>	
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<b>Summarizing Strategy:</b>
<ul style="list-style-type: none"><li>• 3-2-1</li><li>• Respond to Essential Question with partner</li></ul>