

Lesson	Know	Apply	Extend
3.4.1 Energy and temperature	I can state how energy and temperature are measured. <input type="checkbox"/>	I can state the difference between energy and temperature. <input type="checkbox"/>	I can give an example to show that energy and temperature are different. <input type="checkbox"/>
	I can describe how energy is transferred through solids, liquids, and in air. <input type="checkbox"/>	I can describe what happens when you heat up solids, liquids, and gases. <input type="checkbox"/>	I can explain, in terms of particles, how energy is transferred. <input type="checkbox"/>
	I can state what is meant by the term equilibrium. <input type="checkbox"/>	I can explain what is meant by equilibrium. <input type="checkbox"/>	I can give examples of equilibrium. <input type="checkbox"/>
	I can identify a source of error. <input type="checkbox"/>	I can describe how to reduce error in experimental apparatus. <input type="checkbox"/>	I can describe sources of error as systemic or random, and suggest ways to minimise these. <input type="checkbox"/>
3.4.2 Energy transfer: particles	I can describe simply what happens in conduction and convection. <input type="checkbox"/>	I can describe how energy is transferred by particles in conduction and convection. <input type="checkbox"/>	I can explain in detail the processes involved during heat transfers. <input type="checkbox"/>
	I can state that thermal insulators reduce energy loss compared to thermal conductors. <input type="checkbox"/>	I can describe how a thermal insulator can reduce energy transfer. <input type="checkbox"/>	I can explain why certain materials are good thermal insulators. <input type="checkbox"/>
	I can state the pattern in conduction shown in results. <input type="checkbox"/>	I can describe the pattern in conduction shown by results, using numerical data to inform a conclusion. <input type="checkbox"/>	I can explain the pattern in conduction shown by experimental results. <input type="checkbox"/>
3.4.3 Energy transfer: radiation and insulation	I can state some sources of infrared radiation. <input type="checkbox"/>	I can describe some sources of infrared radiation, and how energy is transferred. <input type="checkbox"/>	I can explain how thermal equilibrium can be established. <input type="checkbox"/>
	I can state some properties of infrared radiation. <input type="checkbox"/>	I can describe different ways to insulate in terms of conduction, convection and radiation. <input type="checkbox"/>	I can compare the different ways that energy is transferred. <input type="checkbox"/>
	I can identify some risks in an experiment. <input type="checkbox"/>	I can identify risks and explain why it is important to reduce them. <input type="checkbox"/>	I can explain in detail how to reduce risks. <input type="checkbox"/>