

Topic: Properties and changes of materials	Year 5 Age 9-10	Title: Champion tape
<p>Working Scientifically Review: Report and present findings from enquiries, including conclusions and explanations of degree of trust in results</p>	<p>Conceptual Knowledge Give reasons, based on evidence from comparative and fair tests, for the particular uses of everyday materials</p>	
<p>Assessment Focus</p> <ul style="list-style-type: none"> • Can children recommend a champion tape? • Can children explain how they have come to their conclusion? 		
<p>Activity <i>Today we are going to be materials engineers.</i> Challenge children to design a test to find the stickiest tape. Provide children with a range of sticky tapes and a range of testing/measuring instruments (e.g. rulers, weights, timers, newton meters). Give groups time to discuss how they will do this to get results which they can trust. Groups/individuals could present their champion material, explaining how the scientific evidence makes it a champion, and what it could be used for.</p> <p>Adapting the activity Support: Support with fair test. Have a prompt sheet or results table ready if needed. Extension: Ask children to consider how much they trust their results. Repeat readings. Other ideas: Stretchiest fabric or other properties of materials.</p> <p>Key Questions</p> <ul style="list-style-type: none"> • How will you test for stickiness? • Do you think it needs to be a fair test? • How will you ensure it is a fair test? • How will you compare the tapes? How will you know which is better? • How will you ensure that your test is accurate? • What could your champion tape be used for? 		
<p>Assessment Indicators</p> <p>Not yet met: Can describe which tape is the 'best' but is not able to explain how the results lead to this conclusion.</p> <p>Meeting: Can explain which tape is best and why their findings are reliable (used repeat readings) and fair (identifies variables which should be kept the same), e.g. <i>we used the same amount of weight to make sure it was fair, the same person observed.</i> Suggests uses for their champion material.</p> <p>Exceeding: Recommendations are based on results and utilise scientific concepts appropriate for a scientific audience. Evaluates their findings, including recognising anomalies.</p>		