Barnsley Academy – (Year 7 particles (7CP)Curriculum
Scheme of Work – 2023-24

		Term – Week 1		
		1	2	3
Lesson Focus	Big Picture – success criteria.	Particle model – arrangement, motion and diagrams.	Diffusion	Change of state
Prerequisite Knowledge	What knowledge are they building on (previous units/years)? Informs Do Now/Retrieval.	KS2 – Basic knowledge of states of matter (solid, liquid and gas)	Movement, arrangement, and force of attraction in states of matter	Name and describe the changes in state from S,L,G
Core Knowledge	Key terms and agreed definitions, any other key information essential to students, succeeding. In practical subjects this can include skills.	• Describe the movement and arrangement of particles in solids, liquids and gases • Draw accurate diagrams to represent the particle arrangement in solids, liquids and gases • Use the particle model to explain properties of solids, liquids and gases	1. Describe and explain the term diffusion in terms of particles and concentration 2. Explain why diffusion is different in solids, liquids and gases – relate to particle model 3. Explain the effect temperature has on the rate of diffusion	1. Explain changes of state that occur from solid to liquid and liquid to gas in terms of particles 2. Interpret melting point and boiling point data 3. Plot secondary data showing changes of state
Expert Model /Guided Practice/Agreed Approach (Procedural Knowledge)	Name the steps that student need to take – agreed department approach.	Models of comparison skill Highlighting/ colour coding movement, arrangement and force of attraction to ensure students can identify the difference between the 3 when answering questions	Slices 6-8 images and teacher explanation of diffusion Slide 31 – demo using potassium ponangomate	Melting of an ice cube to model a simple change in state Use of visualiser to model plotting a graph
Independent Practice	The task and reference back to the Big Picture Slide	IP 1 – Describe the arrangement of particles in S,L,G IP 2 – Compare the motion of particles in S,L,G IP 3 – Explain why some states of matter can be compressed	IP 1 – Exam question IP 2 – Questions IP3 – Describe and explain effect of temperature on diffusion (Exam question 3 marks)	IP 1 – KPI changes of state IP2 – Identifying states of matter using melting and boiling points IP3 – plotting data on a line graph

Assessment (Informal/Formal)	Circulation/live feedback/self-assessment/class assessment/whole class feedback (marking cycle)/quiz.	Independent practice tasks – exam question incorporated. Learning checks on WB Students to self- assess all tasks. Teacher to circulate and check for misconceptions.	Independent practice tasks – exam question incorporated. Learning checks on WB Students to self- assess all tasks. Teacher to circulate and check for misconceptions.	Independent practice tasks – KPI incorporated. Learning checks on WB Students to self- assess all tasks. Teacher to circulate and check for misconceptions.
Resources	(Hyperlink)		https://www.youtube.com/watch?v=IgbR-K1ff-w	Use of visualiser (Aver)
Specific SEN(D)/EAL support	Overview for the lesson – can be repeated strategies	Differentiated worksheet for EAL/ LAP		Graph scale and axis already drawn for EAL and SEN