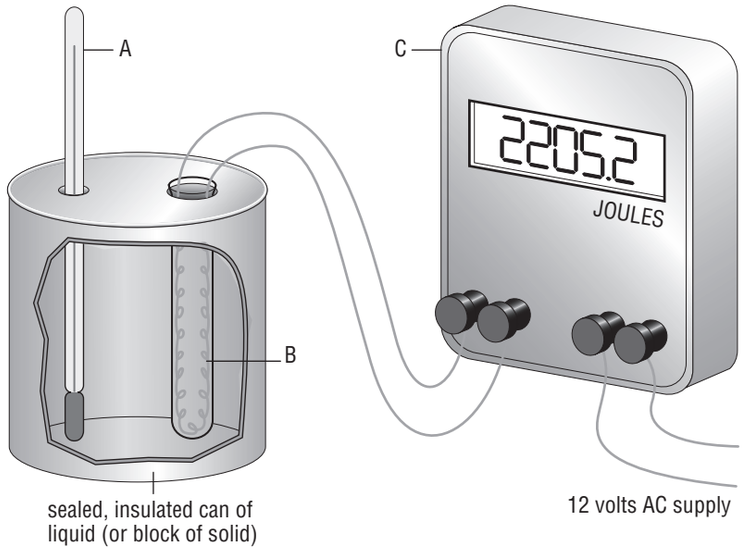
# WORKSHEET 12.2 *End of chapter test*

**1** What is the 'heat' in a substance really a measure of?

**2** When a substance is heated what happens to the particles from which it is made?

**3**




**a)** Identify the objects labelled A to C in the diagram above.
**b)** For what is the equipment in the diagram used?
**c)** Do the same masses of different substances take up the same amount of thermal energy to make their temperature rise 10 °C?

**4** How is thermal energy conducted through a substance?

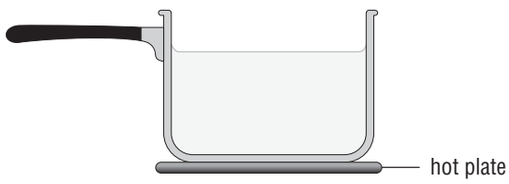
**5** How does conduction vary in solids, liquids and gases?

**6** Where does conduction not occur?

**7** Which kind of materials are the best conductors of heat?

**8** How does thermal energy travel through a substance by convection?

**9** Draw arrows on the diagram below to show the path taken by thermal energy in the water in the pan due to convection.




**10** State two places where convection cannot occur.

**11** What kind of waves transport thermal energy by radiation?

**12** State two places where the transport of thermal energy by radiation can occur.

**13** Which type of surface radiates thermal energy most rapidly?

**14** Which type of surface absorbs thermal energy most slowly?