

Lesson 4: Liquids and Gases

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This lesson I shall be away – see you on Monday! In my absence, I should like you to work from this sheet, in the front of your books.

Last time, we did an experiment to find out what happens when liquids (such as water) heat up. Now you are going to carefully write up what we did and found out in that experiment. I want to see really careful thinking about what we did, what you saw and what was going on, and very clear descriptions of the practical work in your books.

If you have time to get onto the gases work, that's great – we shall be returning to this next time.

Heating a liquid

This carries on right underneath the title and aim that we wrote down in the last lesson – the 'Making thermometers' practical. First of all, you need to draw out the following diagram neatly in pencil in your books, and label it neatly with the correct labels from the list.

Bunsen burner, Tripod, Gauze, Beaker, Water, Thermometer
Coloured Water, Bung, Capillary Tube, Boiling tube, Heatproof mat

To finish the write up, you need to write down the following things in your lab books:

- How we did the experiment. Include 3 things we did to keep ourselves safe.
- What did you actually see? What was happening?
- Why the experiment worked (try to use the words **expand** and **contract**, and *talk about **particles**)
- What you learned. Can you now explain how the thermometers we use in the laboratory work?

Gases

Start by reading the textbook *Exploring Science 7*, pp.81–83 and pp.86–89 carefully. Then start a new page and title ‘gases’. We are going to be looking at gases next lesson, and making some for ourselves. Can you write down the names of 3 gases, where you might find them and what they are used for? Then please answer the following questions: p.81 Q5, p.86 Q1–4.

If you finish all of the work on this sheet, you can start planning/writing your essay on sleep, which is due for next Monday.