

## LESSON PLAN by Michelle Kiefer

**Lesson:** How Germs Spread    **Length:** 20 minutes  
**Age/Grade Intended:** 4<sup>th</sup> grade    **Adapted from:** Scott Foresman Science

### **Academic Standards:**

4.4.10 Explain that if germs are able to get inside the body, they may keep it from working properly. Understand that for defense against germs, the human body has tears, saliva, skin, some blood cells, and stomach secretions. Also note that a healthy body can fight most germs that invade it. Recognize, however, that there are some germs that interfere with the body's defenses.

### **Performance Objective:**

Using flour, students will determine how germs are spread with 100% accuracy.

### **Advanced Preparation by Teacher:**

Plastic containers or pie tins

Flour

Four pieces of dark construction paper for each group labeled A, B, C, and D

The Flea's Sneeze by Lynn Downey

### **Procedure:**

**Introduction/Motivation:** Ask how many students have been sick recently. Remind them about flu season quickly approaching. Ask the students if they have noticed that once one student is sick many others in the class get the same bug, too. Tell the students that one of the best ways to prevent spreading germs is to wash their hands.

**Step-by-Step Plan:** Read the story The Flea's Sneeze by Lynn Downey. Have the students make predictions on why the hog began sneezing. Will the other animals catch the cold, too? How are germs spread? Have the students divide into small groups of 3 or 4. Give each group a container with flour in it as well as the four labeled pieces of construction paper (3 pieces if only 3 group members). Have one student put their hand in the flour. Have them shake hands with a person in the group. Then, person one should smack their hand onto the paper labeled A. The 2<sup>nd</sup> person should shake hands with the 3<sup>rd</sup>, with the 2<sup>nd</sup> person slapping their hand onto paper B. Continue until all group members have gone. The hands should be placed on the paper after they shake hands with the person. Have the students wash their hands. Have them draw what they observe from the four different handprints.

**Closure:** Have the students answer the following questions: What can be inferred from the model of how pathogens pass from person to person? Why do you think doctors wash their hands in between seeing different patients? Be sure to remind them that washing their hands is important and should be done frequently to prevent the spreading of pathogens from person to person. \*Gardner's: Bodily-Kinesthetic, Interpersonal\*

### **Adaptations/Enrichment:**

As an adaptation, have students who may be allergic to flour use paint. As an enrichment, have students describe what some of the most common viruses are spread from not washing your hands.

**Assessment:**

Assess by walking around room and observing each group. At the end, collect the drawings of what they observed to see if they understood the objective of the lesson.

**Self-Reflection:**