High Tunstall College of Science Curriculum Intent

Subject: Physics Year: 7

Thread 2— Particles and radiation



	Physics Thread 2		Progress		
Topic	Key ideas	R	Α	G	
Particles and radia- tion	I can identify particle model in solids, liquids and gases				
	I can explain how energy is transferred by conduction				
	I can explain what thermal radiation is				
	I can explain factors that affect pressure in solids				
	I can identify changes of state and use scientific language to describe these				
	I can draw and interpret heating and cooling curves				

Lesson	Learning Focus	Assessment	Key Words
1	What is conduction?	Completion of practical work and modelling conduction	Conduction, solid, energy, vibrate
2	What is radiation?	Application of radiation to different contexts	Radiation, heat, thermal, energy, transmit, absorb
3	What affects pressure in solids?	Completion of practical work and conclusions drawn	Pressure, compress, area, force
4	What happens when we heat and cool materials?	Differentiated activities describing changes of state	State, change of state, melt, evapo- rate, freeze, con- dense
5	How do we show changes of state in graphical form?	Completion of practical work and production of heating and cooling graphs, with identification of melting and boiling points	Heating, cooling, temperature, melting point, boil- ing point