### Summary of Topic:
How Viruses Travel

### Main Curriculum Tie:
Health science. Taken from HotChalk lesson plans. [www.hotchalk.com](http://www.hotchalk.com)

### Required Materials for Lesson:
- 1 dark film canister with lid for each student numbered 1-4.
- Flour, baking soda, and vinegar.
- Paper for note taking.

### Background for Teacher:
Prepare: Fill majority of the canisters half way with flour. Fill a small percentage of canisters half way with baking soda. For a class of 16, fill 2 with baking soda. On the bottom of each canister, write a number 2-4 for the flour canisters and write the number 1 only on the baking soda canisters.

### Student Prior Knowledge:

### Intended Learning Outcome:
Students will understand how certain viruses travel through a population by simulating the transmission of a communicable disease.

### Instructional Procedure:
- Students write down the name of 2 other students in room.
- Select a canister and return to seat.
- Tell student that some of them contracted a virus. They have not been diagnosed so they don’t know who has it. They are going to a party and share a drink with the 2 people on their list. If someone wants to share, they have to share. They can’t say no.
- They need to go to each person on their list and exchange powders by pouring all into one, shaking it, and then dividing back into the 2 canisters.
- They need to write down the order of the students they exchanged with. Example: Lisa wrote down Kelly and Sue. Emily wrote down Lisa & Amy. So Lisa would have Kelly, Emily and Sue in her notes.
- Once everyone has exchanged powders, the teacher pours vinegar into the canister. If baking soda is present, it will foam. If it’s flour, the vinegar will sit on top.
- On the board, make a list of all the students infected and the order they exchanged powders and same with non-infected.
- Have the students work in groups to see if they can determine the original carriers.

### How to Measure Outcome:
Discussion.