

Multiplication and Division: The Sevens

Aim: Recall multiplication and division facts for multiplication tables up to 12×12 . I can multiply and divide by seven.	Success Criteria: I can count in sevens. I can recognise multiples of 7 up to 12×7 . I can use my knowledge of the 7 times table to find the related division facts. I can solve multiplication and division word problems. I can use my 7 times table and Multiplication Magic to multiply multiples of 10.	Resources: Lesson Pack Soft ball, beanbag or soft toy Stopwatch or timer Split pins
	Key/New Words: Multiplication, multiple, division.	Preparation: Multiplication Spin Wheels - as required Differentiated The Sevens Activity Sheets - one per child

Prior Learning: It will be helpful if children have previous experience of counting in sevens and can recall multiplication and division facts from the $2 \times$, $3 \times$, $4 \times$, $5 \times$, $8 \times$ and $10 \times$ multiplication tables.

Learning Sequence

	Catch Sevens: Children play Catch Sevens in groups of four to six. Start a five-minute timer. The first child calls out a calculation, such as ' $1 \times 7 =$ ', and throws the soft ball or beanbag to another child in the group who must answer. The child who has answered then asks a new question, e.g. ' $6 \times 7 =$ ', and throws the soft ball or beanbag on. The children complete as many passes as they can before the five-minute timer runs out.							
	Let's Count in Sevens: Count in sevens using the counting stick. Ask children which values they can work out. 10×7 , halve it for 5×7 . Double seven for 2×7 , subtract seven from 10×7 for 9×7 . What would 11×7 and 12×7 be? Work these out by counting on.							
	How Much Longer? How many days are there in a week? How many in four weeks? 12 weeks? The children solve problems by counting in sevens.							
	How Many Weeks? This time give the children the days and they must work out how many weeks this is by using their knowledge of the seven times table to find the related division facts.							
	The Sevens Activity: Children complete differentiated The Sevens Activity Sheets, solving problems with multiplication and division facts from the seven times table. <table style="width: 100%; border: none;"> <tr> <td style="width: 33%; border: none;"> Children begin by making the Spin Wheel. Next they fill in the grid on The Sevens Activity Sheet as quickly as possible. Finally, they use their Spin Wheel to check their calculations. </td> <td style="width: 33%; border: none;"> Children practise their seven times table knowledge by filling in the multiplication grids as quickly as possible. They then solve word problems using their seven times table facts. </td> <td style="width: 33%; border: none;"> Children practise their seven times table knowledge by filling in the multiplication grids as quickly as possible. They then solve word problems using their seven times table facts. </td> </tr> </table>	Children begin by making the Spin Wheel. Next they fill in the grid on The Sevens Activity Sheet as quickly as possible. Finally, they use their Spin Wheel to check their calculations.	Children practise their seven times table knowledge by filling in the multiplication grids as quickly as possible. They then solve word problems using their seven times table facts.	Children practise their seven times table knowledge by filling in the multiplication grids as quickly as possible. They then solve word problems using their seven times table facts.				
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	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. <table style="width: 100%; border: none;"> <tr> <td style="width: 10%; border: none;"></td> <td style="border: none;">Children complete fluency problems which involve multiplying and dividing by 7.</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Children explore answering reasoning problems which involve multiplying and dividing by 7.</td> </tr> <tr> <td style="border: none;"></td> <td style="border: none;">Children use problem-solving skills in order to answer an open-ended task that involves a greater depth of thinking when multiplying and dividing by 7.</td> </tr> </table>		Children complete fluency problems which involve multiplying and dividing by 7.		Children explore answering reasoning problems which involve multiplying and dividing by 7.		Children use problem-solving skills in order to answer an open-ended task that involves a greater depth of thinking when multiplying and dividing by 7.	
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Multiplication Magic: Discuss with the children how to multiply multiples of ten. Children use their seven times table knowledge to answer some differentiated questions.



Explore it

Play it: Play the _____ to practise recalling multiplication and division facts for the seven times table.

Compose it: Make the seven times table memorable by composing a seven times table song. Sing the facts along to a nursery rhyme melody or compose a completely new piece.

Chalk it: Use outdoor chalks to write multiples of seven around the playground. Have a caller who shouts out questions from the seven times tables. The other players must run to the answer and next to it.