



## Progression of Skills: Reasoning and Problem Solving

	EYFS	KS1
	Reasoning & Problem Solving	Reasoning & Problem Solving
	Pupils should be taught to	Pupils should be taught to
<b>Make connections</b>	<p>Uses talk to make links and notice patterns in their experiences</p> <p>Uses their experience to test their ideas and anticipates what might happen</p> <p>Comments and asks questions about aspects of their familiar world</p>	<p>Recognises similarities to previous work through classroom discussion</p> <p>Begins to use familiar elements of knowledge to tackle problems that are more unfamiliar or complex</p> <p>Poses 'What if?' questions during practical problem solving opportunities</p>
<b>Evaluate</b>	Questions why things happened and gives explanations	Reviews their work by explaining why they have done something
<b>Draw conclusions</b>	<p>Makes predictions and tests them e.g. developing ideas of grouping, sequences, cause and effect</p> <p>Answers "how and why" questions about their experiences</p>	<p>Predicts an answer or outcome <i>e.g. numbers in an extended sequence</i></p> <p>Talks about findings by referring to own work</p> <p>Explains why an answer is correct</p> <p>Begins to make simple inferences</p>
<b>Generalise</b>	<p>Recognises similarities between learning experiences and begins to use this understanding in new contexts</p> <p>Realises not only objects, but anything can be counted, including steps, claps or jumps</p> <p>Builds up vocabulary that reflects the breadth of their experiences to describe patterns and characteristics of the world around them</p>	<p>Understands a general statement by finding a particular example that match it</p> <p>Begins to describe a pattern or sequence in words or using concrete resources or own representation</p>
<b>Justify</b>	<p>Uses talk to clarify thinking</p> <p>Talks about why things happen and how things work</p>	Provides simple reasons for opinions
<b>Problem solving strategies</b>	<p>Chooses ways to do things</p> <p>Checks how well their activities are going</p>	<p>Sorts information</p> <p>Uses 'guess and check' strategy to solve unfamiliar problems</p>



	<p>Uses a range of ways to capture experiences</p> <p>Looks closely at similarities, differences, patterns and change</p> <p>Makes decisions about how to approach a task</p>	<p>Begins to look for patterns in results while working and uses them to find other possible outcomes</p> <p>Draws simple pictures or diagrams</p> <p>Gives examples to match statements and ones that do not</p> <p>Finds a starting point</p>
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