

Using a Bunsen Burner

Teaching Ideas

Learning Objective: To be able to use a Bunsen burner safely.

Success Criteria:

- To use a Bunsen burner safely during a practical.
- To identify the different parts of a Bunsen burner.
- To identify the two flames on a Bunsen burner and explain when and why they are used.

Context: This is lesson 3 of the introduction to science unit for year 7; how to use a Bunsen burner safely.

Resources

[Lesson Pack](#)

Materials needed

Bunsen burners, heatproof mats.

Differentiated activity: beakers, thermometer, tripod, gauze, water.

Starter

What are the Differences Between the Two Pictures?

Ask pupils to describe the differences between the two Bunsen burners. They can work in pairs or independently. Go through the answers as a class.

With the class' full attention, demonstrate how to use a Bunsen burner safely and show pupils the different parts of the Bunsen burner.

Main Activities

Label the Diagram of a Bunsen Burner

From your demonstration, can the pupils independently label the diagram of a Bunsen burner? The pupils can copy the diagram and questions into their books; alternatively, the differentiated [Bunsen Burner Activity Sheets](#) are available to support lower ability pupils. Go through the answers using the PowerPoint. You may wish for the students to peer assess each other's work.

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Whilst setting up the practical activity, make sure that pupils are following correct science lab procedures and rules. Pupils then make observations of the Bunsen burner to fill in the results table - comparing the 3 settings: air hole open, air hole half open and air hole fully shut. Remind pupils it will be hot.

Higher Ability Extension: Using a Bunsen Burner to Boil Water

Pupils measure the change in temperature every 30 seconds to see how long it takes for the water to boil.

Once completed, pupils collate the results and discuss; explaining why there may be differences between different group's results

Plenary

Keyword Bingo

Using the Bingo Keyword Activity Sheet, the pupils copy six keywords into their bingo grid. Read the words in a different order. At the end of the lesson, provided that the pupils have acted safely and responsibly with their Bunsen burner, award them with their Bunsen Burner Licence certificates.