

# High Tunstall College of Science Curriculum Intent

Subject: Chemistry Year: 7

## Thread 2—Structure, bonding and quantitative Chemistry



	Chemistry Thread 2	Progress		
Topic	Key ideas	R	A	G
Structure, bonding and quantitative chemistry	I can describe the particle theory and model this			
	I can relate the particle theory to properties of solids, liquids and gases			
	I can identify changes of state			
	I can explain what nanotechnology is, and give some uses of this			
	I can explain what ceramics are and give their uses			
	I can explain what composites are and give their uses			
	I can explain what plastics/polymers are and give their uses			

Lesson	Learning Focus	Assessment	Key Words
1	What is the particle theory?	Identification of solids, liquids and gases. Completion of practical work and application of findings to the particle model of solids, liquids and gases	<b>Particle</b> , solid, liquid, gas, pressure, compress, energy
2	What happens when we cool or heat materials?	Completion of practical work and conclusions made	Freeze, evaporate, condense, melt, change of state
3	What is nanotechnology?	Completion of differentiated tasks to self assess understanding of the uses of nanotechnology	<b>Nano</b> , nanotechnology, nanoparticles
4	What are ceramics?	Completion differentiated tasks looking at uses of ceramics and how they are made	<b>Ceramic</b>
5	What are composites?	Application task to design a composite for a particular use	<b>Composite</b> , mixture
6	What are polymers?	Application task choosing an appropriate polymer based on properties, and justifying the choice made	<b>Polymer</b> , plastic