



















# Multiplication and Division: The 3s

<p><b>Aim:</b> To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.  I can multiply and divide by 3.</p>	<p><b>Success Criteria:</b> I can count in 3s. I can recognise multiples of 3 up to 12 x 3. I can write multiplication statements for arrays up to 12 x 3. I can use arrays to find associated division facts. I can use my knowledge of the 3x table to find division facts.  I can solve multiplication and division word problems.</p>	<p><b>Resources:</b> <a href="#">Lesson Pack</a>  Hot Potatoes - balls, beanbags or soft toys  Small manipulatives  Whiteboards and pens - class set</p>
<p><b>Key/New Words:</b> Array, horizontal, vertical, multiply, divide.</p>	<p><b>Preparation:</b> Differentiated <a href="#">Grouping Peas In Threes Activity Sheet</a> - per child</p>	

**Prior Learning:** It will be helpful if children have previous experience of counting in threes.

## Learning Sequence

	<p><b>Hot Potato:</b> You need some hot potatoes - these could be balls, beanbags or soft toys. Stand children up in circles; around tables or in an open space such as the hall or playground. Give each group a number to start counting from, differentiate this to target the specific needs of groups within your class. Explain that the potato is hot so it needs to be passed on as quickly as possible. Children say the name of the person they are passing to, who must then say the next number in the sequence. The next name is then called out (it can be anyone in the circle), and the potato is passed on again. Children can count forwards or backwards in threes. The game can be made competitive by rewarding the group who complete the most passes within a given time.</p>	
	<p><b>Let's Count in 3s:</b> Count forwards and backwards out loud in 3s to 10 x 3. How could we work out the middle number on the counting stick? How could we work out 6 x 3 from this number? How could we work out 9 x 3? How could we work out 11 x 3 and 12 x 3? Children to work out unknown facts by adding or subtracting 3s from known facts. Go beyond 12x by imagining more sections on the counting stick to challenge HA pupils. <b>Who can count in 3s confidently?</b></p>	
	<p><b>Three Peas Please:</b> We need to arrange our peas into pods. Can you count the peas in the pods by using your number facts for the 3x table? The rule for the pods is that they can be as big as you like but there has to be the same number of peas in each pod. Use the slides on the <a href="#">Lesson Presentation</a> to explain the multiplication and division facts for 3 x 4. Unless the array represents a square number there will always be four facts to find: two multiplication facts and two division facts. Discuss this.</p>	
	<p><b>The 3s Activity:</b> Children complete differentiated <a href="#">Grouping Peas in Threes Activity Sheets</a>, solving problems with multiplication and division facts from the 3x table.</p> <div style="display: flex; justify-content: space-around;"> <div data-bbox="215 1355 574 1635">  <p>Children use counters, cubes or other small manipulatives to represent peas. Children make arrays, finding different ways to group the counters so that all of the groups are equal and there are none left over.</p> </div> <div data-bbox="614 1355 973 1711">  <p>Children write four facts for each array of peas, find the missing division facts without arrays and use their knowledge of the relationship between facts to solve division word problems. Allow children to sketch out their answers on whiteboards or scrap paper to assist working out.</p> </div> <div data-bbox="1013 1355 1372 1691">  <p>Children write four facts for each array of peas, find missing facts without arrays and use their knowledge of related facts to solve division problems. Allow children to sketch out their answers on whiteboards or scrap paper to assist working out.</p> </div> </div>	

	<p><b>Diving into Mastery:</b> 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> <p> Children write and solve linked multiplication and division statements for the three times table, using arrays and known facts.</p> <p> Children identify and correct misconceptions in representations of facts from the three times table, explaining their reasons.</p> <p> Children investigate an open-ended problem using known facts from the three and five times tables.</p>	
	<p><b>Teams of 3: Choose a multiple of 3:</b> Ask that many children to come out to the front of the class. The rest of the class must group these children into 3s in an array and write the multiplication and division facts to go with it. <b>Can children find associated multiplication and division facts from arrays?</b></p>	

### Explore it

- Learnit: Learn the 3x table off by heart if not already known. Use this handy [Times Table Mat](#) to help!
- Countit: Count everyday objects in threes both at home and at school.
- Applyit: Play these [Times and Divide Card Games](#) to practice the 3x table.