

Unit 2, Check your progress (Answer key)

1 a) The temperature at which a solid melts and becomes a liquid.

b) Copper, gold, silver, aluminium, candle wax, ice

c) The metals have much higher melting points than the substances that are not metals.

d) No. A melting point is a property of a substance, so each substance has its own melting point that does not change.

2 a) Metals conduct heat better than nonmetals like glass. This means that the heat from the oven is transferred more quickly to the food in the metal dish.

b) Yes. How well a substance conducts heat is a property of a substance, so a different metal will either conduct the heat better or worse than the first metal dish.

3 a & b) Reversible processes:

boiling, freezing, evaporating, dissolving + melting or condensing;

Irreversible processes:

rusting, burning + cooking, baking, rotting or other suitable answers.

4 a) In hot water

b) Adding heat makes the particles of the solid and the water move faster and spread out more. This allows the particles of the solid to move between the water particles more easily, so the solid dissolves faster.

5 a) The iron nail changed colour.

b) Iron, air and water

c) The chemical name for rust is iron oxide.