

# Hygiene Potato Graphs

## Summary

Students will discuss the importance of hygiene. They will conduct a science experiment with potatoes. Students will graph the results of their study.

## Main Core Tie

Health Education - 3rd Grade

[Strand 4: SUBSTANCE ABUSE PREVENTION \(SAP\) Standard 3.SAP.4:](#)

## Time Frame

6 class periods of 15 minutes each

## Group Size

Large Groups

## Life Skills

Thinking & Reasoning, Social & Civic Responsibility

## Materials

Hygiene Potato Graph worksheet (attached)

1 pair rubber gloves (wear while peeling the potatoes so that no germs touch the potato during the peeling process)

3 potatoes peeled

3 zip shut baggies

## Background for Teachers

Teachers should be aware of the Scientific Method. The following web sites are excellent resources:

## Intended Learning Outcomes

Students will understand the importance of washing hands, how easily germs can spread, and the importance of not touching another person's body fluids/blood.

## Instructional Procedures

The teacher may choose to lead the Hygiene Discussion before or after the experiment depending on the classroom environment.

## **Experiment**

Students will watch as the teacher peels 3 potatoes. The teacher will explain that rubber gloves are being worn so that no germs will touch the potatoes.

The first potato will go into a baggie as is. (control group)

The second potato will be passed around the class. Have students look at it closely to see if they can see any germs. They can look for dirty spots or other identifying marks. The purpose is for the potato to be exposed to many hands and many germs. This detail should not be brought up to students at this point however.

The second potato will be put into a baggie after all students have handled it sufficiently.

The students should all wash their hands AFTER they have touched the 2nd potato, but BEFORE they touch the 3rd potato. After students have washed their hands, they will pass around the 3rd

potato in the same manner.

The third potato will finally be put into a baggie.

Students will fill out the "Hypothesis - Make A Guess" section of the worksheet. The teacher could choose to have students work independently or in cooperative groups.

Next, students fill out the DAY ONE section for "Observations -Take a look; Data - Write it down; and Graphs - Make it a picture.

For Days 2-6 students will observe and fill out the appropriate days on their worksheets. At the end of the last day students will discuss and fill out the "Conclusions - Decide what it means" section of the worksheet.

### **Discussion**

The teacher should decide at which point in the lesson the Hygiene Discussion should take place. As a whole group, students should be led in a discussion about proper hand washing, how germs are spread (body fluids i.e.. saliva, mucus, blood), and why it is important not to touch other people's body fluid. They should be led to the conclusion that washing hands is the best way to stay germ-free.

### **Strategies for Diverse Learners**

Cooperative learning groups and peer buddies would help meet the needs of students with different abilities in this activity.

### **Assessment Plan**

During discussion students will be observed for participation and for appropriate responses. The discussion should continue until the teacher can observe that students understand the concepts being taught.

The Hygiene Potato Graph rubric can be used for the experiment.

### **Rubrics**

[Hygiene Potato Graph Rubric](#)

### **Authors**

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