“PINKEYE” DEMONSTRATION

MATERIALS: Small, inexpensive clear cups, baking soda, distilled white (clear) vinegar, water, small measuring spoon (optional).

PREPARATION:

1. Fill 7 cups approximately 1/3 of the way full with water
2. Fill 1 cup approximately 1/3 of the way full with vinegar. Mark this cup discretely with a small “X.”
3. Fill 1 cup half full with baking soda.

DIRECTIONS:

1. Explain to the students:
   a. “Pinkeye or conjunctivitis is a disease you get in your eye. The conjunctiva is the clear membrane that covers the white part of your eyes, and the lining of your eyelid. There are several causes behind inflammation of this membrane: viral, bacterial, allergic, and foreign objects on the eye—most often contact lenses! Pinkeye can cause excessive eye watering, greenish discharge, and redness of the affected eye.
   b. Both viral and bacterial conjunctivitis are highly contagious, that means that it can be easily spread from one person to another. For example, you could be rubbing your eyes and then shaking hands with someone; or sharing a washcloth, towel, or pillowcase with someone; or letting someone try on your sunglasses, or sneezing and forgetting to wash your hands afterward; or rubbing your eyes, and then handing your friend a pencil; or sharing eye make-up. We are going to do an experiment that demonstrates how pinkeye is spread."

2. Choose 8 students to volunteer for the demonstration.
3. Have students choose a cup. **DO NOT TELL THEM THAT ONE HAS VINEGAR AND THE OTHERS WATER!********** (The student with the vinegar is the person with pretend pinkeye.)

4. Instruct the students:
   a. “Everyone needs to carefully hold one cup of simulated tears. We aren’t using real microbes, and the chemicals we are using aren’t dangerous, but we don’t want to make a mess. When I tell you to, you are going to choose one person to mix your “tears” with...I want you to CAREFULLY pour your liquid into a partner’s cup, and then let them pour half of it back into your cup, so you both have about the same amount you started with, to avoid spillage.
   b. We’ll do this a couple of times, and then test everyone for contamination. When we exchange fluids like this, it represents different ways you accidentally spread pinkeye germs to other people.”

5. Have the students “share tears” with at least 2 different people.

6. Line up the students and put a pinch (1/4 teaspoon) of baking soda in each of their cups.

7. The cups that make bubbles have pinkeye. (The vinegar and baking soda react with each other.)

8. You can then find the “initial infected person” by locating the cup with the small “X” on it.

9. Recap:
   a. “See how easily Pinkeye can be spread? That’s why schools sometimes send home letters warning parents that a Pinkeye infection is happening at school, so everyone knows to be extra careful.
   b. Washing your hands often is the best way to reduce the spread of infections from Pinkeye, as well as colds & the flu.