CH2: taking safety into account

1. Lab safety

### 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 :

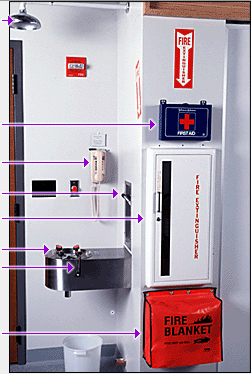
|  |  |
| --- | --- |
| Macintosh HD:Users:cecilekressmann:Desktop:Capture d’écran 2017-03-18 à 13.22.27.png  *Sources : wikimedia commons* | Macintosh HD:Users:cecilekressmann:Desktop:Capture d’écran 2017-03-18 à 13.35.49.png |

### 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=IiHEYtnKfF0>

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



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

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

### 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=e7VkIuiT1kU>

1. 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 …………………………………………………………………………………..

### 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
* Fire Safety
* Spills
* Conclusion

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

What you must remenber :

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

Skills linked to the curriculum:

|  |  |
| --- | --- |
| **Compétences** | **Capacités à maîtriser** |
| * APP | |  | | --- | | * Connaître et savoir appliquer les règles de sécurité au laboratoire * Savoir adopter une attitude responsable au laboratoire | |
| * ANA | * Savoir réagir face à une situation dangereuse au laboratoire, d’une manière autonome |