

# 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. Form the kinetic sand to model your chosen land contour. Use cardboard to smooth out other bumps in the surface.
4. Place 50 beads (representing water) on top of the sand, as seen in Image 3. Fifty 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 end of the baking 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.
8. Count the beads that rolled to the bottom of the pan and record in the table.
9. Put beads back into jar and place lid on jar.
10. Put sand back into pile in the center of pan.
11. Respond to 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.
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. 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 your 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 contents of the beaker. Place the cistern back into the bracket on the crate.
9. Respond to questions 3 and 4 on your handout.

