



Fun with Germs

Objective: The objective of this activity is to teach students how science is used to maintain a healthy lifestyle.

Materials (provided by CSM):

- Glo-germ
 - Glo-germ powder
 - UV light
- Microscope
 - Microscopes
 - Slides

Discussion:

- How does science help us stay healthy?
 - Medicine, bacteria, illnesses, etc.
- What are different things we can do to stay healthy?
 - Wash our hands, eat healthy foods...
- Why is it important to maintain a healthy lifestyle?
 - Live a long life, avoid getting sick...
- What are germs and why do we study them?
 - Microorganism, usually causes disease. We study them so we don't get sick!
- How do germs spread?
 - Air and through direct and indirect contact
- The importance of proper hand washing:
 - To wash the germs away, warm water for 20 seconds.

The steps of proper hand washing.

1. **Follow these simple steps:** (pretend to wash your hands and have the students follow your lead)
 1. Wet your hands with running water.
 2. Apply liquid, bar or powder soap.
 3. Lather well.
 4. Rub your hands vigorously for at least 20 seconds. ...

5. Rinse well.
6. Dry your hands with a clean or disposable towel or air dryer.
7. If possible, use a towel or your elbow to turn off the faucet.

Glo-germ:

Glo-germ is a germ stimulator. It helps students understand how germs spread. Remind students that putting the powder on their hands does not enable them to see the real germs on their hands.

Procedure: Put students in pairs and line them up to use the UV light. Show them their hands under the UV light before you add the glo-germ. Have one student pretend to be sick and put glo-germ on his or her hand. Do not give both partners glo-germ. Then let them give each other a high-five or a handshake. Show their hands under the UV light. Lastly, have them properly wash their hands.

Things to remember: As the students are waiting in line and washing their hands, continue to ask them questions about health and germs. This is usually a long waiting period, and we do not want them to lose interest. Here are some questions you can ask:

- When is it a good time to wash your hands?
- Where would you find a lot of germs?
- What place has the most germs the kitchen, the bathroom, or a cell phone?
 - Cell phone!!
- Where are there not a lot of germ?
 - Operating rooms, sterile objects
- What do you think germs look like?
- Are germs alive?
- We know that washing our hands prevents germs from spreading, but what do you do if you get sick?
 - Take medicine
 - Go to the doctor
- What else can we do to prevent germs from spreading?
- Is it a good idea to share someone's water bottle or chapstick?

Microscopes:

Procedure: Set the microscopes up so the students can make a line and look through the microscopes one-by-one. Put the label of the slide in front of the microscope. Remind them to not touch the microscopes. They only need to use their eyes. Ask them questions on their observations.