

GYSTC Activity



Glo-Germ Experiment

Purpose:	The purpose of the Glo-Germ handwashing activity is to teach students proper handwashing techniques and to show how easily germs can spread.
Standard:	<p>S5L4. Obtain, evaluate, and communicate information about how microorganisms benefit or harm larger organisms. (Clarification statement: Possible microorganisms could include Tardigrades, Lactobacillus, Probiotics, Rotifers, Salmonella, Clostridium botulinum (Botox), E-coli, Algae, etc. Students are not expected to know these specific microorganisms. The list is provided to give teachers examples.) a. Construct an argument using scientific evidence to support a claim that some microorganisms are beneficial. b. Construct an argument using scientific evidence to support a claim that some microorganisms are harmful.</p> <p>S8P1. Obtain, evaluate, and communicate information about the structure and properties of matter. a. Develop and use a model to compare and contrast pure substances (elements and compounds) and mixtures. (Clarification statement: Include heterogeneous and homogeneous mixtures. Types of bonds and compounds will be addressed in high school physical science.) b. Develop and use models to describe the movement of particles in solids, liquids, gases, and plasma states when thermal energy is added or removed. c. Plan and carry out investigations to compare and contrast chemical (i.e., reactivity, combustibility) and physical (i.e., density, melting point, boiling point) properties of matter.</p>
Materials:	<ul style="list-style-type: none"> ● Black Light ● Glo-Germ Lotion ● Sink with water ● Soap ● Paper Towel

<p>Procedures:</p>	<ol style="list-style-type: none"> 1. Explain the importance of washing your hands and times when hand washing is required 2. Create a list of proper hand washing techniques from the students' ideas. 3. Model how to wash your hands. 4. Explain how Glo-Germ will stimulate germs in our daily environment. Rub Glo-Germ on your hands and then examine them using the black light. 5. Split the class in half. Have one half wash their hands with only water, have the other half of the students wash their hands with both soap and water. Assist students in lining up and returning to the black light after washing their hands. 6. Pair students up with one student from both test groups (Only Water and Soap and Water). Have students make conclusions together concerning proper hand washing techniques.
<p>Science Behind It:</p>	<p>The Glo-Germ lotion or gel and the powder contain plastic simulated germs, and the black light illuminates those pretend germs to test how germs travel and how well we wash our hands.</p>
<p>Questions to Ask:</p>	<ol style="list-style-type: none"> 1. How easily germs can spread? 2. How can you prevent the spread of germs? 3. What is the purpose of hand washing experiments like the Glo-Germ Activity?