



















Multiplication and Division: The 4s

Aim: To recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. I can multiply and divide by 4.	Success Criteria: I can count in 4s. I can recognise multiples of 4 up to 12×4 . I can write multiplication sentences for arrays up to 12×4 . I can use arrays to find division facts. I can use my knowledge of the 4x table to find division facts. I can solve multiplication and division word problems using these facts.	Resources: Lesson Pack Whiteboard and pens – class set
	Key/New Words: Array, multiple.	Preparation: 4x Table Visual Aid Activity Sheet – as required Differentiated Paws Activity Sheets – as required

Prior Learning: It will be helpful if children have experience of counting in fours, and have previous experience of grouping objects using arrays (covered in Lesson 1: The 3s).

Learning Sequence

	Thumbs Up: Using the slide on the Lesson Presentation , point to a number on the grid. Children put their thumbs up or down depending on whether or not the number is a multiple of four. You can vary the game by having the children standing up and sitting down to vote yes or no, or you could have a 'thumbs up' and 'thumbs down' side of the classroom which they must go to. You could even have the number grid written in chalk on the playground or print out the grid, cut it up and stick the numbers on the floor. The children then have to stand on the 'thumbs up' squares i.e. the ones which fit the rule.		
	Paws Come in 4s: How many paws are there? Do you need to count each one? Can you count in groups of 4? Count forwards and backwards out loud in 4s to 10×4 . What is 5×4 ? How could we work out 6×4 from this known fact? How many paws would 11 or 12 dogs have? Encourage the children to work out unknown facts by adding or subtracting fours from known facts. Challenge HA pupils by asking them how many paws 20 dogs would have. How could they work this out from known facts?		
	Multiplying and Dividing by 4: Remind children how to find four multiplication and division facts from an array. Model looking at the rows and columns for the multiplication facts. $4 \times 3 = 12$, $3 \times 4 = 12$. The division facts always start with the total number of paws being grouped. $12 \div 4 = 3$, $12 \div 3 = 4$. Children complete the examples working with a partner to write the answers on whiteboards.		
  Children complete the 4x Table Visual Aid Activity , writing the answer to the number sentence on the flap, and the three corresponding multiplication and division sentences underneath.	 Children complete the Paws Activity Sheet MA , identifying multiples of 4, recalling multiplication and division facts and applying their knowledge of facts by using them to solve word problems.	 Children complete the Paws Activity Sheet HA , identifying multiples of 4, finding missing numbers to continue sequences and dividing by 4 by halving and halving again.	

	<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> <p> Children write and solve linked multiplication and division statements for the four times table, using arrays and known facts.</p> <p> Children identify and correct misconceptions in representations of facts from the four times table, explaining their reasons.</p> <p> Children investigate an open-ended problem using known facts from the four, three and five times tables.</p>	
	<p>Self-Assessment: Children discuss the success criteria with their partner. Children indicate their confidence levels then note down the step from the success criteria which they need to work on next.</p>	

Exploreit

Countit: We used animals to count in fours. Can children think of any other things that come in sets of four?

Singit: Sing the 4x table to a known tune. Try 'Row, Row your Boat', or 'If You're Happy and You Know It'.

Applyit: Practice applying skills by solving these [Word Problems](#).