Writing skill worksheet 1-2

Book 1 Ch 2
Skill: writing

(Study **Writing practice** on textbook p.32 and answer the following questions.)

Learn by practice 3 Q1 (p.34)

Question

Ken carefully moves a wooden splint until it is about 0.5 cm away from a Bunsen flame (Fig a). He finds that although the flame has a very high temperature, the wooden splint does not light up. Explain the result.

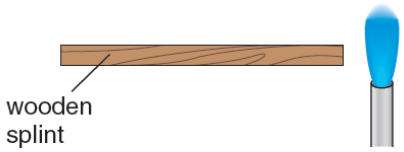

Fig a

Answer

Air is a _____ of heat. Therefore, heat is conducted _____ from the _____ to the _____.

Learn by practice 3 Q3 (p.34)

Figure c shows a wok.

Fig c

Question (a)

How does the metal body enhance cooking?

Answer

Metal is a _____. Therefore, heat is conducted _____ from the stove _____. This shortens the _____.

Question (b)

Explain why the handle is made of wood instead of metal.

Answer

Wood is a _____. Therefore, _____ _____. This allows the user to _____ _____.

Exercise 2.2 Q10 (p.57)

Figure i shows a cool box designed for keeping soft drinks cold in summer. Its **inner surfaces** are made of white foam. Its lid is kept closed to keep the drinks cold.

Fig i

Question (a)

Explain, in terms of the heat transfer by conduction, how the white foam keeps soft drinks cold.

Answer

Foam is a _____ of heat. It slows down the heat transfer from the _____ to the _____ by _____.

Question (b)

Explain, in terms of the heat transfer by radiation, how the white foam keeps soft drinks cold.

Answer

White foam is a _____ of radiation. It slows down the heat transfer from the _____.

Question (c)

Can this box keep hot drinks hot? Why?

Answer

_____. The foam box can _____ _____ by _____, _____ and _____.

Revision 2 Q10 (p.61)

Some ice is kept at the bottom of a boiling tube by a piece of wire gauze under water. The upper part of the boiling tube is heated with a Bunsen burner. The water at the top is boiling but the ice trapped at the bottom melts very slowly (Fig i).

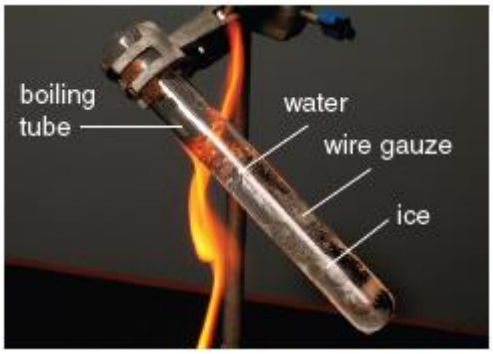

Fig i

Question (a)

Explain briefly why the ice does not melt quickly. (2 marks)

Answer

Heat is transferred upwards by _____, so heat can hardly be transferred from the upper part of the tube to _____ by _____. 1A

Also, water and glass are _____, so _____ _____. 1A

Question (b)

Explain how the time needed for the ice to melt would be affected if the following changes are made separately.

(i) The glass boiling tube is replaced with a metal tube.

(ii) The lower part of the boiling tube is heated instead of the upper part. (6 marks)

Answer

(i) The time needed would _____ 1A

because metal is a _____, 1A

heat is _____. 1A

(ii) _____ 1A

because _____, 1A

_____. 1A

Answers

Learn by practice 3 Q1

poor conductor, slowly, Bunsen flame, wooden splint

Learn by practice 3 Q3

(a) good conductor of heat, quickly, to the food in the wok, cooking time

(b) poor conductor of heat, heat is conducted slowly from the hot metal body to the hand holding the handle, hold the handle without getting burnt

Exercise 2.2 Q10

(a) poor conductor, surroundings, soft drinks inside the box, conduction

(b) poor radiator, box to the soft drinks inside by radiation

(c) Yes, slow down the heat transfer from the hot drinks inside the box to the surroundings, conduction, convection, radiation

Revision 2 Q10

(a) convection, ice, convection,

poor conductors of heat, heat can hardly be transferred from the upper part of the tube to the bottom by conduction

(b) **(i)** decrease

good conductor of heat

transferred quickly from the upper part of the tube to the bottom by conduction

(ii) The time needed would decrease

the heated water is close to the ice

so heat is conducted to the ice more quickly