Energy and the particle model (BOM11) – Revision Checklist

I can…	Lesson	Revised
State the names of the 3 main states of matter	BOM11 LE1	
State the names of the changes between the 3 main states	BOM11 LE2	
Describe the arrangement of particles within the 3 main states of matter	BOM11 LE2	
Describe the changes in arrangement of particles in the changes of state	BOM11 LE2	
Use the particle model to explain the changes of state	BOM11 LE2	
Explain how the strength of forces between particles affects melting point and boiling points	BOM11 LE2	
(HT) Describe the limitations of the simple particles	BOM11 LE1	
Predict the state of a substance at a given temperature	BOM11 LE2	
Explain why atoms do not have bulk properties of materials	BOM11 LE2	
State the meaning of the symbols (s), (l), (g) and (aq) in chemical equations	BOM11 LE1	
Include correct state symbols when constructing chemical equations	BOM11 LE1	
Explain why changes of state are physical changes	BOM11 LE2	
Use the particle model to define density	BOM11 LE3	
Draw simple particle model diagrams for solids, liquids and gases	BOM11 LE1	
Explain differences in density in terms of particle arrangement	BOM11 LE3	
Describe how to determine the volume of a regular objects	BOM11 LE3	
Describe how to determine the volume of an irregular object	BOM11 LE3	
Describe a method to calculate the density of an object	BOM11 LE4	
Define internal energy	BOM11 LE5	
Explain how heating changes the energy stored in a system	BOM11 LE5	
Explain why heating can cause a temperature rise	BOM11 LE5	
Explain why heating can cause a change of state.	BOM11 LE5	
Describe how mass affects temperature change.	BOM11 LE5	
Describe how the type of material affects temperature change.	BOM11 LE6	
Describe how energy input affects temperature change.	BOM11 LE6	
Define specific heat capacity.	BOM11 LE6	
Define latent heat.	BOM11 LE7	
Define specific latent heat.	BOM11 LE7	
Define specific latent heat of fusion.	BOM11 LE7	
Define specific latent heat of vaporisation.	BOM11 LE7	
Explain why temperature does not change during a change of state	BOM11 LE7	
Distinguish between specific heat capacity and specific latent heat.	BOM11 LE7	
Interpret heating graphs that include changes of state.	BOM11 LE7	
Interpret cooling graphs that include changes of state.	BOM11 LE7	
Describe the motion of molecules in a gas.	BOM11 LE5	
Explain the relationship between temperature and the kinetic energy of gas molecules.	BOM11 LE5	
Describe how temperature affects gas pressure at constant volume.	BOM11 LE5	
Explain how molecular motion produces gas pressure.	BOM11 LE5	
Explain, qualitatively, the relationship between temperature and pressure at constant volume.	BOM11 LE5	