Station: Land Contouring

1. Turn to page 2 on your handout.

2. Look at images of Berm 'n' Basin (Image 1) and Boomerang Berms (Image 2) and choose one type of land contouring to test. Circle your choice in the table.

Image 1

Image 2

3. Shape the kinetic sand to model your chosen land contour. Use cardboard to smooth out other bumps in the surface.

4. Place 20 beads (representing water) on top of the sand on one side of the pan, as seen in Image 3. Twenty beads are already counted for you.

5. Have one student hold the ruler vertically next to the end of the pan with the beads.

6. Slowly lift the side of the pan with the beads until the top edge of the pan is six inches in the air. Hold for 10 seconds.

7. Slowly place pan back on table. Count the beads that rolled to the bottom of the pan and record in the table.

9. Put 20 beads back into jar and place lid on jar.

10. Flatten sand back into the center of pan with cardboard.

11. Answer question 2 on your handout.

Image 3

Station: Rooftop Rainwater Harvesting

1. Turn to page 2 on your handout.
2. Examine the "roof" and make sure that the water will flow into the cistern. See Figure 1.
3. Measure 500 mL of water and pour it into the watering can.
4. Slowly pour the contents of the watering can over the bin. Distribute the water evenly around the bin. Watch as the water flows off the roof into the cistern.
5. Once the "rain" has stopped, carefully remove the cistern from the bin.
6. Measure the water that was collected in the cistern using the beaker. Record results in question 2.
7. Calculate the percentage of total rainwater harvested in the cistern and record this value in the table in question 2.
8. Empty the beaker. Place the cistern back.
9. Respond to questions 3 and 4 on your handout.

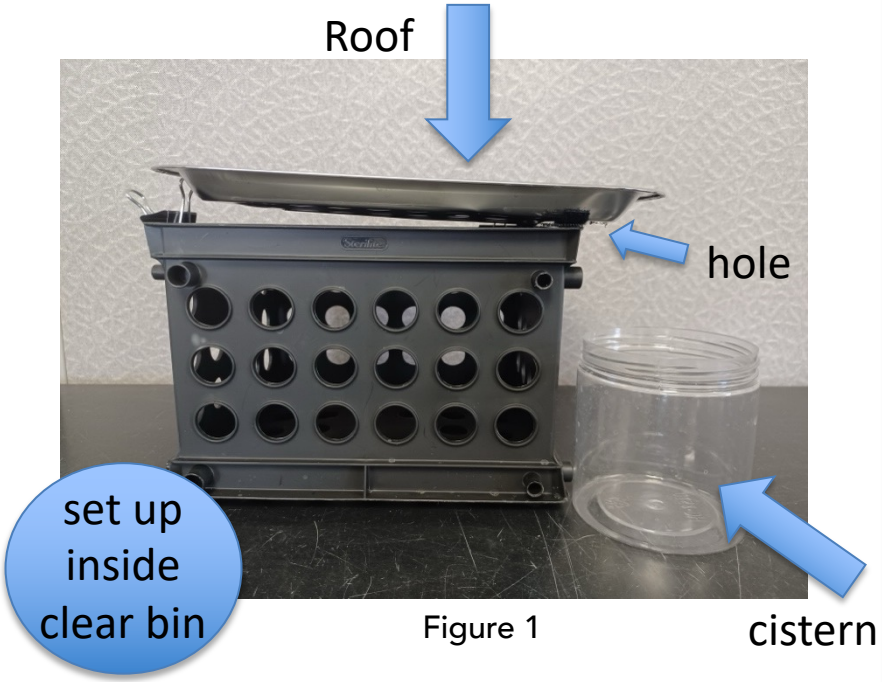

Figure 1