
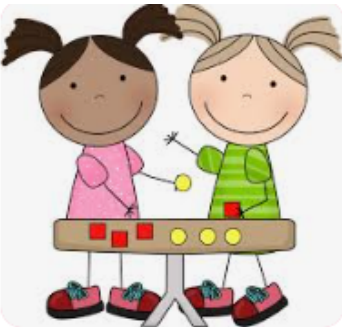

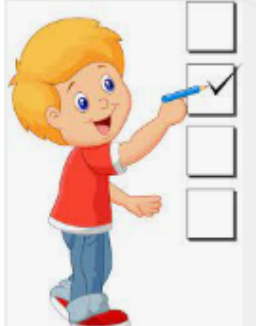



Problem Solving Strategies


Strategy 1	Guess, check and improve!	
	Use your first incorrect guess to make an improved next guess!	

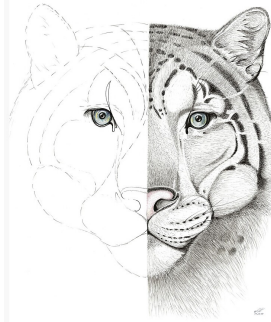
Strategy 2	Model it!	
	Model things in the problem by using materials (e.g. blocks or counters) or acting-out the situation!	

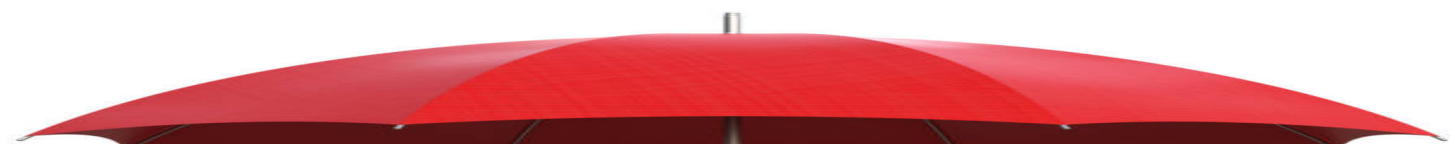
Strategy 3	If in doubt, draw it out!	
	Draw a picture or diagram to represent the problem! <i>For example, venn, tree or diagrams.</i>	

Strategy 4	Make a list or table!	
	Making a table can be an efficient way to see patterns or logic. <i>For example, checklist or number tables.</i>	

Strategy 5	Work backwards!	
	Working back to the beginning helps us see possibilities. This strategy is often used when playing games.	

<p>Strategy</p> <p>6</p>	<p>Look for patterns!</p> <p>Finding patterns helps us understand how things are connected and how things work! In many ways, this is what maths is all about.</p>	
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<p>Strategy</p> <p>7</p>	<p>Use symmetry!</p> <p>Using symmetry helps us reduce the difficulty of a problem! For example, when playing noughts and crosses you will realise there are 3 not 9 possibilities to play the first move. This immediately reduces the number of possibilities and makes it easier to analyse.</p>	
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Umbrella Strategies

1. Be systematic!

- Keep your working-out in some order so that it is easy to follow.
- Work logically as you go along and make sure you don't miss any steps.
- Follow an idea for a while to see where it leads, rather than jumping about all over the place.

2. Keep track!

- You should know where you have been and where you are going or you might get hopelessly muddled!
- This strategy is more important with problems that involve multiple steps, such as *Model it!*

3. Use known skills!

- Which skills do you already know that can be applied to the problem?
- Have I seen a problem like this before?
- Being able to relate a word problem to some previously acquired skill is not easy but it is very important!