

Panic in the lab

Students task :

- To create a video (can be comical) showing some common mistakes, errors or safety hazards that have to be avoided in a lab.
- The form is up to you: it can be a story, an advertisement, a list of instructions ...
- You will work in groups of 3 and will have to finish the video in 4 weeks.
- Assessment : lab voc accurate, adapted, clearly introduced, correct use of “modaux”, videos have to be understandable and audible.

Séquence :

Semaine 1 :

Visionnage d'une vidéo présentant des étudiants de chimie de l'université d'Oxford :

- ➔ Quote three reasons given by the students to explain why they chose to study chemistry.
- ➔ Note differences and common points between a lab in France and in England.

On les amène à se demander si on respecte tous les mêmes règles de sécurité (blouse, gants...)

- ➔ Présentation de l'idée (avec un exemple vidéo de l'an passé ou tirée d'internet ?)

Formation des groupes

Brainstorming collectif : on recense avec les élèves les différentes erreurs dans un labo

Chaque groupe en choisit ensuite 2 et essaye de trouver des idées pour les présenter

Semaine 2 :

Travail sur les idées, le vocabulaire à convoquer

Écriture du storyboard

Écriture liste de matériel pour groupes prêts

Point prof storyboard (évaluation de l'avancée et du travail fourni)

Semaine 3 :

Poursuite travail d'écriture pour les groupes à la traîne : Vérification vocabulaire, dialogues, phonologie ...

Répétition et début tournage pour les groupes prêts

Semaine 4 :

Fin du tournage

Evaluation :

Storyboard OK, précis

Liste de matériel avant tournage fournie et bien détaillée

Production finale

- ➔ Cf barème – fiche notation

Séance intro

- **Vidéos d'accroche :**

Etudiants Oxford University expliquant ce qu'ils aiment dans un labo de chimie :

<https://www.youtube.com/watch?v=0WrD-cC348k>

Pour les erreurs à éviter :

<https://www.youtube.com/watch?v=Pvd6RHZNjII>

<https://www.labsafetyshop.com/blogs/news/top-10-lab-safety-mistakes-made>

- **Brainstorming, erreurs à ne pas faire en TP :**

Students spend countless hours inside laboratories across the world and have to be extremely careful every step of the way. There are all kinds of common lab mistakes that can lead to some disastrous consequences inside a laboratory. Here are some common laboratory mistakes that you should avoid at all costs:

- **Not going in with a detailed plan -> importance of the protocol:** If you're not bringing your laboratory notebooks with you prior to an experiment, you're going to potentially have some serious issues on your hand. You need to plan out every aspect of your experiment and keep everything organized in your notebook. Being able to reference back to your plans and findings is key for any scientific project.
- **Taking shortcuts:** Avoid taking shortcuts at all costs. If an experiment requires an incubation period of 30 minutes, patiently wait the required 30 minutes and don't cut anything short to avoid lab errors. Make sure you know exactly what your time investment will be before beginning an experiment.

Additionally, here are some laboratory mistakes you should remember to avoid:

- **Never** bring any food or drinks into the lab.
- **Never** taste or smell any lab samples or chemicals for any reason at all.
- **Never** handle chemicals without the appropriate equipment: gloves, goggles, lab coat if necessary -> always refer to the safety pictograms
- **Never** forget to wash your hands after handling chemicals or hazardous materials
- **Always stand** while manipulating
- **Never** wear loose or drafty clothing that could get caught in any equipment or come in contact with various chemicals.
- **Never** leave a container open, without its stopper.
- **Never** run in a lab