

Back-to-Front Maths assessment criteria for parents and students

Assessment criteria	A	B	C	D	E
Problem Solving (Thinking and Reasoning)	<p>Students solved a problem they hadn't seen before by using their own invented strategies and thinking, rather than using a formula they have memorised.</p> <p>Teacher may have made suggestions to help the student get started and to help them evaluate their ideas carefully.</p>	<p>Students adapted strategies they had used before to solve a problem that was new, rather than using a formula they had memorised.</p> <p>Teacher may have prompted, guided, or lead throughout the problem as long as this involved asking questions rather than telling the student what to do.</p>	<p>Students competently solved problems similar to ones they had completed previously, using rehearsed strategies that they had memorised.</p> <p>Teacher may have prompted, guided and lead throughout the problem solving process.</p>	<p>Students sometimes solved problems that were similar to ones they had completed in class but this was inconsistent.</p> <p>Teacher may have provided substantial guidance throughout the problem solving process.</p>	<p>Students did not solve many problems successfully even when they were similar to those completed previously, and with substantial teacher guidance.</p>
Reasoning (Communicating)	<p>Students clearly proved how they got their answer. This included detailed working, drawings or explanations.</p>	<p>Students proved how they got their answer. This included working, drawings or explanations, but may have skipped some details.</p>	<p>Teacher could interpret how the student obtained their answer.</p>	<p>Teacher had difficulty interpreting how the student obtained their answer.</p>	<p>Student did not show how they obtained their answer.</p>
Understanding (Reflecting)	<p>Students demonstrated a deep level of mathematical understanding by making connections between the patterns and principles that underpin mathematics. They showed ability to adapt and manipulate mathematical formulae and algorithms for themselves when solving non-standard problems.</p>	<p>Students made connections between the patterns and principles that underpin mathematics. With some teacher input and guidance, they adapted mathematical formulae and algorithms when solving non-standard problems.</p>	<p>Students explained some patterns and principles that underpin mathematics, but had difficulty making connections between these. They used mathematical formulae and algorithms in routine and application questions, but had difficulty with non-standard problems.</p>	<p>Students had some difficulty explaining patterns and principles that underpin mathematics, and did not make connections between these. They sometimes used mathematical formulae and algorithms in routine questions, but had difficulty with application.</p>	<p>Students had difficulty stating patterns and principles that underpin mathematics.</p>