

3.17 Heat

Name:.....

1. Heat is a form of _____ and is measured in _____.



2. Write down three safety rules that are important when working with the Bunsen burner.

(i) _____.

(ii) _____.

(iii) _____.

3. Draw a diagram of the equipment that you would use to show the effect of heat on a solid. Please label your diagram.

4. Which colour flame of a Bunsen burner is the hottest?

How would you make the coldest flame on a Bunsen burner? _____

5. Which do you think changes the most when heated: solids, liquids or gases?

Why?

6. List five items of equipment that you would use to investigate the effect of heat on liquids.

(i) _____

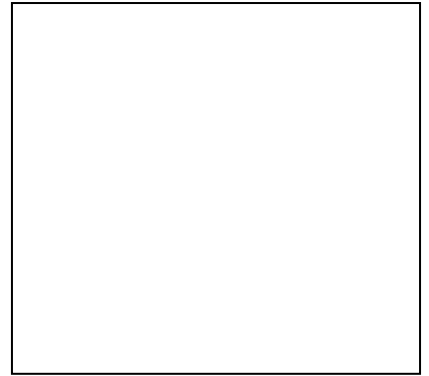
(ii) _____

(iii) _____

(iv) _____

(v) _____

7. Describe with the aid of a labelled diagram a method to show the effect of heat on gases.



Method: _____

8. Outline two examples where engineers make allowances for expansion due to heat in everyday life.

9. Solids _____ when heated and _____ when cooled.

10. What happens to the molecules inside a gas when it is heated?

11. Using a diagram to show your idea, design an experiment to show the effect of heat on the volume of an inflated balloon.



(a) List what you need:

(b) What measurements will you make?

(c) Predict what will happen in your experiment.

(d) How accurate do you think your method will be?
