



















Multiplication and Division: Multiples

<p>Aim: Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</p> <p>DfE Ready-to-Progress Criteria: Find factors and multiples of positive whole numbers, including common factors and common multiples (5MD-2).</p> <p>To identify multiples of numbers.</p>	<p>Success Criteria: I can explain what a multiple is. I can identify and use rules to find multiples. I can identify common multiples.</p>	<p>Resources: Lesson Pack</p>
	<p>Key/New Words: Multiple, common multiple, product, pattern, odd, even, digit.</p>	<p>Preparation: Differentiated Multiples Activity Sheets – one per child as needed Diving into Mastery Activity Sheets – as required</p>

Prior Learning: It will be helpful if children are familiar with times table facts up to 12×12 .

Learning Sequence

	<p>Remember It: Using the corresponding slide on the Lesson Presentation, the children complete the three activities on the screen. Children will identify numbers in the chosen multiplication tables from a range of numbers as well as complete a missing number task in a section of a hundred square. Children can use mini whiteboards to assist them along with partner talk if necessary. Can the children identify numbers in the times tables?</p>	
	<p>What Is a Multiple? Use the corresponding slide of the Lesson Presentation to generate a class discussion on what a multiple is or could be. Use the prompts to help children identify the multiples. Using the next slide, encourage the children to think about the rules of how to find a multiple of two, three, four and five. Encourage the children to see if they can identify any more multiples using the rules. You may wish to use the challenge on this slide to extend the learning. Can the children explain what a multiple is? Can they identify and use the rule to find multiples?</p>	
	<p>Practice Time: Using the corresponding slide of the Lesson Presentation, share the true and false statements and support the children in discussing with a partner whether the statements are correct. Children should use the rules and knowledge learned in the previous section to help justify their answers. The children can work individually or in pairs to sort the correct multiples into the table. Following this activity, extend the learning to identify common multiples using the prompt given. Can the children identify multiples? Can children identify common multiples?</p>	
	<p>Multiples: Using the differentiated Multiples Activity Sheets, the children complete the tasks using rules to identify the multiples of numbers.</p> <div style="display: flex; justify-content: space-around;"> <div>  <p>This activity supports children working towards expected level. Children colour the stripe of the hot air balloon according to the multiple colour key. They use this to identify common multiples.</p> </div> <div>  <p>Children working at expected level match the corresponding rules to the correct number. They use these rules to aid them in generating their own numbers and finally sort three-digit multiples into the correct table.</p> </div> <div>  <p>This activity challenges children working at greater depth. They match all the corresponding rules to the correct number. They use these rules to aid them in generating their own numbers and finally sort three-digit multiples into the correct table. They will need this to answer reasoning questions at the end of the activity.</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> <p> Children complete fluency questions related to multiples.</p> <p> Children answer reasoning questions related to multiples and common multiples. They explain their reasoning.</p> <p> Children work individually or collaboratively on problem-solving questions related to multiples and common multiples.</p>	
	<p>More Rules: Using the corresponding slide of the Lesson Presentation, guide the children through the rules of finding multiples of 6, 7, 8 and 9. Some of the children may be familiar with these rules from the Multiples Activity Sheets. Encourage children to work in pairs to generate random three-digit numbers and identify if they are a multiple of a number on the screen by using the rules. Can the children use rules to find multiples?</p>	

Exploreit

Testit: Children test out the rules from the lesson with larger numbers (such as four, five or six-digit numbers) to investigate if the rules still work. This could be added to a working wall or used as part of a display.

Learnit: Children will find this visually exciting [Knowledge Organiser](#) a useful tool to support their understanding of multiplication and division.