Balloon Investigation Directions

1. Start with balloon #1. Choose a substance to put in your balloon: (1) hot water, (2) cold water, or (3) room-temperature water. Another option is to add salt to any of the three types of water.
2. Record your substance and your group's prediction on the data sheet. How will the water-filled balloon respond when you place it in your test tank? Sink to the bottom, float on the surface, or go somewhere between?
3. Use your group's paper cup to get your chosen water from the labeled containers, and bring the cup and water back to your group.
4. If adding salt, stir 1 spoon of salt into your cup of water, before adding the water to the balloon.
5. Work over the tray. Using the funnel, pour the water into the balloon until it just overflows, pinch the balloon near the opening and squeeze just a little water out of the balloon to make sure there is no air inside, and then tie off the balloon.
6. Place the balloon in the test tank. After 30 seconds, record where the balloon ends up, and draw it on the tank diagram on your data sheet. Write why you think the balloon responded in that way. Indicate with arrows if the position of the balloon changes as you are doing the investigation. Put the balloon number on your drawing.
7. Use a sticky note to add your group's results to the class chart, Balloon Investigation Results. First write what substance was in the balloon, then position the sticky note so it shows where your balloon was located about 30 seconds after you added it to your tank.
8. Repeat steps 1–7 with your next substance and balloon.