

|   |  |  |  |
|---|--|--|--|
| <b>Grade:</b> 6th   |  | <b>Subject:</b> Math   |  |
| <b>Materials:</b> Scratch Paper and a Pencil  |  | <b>Technology Needed:</b> None   |  |
| <b>Instructional Strategies:</b><br><input type="checkbox"/> Direct instruction<br><input type="checkbox"/> Guided practice<br><input type="checkbox"/> Socratic Seminar<br><input type="checkbox"/> Learning Centers<br><input type="checkbox"/> Lecture<br><input type="checkbox"/> Technology integration<br><input type="checkbox"/> Other (list) |  | <b>Guided Practices and Concrete Application:</b><br><input type="checkbox"/> Large group activity<br><input type="checkbox"/> Independent activity<br><input type="checkbox"/> Pairing/collaboration<br><input type="checkbox"/> Simulations/Scenarios<br><input type="checkbox"/> Other (list)<br>Explain:   |  |
| <b>Standard(s)</b><br><br><u>6.NS.1 -</u><br>Use visual fraction models and equations to interpret and compute quotients of fractions.  |  | <b>Differentiation</b><br><br><b>Below Proficiency:</b><br><br>Students are unable to multiply fractions correctly and cannot repeat the process.<br>=> Have these students work with me in the back of the classroom for one-on-one help.<br><br><b>Above Proficiency:</b><br><br>Students are able to multiply fractions correctly and with ease.<br>=> Have these students continue their work and have them try harder problems in the book.<br><br><b>Approaching/Emerging Proficiency:</b><br><br>Students are able to multiply fractions with minimal struggle and minimal error.<br>=>Have these students work with their pods to collaborate on the process.<br><br><b>Modalities/Learning Preferences:</b><br><br>Repetition, Visual, Lecture, Collaboration, and Discussion |  |
| <b>Objective(s)</b><br><br>Students are able to multiply fractions together<br><br><b>Bloom's Taxonomy Cognitive Level:</b> Analyzing / Evaluating  |  |  |  |
| <b>Classroom Management- (grouping(s), movement/transitions, etc.)</b><br><br>Students will work collaboratively with others during turn and talks during the lesson with their pods that they are in.  |  | <b>Behavior Expectations- (systems, strategies, procedures specific to the lesson, rules, and expectations, etc.)</b><br><br>Students are expected to follow school rules as well as being respectful towards others, participating during turn and talks, and to ask questions when they do not understand a concept.   |  |
| <b>Minutes</b>  | <b>Procedures</b>  |  |  |
| 1   | <b>Set-up/Prep:</b><br>Set up notes and grab entrance and exit tickets   |  |  |
| 2   | <b>Engage: (opening activity/ anticipatory Set – access prior learning / stimulate interest /generate questions, etc.)</b><br>Entrance Ticket: Attached at bottom    |  |  |
| 25  | <b>Explain: (concepts, procedures, vocabulary, etc.)</b><br><br><u>I do:</u><br><br>n = numerator, d = denominator<br>$n/d \times n/d = (n \times n) / (d \times d)$ |  |  |

|  |   |
|--|---|
|  | <p><math>3 \times \frac{1}{3} = \frac{3}{1} \times \frac{1}{3} = (3 \times 1) / (3 \times 1) = 3/3 = 1</math></p> <p><math>\frac{2}{5} \times \frac{4}{5} = (2 \times 4) / (5 \times 5) = 8/25</math></p> <p><u>We do:</u></p> <p>Let's simplify too!!!</p> <p><math>\frac{3}{4} \times \frac{4}{5} = (3 \times 4) / (4 \times 5) = 12/20 = 3/5</math></p> <p><math>\frac{2}{3} \times \frac{4}{5} = (2 \times 4) / (3 \times 5) = 8/10 = 4/5</math></p> <p><math>\frac{3}{4} \times \frac{8}{15} = (3 \times 8) / (4 \times 15) = 24/60 = 2/5</math></p> <p><u>They do:</u></p> <p>Remember to Simplify!!!</p> <p><math>\frac{4}{5} \times 5 = \frac{4}{5} \times \frac{5}{1} = (4 \times 5) / (5 \times 1) = 20/5 = 4</math></p> <p><math>\frac{4}{7} \times \frac{1}{2} = (4 \times 1) / (7 \times 2) = 4/14 = 2/7</math></p> <p><math>a = \frac{2}{3}, b = \frac{9}{15}</math><br/> <math>a \times b = \frac{2}{3} \times \frac{9}{15} = (2 \times 9) / (3 \times 15) = 18/45 = 6/15</math></p> <p>You bake cookies for <math>\frac{1}{2}</math> an hour. You spent <math>\frac{1}{4}</math> of that <math>\frac{1}{2}</math> hour cleaning the dishes. What fraction of an hour did you spend cleaning the dishes.<br/> <math>\frac{1}{2} \times \frac{1}{4} = (1 \times 1) / (2 \times 4) = 1/8</math> of the hour</p> <p><b><u>If time allows we can do more examples!!!</u></b></p> |
| 15   | <p><b>Explore: (independent, concrete practice/application with relevant learning task -connections from content to real-life experiences, reflective questions- probing or clarifying questions)</b></p> <p>Homework for Section 2.3<br/> Page 58-60, #12 – 18 evens, #23, 26</p>  |
| 2  | <p><b>Review (wrap up and transition to next activity):</b></p> <p>Exit ticket: Attached at bottom</p>  |
| <p><b>Formative Assessment: (linked to objectives)</b><br/> <b>Progress monitoring throughout lesson- clarifying questions, check-in strategies, etc.</b></p> <p>Walking around during turn and talks to see what each group can collectively do and understand during collaboration.</p> <p><b>Consideration for Back-up Plan:</b></p> <p>Khan Academy for multiplying fractions activity</p> | <p><b>Summative Assessment (linked back to objectives)</b><br/> <b>End of lesson:</b></p> <p>Exit ticket</p> <p>Page 58-60, #12 – 18 evens, #23, 26</p> <p><b>If applicable- overall unit, chapter, concept, etc.:</b></p> <p>Summative quiz on Chapter 2</p>   |
| <p><b>Reflection (What went well? What did the students learn? How do you know? What changes would you make?):</b></p>   |   |

Entrance Ticket

Name: \_\_\_\_\_

Evaluate the Expressions:

1.  $3 \times \frac{1}{3} =$

2.  $\frac{1}{3} \times \frac{1}{5} =$

Exit Ticket

Name: \_\_\_\_\_

Find and fix the mistake below:

1)  $\frac{3}{8} \times \frac{5}{8} = \frac{3 \times 5}{8} = \frac{15}{8}$