## Heat and Temperature Practice Quiz Topic 5 - The Particle Model and Changes of State

1. The sun shines down on the banks of a river (and the river itself). The thermal energy absorbed will be ...

more in the water

more in the soil

almost the same in both

dependant on the mass of each

 When a substance undergoes a change of state, energy is involved. Which change of state involves a release of energy?
melting

sublimation

evaporation

fusion

 As high-energy particles escape from the surface of a liquid, by evaporation, the remaining liquid cools. This surface cooling phenomenon is described by scientists as ... evaporative cooling

subliminal cooling

fusion

condensive evaporation

4. During a phase change, the temperature remains the same, so the particles have ... less average energy

more average energy

the same average energy

a faster speed

The water droplets that form on a shower door have undergone a phase change. Prior to the droplets forming, the water was in a state of ...
absolute flux

suspended animation

liquid

gas

<u>Answers</u>

## Heat and Temperature Practice Quiz Topic 5 - The Particle Model and Changes of State

1. The sun shines down on the banks of a river (and the river itself). The thermal energy absorbed will be ...

more in the water

more in the soil

almost the same in both (Text p. 218) The sun shines equally on both substances and so the thermal energy will increase the same for both substances

dependant on the mass of each

 When a substance undergoes a change of state, energy is involved. Which change of state involves a release of energy?
melting

sublimation (Text p. 220) Figure 3.18

evaporation

fusion

 As high-energy particles escape from the surface of a liquid, by evaporation, the remaining liquid cools. This surface cooling phenomenon is described by scientists as ... evaporative cooling (Text p. 221) Evaporation cools the liquid

subliminal cooling

fusion

condensive evaporation

During a phase change, the temperature remains the same, so the particles have ...
less average energy

more average energy

the same average energy (Text p. 224) When the temperature remains the same, the average energy of the particles remains the same

a faster speed

The water droplets that form on a shower door have undergone a phase change. Prior to the droplets forming, the water was in a state of ...
absolute flux

suspended animation

liquid

gas (Text p. 225) The Water vapour in the air was hot water from the shower, when it came into contact with the door, it condensed into a liquid