

# Optical Illusions with Volume

Is the amount of water the same in different shaped containers? Let's try it and see! Compare the volume (or amount of water) in one container to the volume in the rest of them. Even though they may look like different amounts, they may be the same.

## Materials

- Containers of various shapes & sizes
- 2 Liters of colored water
- Large tray or pan with high sides
- Wide mouth funnel
- Small bag of lentils or beads
- Roll of paper towels

## Instructions

1. Gather up the containers you want to use in the experiment. Choose two containers that you want to compare and put them on a tray or pan with high sides.
2. Using a wide mouth funnel, pour the colored water into one container until it is full.
3. Make a prediction! How much do you think it held? Do you think it could hold even more? Do you think the second container will hold more or less? How much do you think each container holds? How would you find out?
4. Pour the colored water from the first container into the second. Are the containers of equal volume? Can you make any predictions?
5. Try it again with some different containers. See how close you can get with your predictions!
6. Try putting some beads or lentils in one of the containers of water. What does it look like now?