



## Health and Safety in a Lab Teaching Ideas

**Learning Objective:** To be able to explain how to be safe in a lab and recall some common hazard symbols and lab rules.

**Success Criteria:** To be able to explain how to be safe in a lab and recall some common hazard symbols and lab rules.

**Context:** This is the first lesson of the new topic; an introduction into secondary science and how to be safe when carrying out a practical.

**Resources**

[Lesson Pack](#)

### Starter

#### Laboratory Hazards

From the picture on the PowerPoint, pupils identify hazards in the lab during a practical. Tell the pupils they can work as a table or in pairs to come up with as many as they can. They then share their ideas with the class. Encourage pupils to challenge themselves by completing the extension activity and come up with suggestions to prevent these hazards.

### Main Activities

#### Hazard Symbols

What do the following hazard symbols show? This activity is differentiated at three levels. A higher ability class should try to define the hazard symbols for themselves. For a middle and lower ability class, this can be done as a match-up activity from the PowerPoint or on the [Hazard Match-Up Activity Sheet](#).

Discuss with the class why hazard symbols are so important. Alternatively, have them hold up their ideas on whiteboards.

#### Hazard Symbols in the Lab

Pupils go around the room and fill in the [Chemicals and Hazards Table](#). Bring the class together to discuss their findings. Some may have found more than one hazard symbol on each chemical.

#### Rules in the Lab

Discuss laboratory safety rules with the class. Ask the pupils to look at the pictures to guess the rules, and place the rules in order of most important to least. Some pupils may be able to think of some rules of their own. To support lower ability pupils, use the cloze activity on the [Safety Rules Activity Sheet](#).

#### Problem Solving

Pupils read the scenarios and explain, in their own words, what the teacher/student should do. This could be a discussion activity in groups or an independent activity using the [Problem-Solving Activity Sheet](#). Pupils could peer assess if it has been completed independently or answers held up on a whiteboard.

### Plenary

Hazard Symbols Quiz - pupils hold up answers on their whiteboards.