

KEY STAGE: 2

AT/SC: 3

TITLE: What happens to the rate of cooling if I change the insulating material eg around a hot drink?

Programme of Study:

3:1b that some materials are better thermal insulators than others

Points to consider:

simple version - whole class demo, simply measuring the temp. drop after 5 minutes.

Or

groups could each work with a different insulator taking several temp. measurements over a longer period and then comparing results/graphs with other groups

- opportunity for datalogging

Possible AT1 teaching focus:	Comments:
<p><u>Planning</u> Asking questions Predicting Fair Testing Choosing equipment <u>Obtaining Evidence</u></p> <ul style="list-style-type: none">• Using tables• Using equipment <p>Observing and sorting</p> <ul style="list-style-type: none">• Repeating readings <p><u>Considering evidence</u></p> <ul style="list-style-type: none">• Using graphs <p>Drawing conclusions Interpreting Using science</p> <p><u>Evaluating</u> Sufficient evidence? Consider anomalies Consider improvements</p>	<p>Could also look at different variables eg thickness of insulating layer.</p> <p>Measuring temperature.</p> <p>Transfer information from table to line graph of temperature against time.</p>