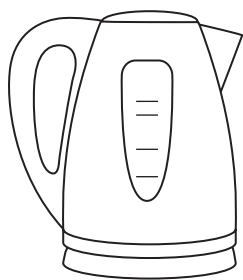


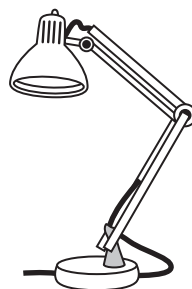
2 The diagram shows some electrical appliances.



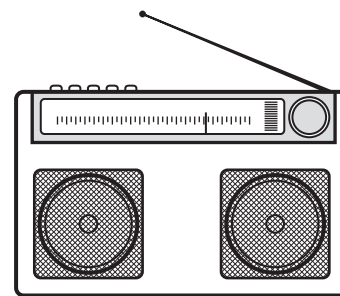
A



B



C



D

(a) (i) Which appliance is designed to transfer electrical energy to thermal energy?

(1)

- ☐ A food mixer
- ☐ B kettle
- ☐ C lamp
- ☐ D radio

(ii) Which appliance is designed to transfer electrical energy to kinetic energy?

(1)

- ☐ A food mixer
- ☐ B kettle
- ☐ C lamp
- ☐ D radio

(b) In all the appliances, energy is conserved.

What is meant by the phrase **energy is conserved**?

(1)

.....

.....



(c) (i) The lamp has an efficiency of 20%.

Explain what this means.

(2)

(ii) Draw a labelled Sankey diagram for the lamp.

(3)

(Total for Question 2 = 8 marks)

