

Don't Catch that Germ

(Recommended for grades 4 and up)

In this activity students learn about disease transmission by simulating the spread of a cold throughout the classroom.

- For each student in the class fill a small, clear test tube or small plastic cup with some water (only a couple of tablespoons are needed). In one tube/cup add a small amount of baking soda (make sure it is dissolved). Make a small black dot on the bottom of the baking soda tube/cup.
- Inform your students that someone in the class has a cold virus and they will simulate the spread of the cold throughout the classroom. Each student is to mix some of their liquid back and forth with 2 or 3 other students (depending on class size). This will simulate the spread of the cold virus.
- After students have mixed and mingled, go around the room and add a drop of phenolphthalein pH indicator* into each container. The containers of those students who have "caught" the cold will turn pinkish in color**. Those who have not will remain clear.
- To find the source of the infection, have students carefully look on the bottoms of their containers. The one with the mark is the culprit. This activity can provide a nice introduction to talking about what "germs" are and how we can keep them from spreading.

*Phenolphthalein can be purchased from most science supply companies. It is an alcohol based solution. **Only teachers should handle the phenolphthalein.** Students should be careful not to get their solution into their eyes or mouth and should wash their hands after the activity.

**By the end of this activity the majority of students should have caught the cold, demonstrating how easily some germs, like cold viruses, can spread from one person to another.