Particles and changes of state

1. What do you need to add to a solid to cause it to melt and a liquid to cause it to evaporate?

2. What do we need to take away from a gas to cause it condense and a liquid to cause it to freeze?

3. With an enclosed container (e.g. a pan with a lid on), what would happen to the mass of the water in the pan if it was heated and all the water turned to steam?

4. Why would this be the case?

5. At the melting point of a material, what happens to many of the bonds?

6. At the melting point of a material, what will happen to the temperature whilst the solid is melting?

7. What is the condensing point of water?

8. Are the boiling points and melting points of all materials the same?