

Learning Objective: To get to know your way round the laboratory and find some scientific equipment.

Success Criteria: • To be able to find equipment around the laboratory.

• To be able to identify some pieces of scientific equipment

• To draw and label scientific diagrams of different scientific equipment.

Context: The second lesson in the Year 7 introduction to science. Students get

to know their way around the laboratory and learn about different

practical equipment.

Resources Lesson Pack

Materials needed: Examples of practical equipment in a science lab (see the equipment list).

Starter

Laboratory Equipment

Looking at the pictures on the **Presentation**, ask the pupils how many pieces of science equipment they can already identify. Pupils could write down the numbers and name the equipment in their books or write their answers on a white board. You may then go through the answers as a class.

Main Activities

Finding Your Way Around the Lab

Ask the pupils to work in groups and give each group a list of equipment. They should choose one person at a time to go around the lab and bring a piece of equipment back to the desk. The pupils that are at the desk could be asked to work out what the equipment might be used for.

Setting up a Practical

From the equipment that they have in front of them, ask the pupils to choose appropriate items and set up a practical to find out how quickly water boils.

Lower ability differentiation – give the pupils three pieces of equipment that they will need. The pupils should work out for themselves which other three pieces of equipment are required.

Problem Solving

As an extension, you could ask pupils to decide which equipment they would need to use to carry out each of the further four practicals. You can check their practical set-ups as you go around the room.

Drawing a Diagram of a Practical

Introduce 2D diagram representations of science practical equipment. Can the pupils identify why simplistic pictures are used instead of detailed ones? Pupils can then complete the **Equipment Match-Up Activity Sheet**, matching up the equipment diagrams with the names.

Extension: Pupils can draw a diagram of their boiling water experiment using the scientific diagrams shown on the activity sheet.

Home Learning

Ask the pupils to research and explain what each piece of equipment is used for.

Plenary

Pupils draw diagrams of each piece of equipment on their whiteboards and hold up their answers. Alternatively, the pupils can work in pairs; the first pupil describes the equipment to the second pupil who is facing away from the board; the second pupil then draws the diagram from their description.



