

Safety Activities and Demonstrations

No Contact Lenses in the Lab

1. Draw an eye on the bottom of a Petri dish.
2. Cut a circle from a transparency to simulate a contact lens.
3. Place the lens in the Petri dish, and put the Petri dish on an overhead projector.
4. Put a drop of liquid near the edge of the “contact.” Liquid will be drawn under and become trapped between the “contact” and the “eye.”

No Food or Gum in the Lab: Flame Thrower Demonstration

Note: This demonstration should be done in a hood.

1. Put 1-2” of KClO_3 in a **Pyrex** test tube.
2. Clamp the test tube to a ring stand at an angle.
3. Melt the KClO_3 with a Fisher burner.
4. Quickly toss something organic into the test tube. You can use gummy bears, gum, a wood splint, etc. Let the test tube cool, and then discard it. Do **NOT** reuse the test tube.

Safety goggles: Whipped Cream Activity

1. Wear a lab coat and safety goggles.
2. Put whipped cream on a paper plate and have someone trustworthy hit you in the face with the plate of whipped cream.
3. Remove the goggles to show that the eyes are well protected.
4. If more than one type of protective eyewear is used in the lab, test each type.

Safety goggles: Pig Eye Activity

1. Obtain pig eyes from a local butcher.
2. Have students wear gloves.
3. Give each group of students a pig eye in a Petri dish.
4. Students should time themselves walking, not running, from their lab station to the eyewash.
5. The teacher will add one drop of concentrated H_2SO_4 to the pig eye.
6. After waiting the amount of time it took them to walk to the eyewash station, the students should begin rinsing the pig eye in the sink. They will see that they cannot wash away the damage, as the protein in the eye is denatured.

Safety goggles: Egg White Activity

1. Students should crack an egg and put the egg white into a Petri dish.
2. The teacher will add one drop of concentrated H_2SO_4 to the egg white. The acid will denature the protein, permanently damaging the “eye.”