

# Maths - Problem Solving & Reasoning

## The Federation of Nettlestone & Newchurch

Maths - Problem Solving & Reasoning					
Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
<ul style="list-style-type: none"> <li>• I can solve problems involving counting, simple adding, subtracting, doubling or halving in the context of measures or money, e.g. 'pay' and 'give change'</li> <li>• I can describe a problem using numbers, practical materials and pictures and use these to solve the problem and set the solution back in context</li> <li>• I can talk about methods used to solve problems and explain choices and decisions orally or using pictures</li> <li>• I can talk about and generate simple patterns and relationships involving numbers or shapes; decide whether examples satisfy given conditions and say how objects differ or share the same properties</li> </ul>	<ul style="list-style-type: none"> <li>• I can select the mathematics I use in some classroom activities</li> <li>• I can discuss my work using mathematical language</li> <li>• I can begin to represent my work using symbols and simple diagrams predict what comes next in a simple number, shape or spatial pattern or sequence and give reasons for their opinions</li> <li>• I can explain why an answer is correct</li> </ul>	<ul style="list-style-type: none"> <li>• I can solve one- and two-step problems involving whole numbers and unit fractions, money or measures, including time and temperature</li> <li>• I can identify the known and to-be-found information in a problem; use number sentences and diagrams to support thinking; present the solution in context of the problem</li> <li>• I can present solutions to problems in an organised way; explain decisions, methods and results using mathematical language, images and arithmetic symbols</li> <li>• I can use patterns, properties of and relationships between numbers or shapes to determine and describe similarities and differences make</li> </ul>	<ul style="list-style-type: none"> <li>• I can solve one and two-step problems involving whole numbers, simple fractions and decimals, money and measures, including time and temperature, perimeter and applying multiplicative scaling</li> <li>• I can represent a problem using number sentences involving more than one operation; draw and interpret diagrams and graphs</li> <li>• I can report orally on solutions to problems, providing explanations and decisions supported with an argument and reasons</li> <li>• I can identify and describe patterns, properties and relationships to establish invariants, apply in unfamiliar situations to make deductions; investigate</li> </ul>	<ul style="list-style-type: none"> <li>• Across all domains</li> </ul>	<ul style="list-style-type: none"> <li>• Across all domains</li> </ul>

		<p>inferences from given information and frame an hypothesis to test further</p>	<p>a given statement and test with examples; collect data to create graphs and support an argument</p>		
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