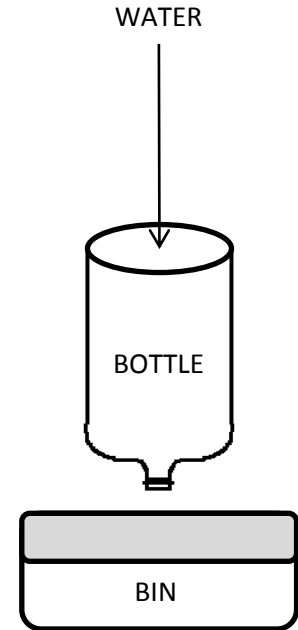
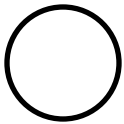


MAKING AN BLOOD FLOW MODEL

1. Gather materials. You will need a 2-liter bottle with the bottom cut off, a large beaker, modeling clay, a stopwatch, and a bin to catch water poured through your model.
2. One student should hold the 2-liter bottle upside down (mouth of the bottle pointing down) with his/her palm covering the mouth tightly.
3. Another student should fill the bottle with 1.5 liters of water.
4. The student should quickly remove his/her palm from the mouth of the bottle and the stopwatch should be started.
5. As soon as the water empties out of the bottle, stop the stopwatch.
6. Record the time on your student data sheet.
7. Repeat steps 1-6 two more times and record the times on your data sheet.
8. Add a small lump of clay to the mouth of the bottle. The clay should block approximately 25% of the opening.
9. Repeat steps 1-6 with the 25% blockage three times. Record the times on your data sheet.
10. Add more clay to the mouth of the bottle to block approximately 50% of the opening.
11. Repeat steps 1-6 with the 50% blockage three times. Record the times on your data sheet.
12. Add more clay to the mouth of the bottle to block approximately 75% of the opening.
13. Repeat steps 1-6 with the 75% blockage three times. Record the times on your data sheet.



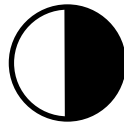
no clay



25% clay



50% clay



75% clay



BLOOD FLOW MODEL DATA SHEET

Record your data in the table below.

	0% blockage	25% blockage	50% blockage	75% blockage
Trial 1 time				
Trial 2 time				
Trial 3 time				

Graph your data using the x and y axes below. Be sure to title and label your graph. How long would you expect 1.5L of water to pass through a 90% blockage? A 35% blockage? How do you know?

