

Pre-Lab Questions

1. Predict how once trash reaches the Landfill, how the trash affects the environment?

2. Are there any problems with rain falling on the landfills? Explain.

What Would You Do if You were the Landfill Operator?

Worksheet

1. Each group randomly grab 24 colored fruit loops. Separate the fruit loops by color. Count the number of fruit loops per color and write the number on the table below. Each color represents a type of waste.

Landfill 1		
Color	Type of Waste	Number
Purple	Food Waste	
Blue	Paper	
	Aluminum	
Green	Cans	
Yellow	Tires	
Orange	Batteries	
	Chemical	
Red	Waste	

2. Lightly crush the fruit loops with your hands and place them in the plastic cup. Label the plastic cup "Landfill 1."

3. Each group randomly grab another 24 colored fruit loops. Once again separate the fruit loops by color. Count the number of fruit loops per color and write the number on the table below. Each color represents a type of waste.

Landfill 2

Type of Waste		
Color	Type of Waste	Number
Purple	Food Waste	
Blue	Paper	
	Aluminum	
Green	Cans	
Yellow	Tires	
Orange	Batteries	
	Chemical	
Red	Waste	

4. Lightly crush the fruit loops with your hands and place them in the plastic cup. Label the plastic cup "Landfill 2."

5. On the lab sheet below, make a pie graph for each landfill, showing the different types of waste in both the landfills.

Figure 1 : Landfill one: trash composite of the landfill

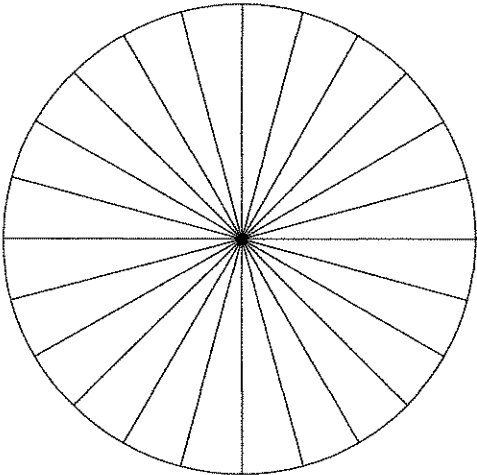
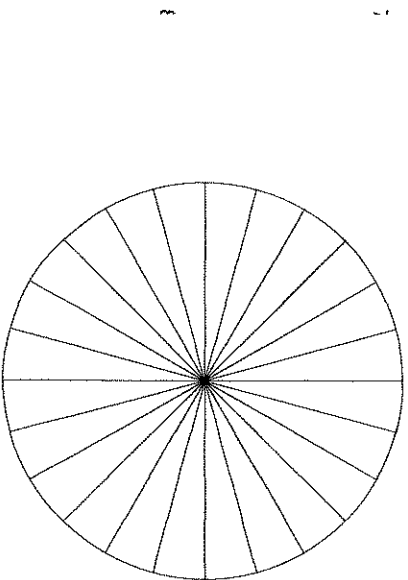


Figure 2: Landfill two: trash composite of the landfill.



6. Both your landfills have malfunctioned: there is a hole at the bottom of your liner. With your push pin punch a whole on the bottom side of your cups. What do you think would happen if it rained on your landfills?

7. Place approximately 25ml of milk into each cup and place the cups in the bowls. Describe what you see. Using the color spectrum above characterize your leachate.

8. What problems could this leachate cause to the neighborhoods near your landfills? If you could fix one landfill which one would you fix and why?

9. Describe the differences between your landfills. Is one more harmful or hazardous than the other? Explain.

10. As the landfill operator, is there a way to reduce the amount of waste in any of the landfills? Will one landfill have more waste than the other?