

**KEY STAGE:** 2

**AT/SC:** 4

**TITLE:** What happens to the sound made by a plucked elastic band when I change the length of the elastic band?

**Programme of Study:**

4.3f That pitch and loudness of sound produced by some vibrating objects.

**Points to consider:**

Before commencing, pupils will need to understand and recognise the change in loudness and pitch. Can they identify change in pitch? How will you control the change in length - eg clamping the band and measurement of length.

<b>Possible AT1 teaching focus:</b>	<b>Comments:</b>
<p><u>Planning</u> Asking questions Predicting Fair Testing Choosing equipment <u>Obtaining Evidence</u> Using tables Using equipment Observing and sorting Repeating readings <u>Considering evidence</u> Using graphs</p> <ul style="list-style-type: none"><li>• Drawing conclusions</li><li>• Interpreting Using science</li></ul> <p><u>Evaluating</u> Sufficient evidence? Consider anomalies Consider improvements</p>	<ul style="list-style-type: none"><li>• Consider how pupils will record change in pitch.</li><li>• Test may be given and set up in advance.</li><li>• Extension activities could involve changing thickness of band.</li><li>• Good opportunity for pupils to describe the pattern and trends in the results gained. Further predictions could be made using instruments - asking questions about eg strings on a guitar -what happens if I clamp down this string? How does a piano work?</li></ul>