

### Physics Year 9 Spring 1

Chapter and Topic	Lesson	Outcomes
P2 Energy transfer by heating	P2 Energy transfer by conduction	<ul style="list-style-type: none"> <li>• I can describe materials as good or poor thermal conductors</li> <li>• I can describe the changes in the behaviour of the particles in a material as the temperature of the material increases</li> <li>• I can justify the choices of a material involved in insulation or conduction using the concept of thermal conductivity and other data</li> </ul>
Physics only	P2 Required prac – materials as insulators	
Physics only	P2 Infrared radiation	<ul style="list-style-type: none"> <li>• I can describe what infrared radiation is</li> <li>• I can recognise the correlation between infrared radiation and temperature</li> <li>• I can explain what black body radiation is</li> </ul>
Physics only	P2 More infrared radiation	<ul style="list-style-type: none"> <li>• Describe what happens to the temperature of an object if it absorbs more IR than it emits</li> <li>• Explain how the temperature of the Earth is affected by IR radiation</li> </ul>
	P2 Specific Heat Capacity	<ul style="list-style-type: none"> <li>• I can explain what is meant by the SHC of a substance</li> <li>• I can calculate energy changes with regard to changes in temperature</li> <li>• I can explain what happens to temperature changes when the mass of a substance changes</li> </ul>
	P2 SHC Required prac	<ul style="list-style-type: none"> <li>•</li> </ul>
	P2 Heating and insulating buildings	<ul style="list-style-type: none"> <li>• Understand how homes are heated. Explain how to reduce the rate of energy transfer in a home . Explain what cavity wall insulation is</li> </ul>