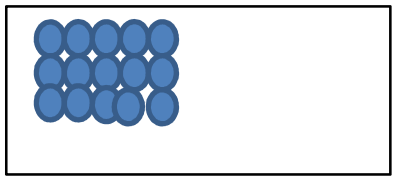
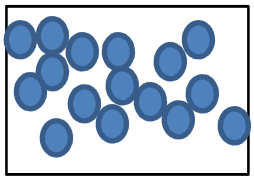
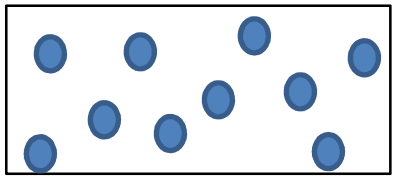
P1 Fact Sheet – Heat Transfers Name……

Question	Answer
What do particles of solids, liquids and gases have different amounts of?	energy
Draw the particles in 1. a solid 2. a liquid 3. a gas	**Solid**  **Liquid**  **Gas** 
When a liquid turns into a gas it is called…..	evaporation
When a gas turns into a liquid it is called….	condensation
Transfer of heat is caused by this type of wave…	Infra-red radiation
The two types of heat transfer which involve particles are…	i) conduction ii) convection
The method of heat transfer in solids is…	conduction
The method of heat transfer in liquids and gases is…	convection
All objects absorb and emit (give out) this…	infra-red radiation

Question	Answer
The rate at which an object transfers energy by heating depends on…	• surface area • volume • the material it is made from • the surfaces the object is in contact with • The difference in temperature of the object and the surroundings
The best **absorbers** of infra-red radiation are…	Dark and matt
The best **emitters** of infra-red radiation are…	Dark and matt
The best **reflectors** of infrared radiation are…	light and shiny
The amount of energy required to change the temperature of 1kg of a substance by 1^{o}C is called its…	specific heat capacity
A substance which prevents heat loss is an…	insulator
Insulators are poor ….	conductors of heat
Insulation works by preventing or slowing down heat transfer by…	i) conduction ii) convection and iii) radiation
This is a measure of how effective a material is as an insulator is its…	U value
If a material is a better insulator, this value is…	~~higher~~ / lower
What are the three types of heat transfer?	i) conduction ii) convection and iii) radiation
Which type of heat transfer doesn't need particles?	radiation
How does energy reach us from the sun?	radiation
Good conductor	metal
Good insulator	plastic