



















Fractions: Multiplying Fractions

Aim: Multiply simple pairs of proper fractions, writing the answer in its simplest form. I can multiply proper fractions together, writing the answer in its simplest form.	Success Criteria: I can multiply numerators together first and multiply denominators together second. I can reduce a fraction to its simplest form by dividing the numerator and denominator by the greatest common factor.	Resources: Lesson Pack
	Key/New Words: Fraction, simplify, greatest common factor, numerator, denominator.	Preparation: Differentiated Multiplying Fractions Activity Sheets – one per child Extra Challenge Activity Sheet – as required Multiplying Fractions Fortune Teller – one per class Multiplication Methods Display Poster – as required

Prior Learning: It will be helpful if children have experience of multiplying proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.

Learning Sequence

	Fraction Model Match Up: Shown on the Lesson Presentation are different mixed number fraction diagrams. The children select the correct multiplication expression to match the diagram.	
	Multiplying Proper Fraction: Use the text and images displayed on the Lesson Presentation to demonstrate three common methods for multiplying proper fractions together. The first method visualises the calculation using a bar model. The second method involves multiplying the numerators together and then multiplying the denominators together to create a fraction which may need simplifying. The third method involves visualising the calculation as a butterfly, looking at numbers diagonally opposite for a greatest common factor.	
	Multiplying Fractions Methods: Working with a partner, the children apply the learning from the previous slides to choose a method to use to calculate the multiplying fractions questions displayed on the Lesson Presentation .	
 <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  <p>Multiply pairs of simple fractions together, showing working out.</p> </div> <div style="text-align: center;">  <p>Multiply pairs of fractions together, showing working out.</p> </div> <div style="text-align: center;">  <p>Multiply pairs of more complex fractions together, showing working out. An Extra Challenge Activity Sheet is also included.</p> </div> </div>		
 <p>Diving into Mastery: Schools using a mastery approach may prefer to use the following as an alternative activity. These sheets might not necessarily be used in a linear way. Some children might begin at the 'Deeper' section and in fact, others may 'dive straight in' to the 'Deepest' section if they have already mastered the skill and are applying this to show their depth of understanding.</p> <div style="margin-top: 10px;">  <p>Children complete fluency problems which involve multiplying fractions by fractions.</p>  <p>Children explore answering reasoning problems which involve multiplying fractions by fractions.</p>  <p>Children use problem solving skills in order to answer an open-ended task that involves a greater depth of thinking when multiplying fractions by fractions.</p> </div>		
 <p>Fortune Teller: Provide each child with a copy of the Multiplying Fractions Fortune Teller. Using the instructions shown on the Lesson Presentation, the children construct the origami paper toy, which they then use with a friend to rehearse multiplying pairs of simple fractions.</p>		

Exploreit

Exploreit: Provide the children with construction bricks to visualise multiplying different fractions together. Photograph and display.

Correctit: The children write a multiplying fractions calculation with answer, but make one deliberate mistake. See if a friend can correct the mistake.