

## CH2: taking safety into account

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### ACTIVITY 1 : Lab safety

#### Partie 1 : Personal Protective Equipment (PPE)

Watch the two videos in order to find out the PPE you have to wear in a laboratory:

- PPE\_Lab\_Safety\_video\_Part1 :

<https://www.youtube.com/watch?v=GjAD83B4JaY>

- Health and Safety Essentials : Laboratory Best (from the beginning to 1'33)

<https://www.youtube.com/watch?v=RhLOYhOvCsQ>

1. Find out the right PPE in a lab and fill in the diagram below :



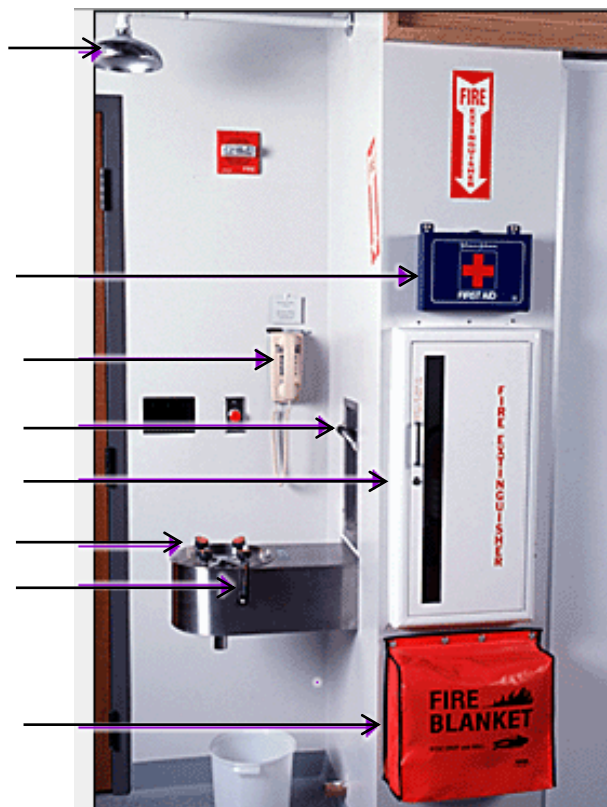
Sources : wikimedia commons

#### Partie 2 : Safety equipment

Watch the video in order to find out the safety equipment available in a general chemistry lab:

Equipment / Lab Safety Video Part 2 : <https://www.youtube.com/watch?v=liHEYtnKfFO>

2. Find out the safety equipment found in the lab and complete the picture below :



<https://www.dartmouth.edu/~chemlab/info/safety/equipment.html>

3. What is the eyewash station used for ?
4. How long do you have to rinse your eyes in the eyewash station ?
5. What are the 4 types of fire ?

### Partie 3 : Your behavior in a lab

Watch the video in order to find out the appropriate behavior in a chemistry lab :

Behavior/Lab Safety Video Part 3 : <https://www.youtube.com/watch?v=e7VkluiT1kU>

6. How should you behave in order to ensure that the lab is a safe environment for everyone? (*Fill in the blanks*)

- First consideration is to follow the written .....  
step-by-step
- Never ..... or ..... while in  
the lab
- Never .....
- Good .....
- Never place any chemical bottles .....
- If you do make a spill, check the ..... for the appropriate  
response. And clean it immediatly and place a ..... sign
- Keep your .....
- Don't place materials ..... of the workbench
- Never try to ..... and dispose the glass in  
a designated .....
- After you've finished an experiment, ....., return reagents  
..... and clean .....
- If a safety violation occurs, or you notice any unsafe condition in the lab, report it immediately to  
.....

#### Partie 4 : Interactive eLearning Tools => Lab Safety

To conclude this activity, you have to obtain your certificate of completion.

It will prove that you know how to :

- Dress properly before entering the lab
- Locate lab safety equipment in your own lab
- Keep your lab clean and free of clutter
- Respond to hazardous situations

Go to :

<http://www.ncbionetwork.org/educational-resources/elearning/interactive-elearning-tools/lab-safety>

Then « launch App »

Then « Enter the lab »

Then follow instructions and do successively :

- Proper Dress
- Housekeeping
- Safety Equipment
- Mixing

At the end of the activity :

- Click « View Certificate » to print your certificate of completion
- Click « Print Lab Notes » to obtain your Lab Notes

## Activity summary

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### What you must remember :

- Vocabulary associated with PPE, Safety equipment and behavior in a lab

### Skills linked to the curriculum:

Compétences	Capacités à maîtriser
<ul style="list-style-type: none"> <li>– APP</li> </ul>	<ul style="list-style-type: none"> <li>– Connaître et savoir appliquer les règles de sécurité au laboratoire</li> <li>– Savoir adopter une attitude responsable au laboratoire</li> </ul>
<ul style="list-style-type: none"> <li>– ANA</li> </ul>	<ul style="list-style-type: none"> <li>– Savoir réagir face à une situation dangereuse au laboratoire, d'une manière autonome</li> </ul>