

Addition, Subtraction, Multiplication and Division:

Common Factors, Common Multiples and Prime Numbers Reasoning

<p>Aim: Identify common factors, common multiples and prime numbers.</p> <p>I can solve reasoning questions using my knowledge of common factors, common multiples and prime numbers.</p>	<p>Success Criteria: I know what the term 'common factor' means. I know what the term 'common multiple' means. I know what the term 'prime number' means. I can use mathematical language to explain solutions to problems.</p>	<p>Resources: Lesson Pack</p>
	<p>Key/New Words: Problem solving, solutions, predict, identify, RUCSAC, reasoning.</p>	<p>Preparation: Talk Partner Activity Sheet - 1 per pair Independent Activity Sheet - 1 per child</p>

Prior Learning: It will be helpful if children are familiar with the terms 'common multiple', 'common factor' and 'prime number'.

Learning Sequence

	<p>Common Factors Reasoning 1a: Use the step-by-step slides from the Lesson Presentation to model how to solve common factor reasoning questions.</p>	
	<p>Common Factors Reasoning 1b: Recording their answers on the Talk Partner Activity Sheet, the children work with a partner to apply the strategy to a similar question, explaining their reasoning. Display the answers on the Lesson Presentation and discuss.</p>	
	<p>Common Multiples Reasoning 2a: Use the step-by-step slides from the Lesson Presentation to model how to solve common multiple reasoning questions.</p>	
	<p>Common Multiples Reasoning 2b: Recording their answers on the Talk Partner Activity Sheet, the children work with a partner to apply the strategy to a similar question, explaining their reasoning. Display the answers on the Lesson Presentation and discuss.</p>	
	<p>Prime Numbers Reasoning 3a: Use the step-by-step slides from the Lesson Presentation to model how to solve prime number reasoning questions.</p>	
	<p>Prime Numbers Reasoning 3b: Recording their answers on the Talk Partner Activity Sheet, the children work with a partner to apply the strategy to a similar question, explaining their reasoning. Display the answers on the Lesson Presentation and discuss.</p>	
	<p>Reasoning Practice: Children complete the Independent Activity Sheet to show that they solve reasoning questions using their knowledge of common factors, common multiples and prime numbers. The questions are differentiated three ways and children are encouraged to choose the level of challenge they think is suitable for them.</p>	
	<p>Reasoning Answers: Using the slides from the Lesson Presentation, discuss the answers to the independent activity questions. Children self-assess how confident they feel about solving reasoning questions involving common multiples, common factors and prime numbers.</p>	