



Family Activity 2: What Happens to All That Rain?

Family Members Present for Investigation: _____

Date of Investigation: _____

Question for Investigation: How does vegetation and slope of the land affect stormwater run-off?

Hypothesis: Ask you family to predict how vegetation (plants) and slope affect stormwater run-off.

Materials:

- plastic or aluminum rectangular pan
- sand to fill half the pan
- 2 cups - measuring cup
- chocolate syrup
- grass plugs or sod
- water

Procedure:

1. Fill pan half full of sand.
2. Diagonally, from the top corner of the pan to the bottom corner, make a river channel; Scoop sand from the middle of the box up on the sides to form river banks. Make a steep slope on one side of the river. Make a gentle slope on the other side.
3. Place a sod square or several grass plugs on one side with a gentle slope. This represents wetlands vegetation.
4. Position one person on each side of the river holding each cup of water. These students will make it rain on the river. **VERY SLOWLY** and at the same time, have one person pour water on the sandy side, while the other pours water on the grassy area. Observe which run-off flows faster and drains into the lagoon first and record below.
5. Repeat Step 4 using 1/4 cup of chocolate syrup. The syrup represents stormwater pollution. Observe and record what happens below.
6. Repeat Step 4 again, pouring 1/2 a cup of water on the syrup. Observe and record what happens.

Data:

Observation #1	Observation #2	Observation #3

Results: Discuss with your family what their observations were.

Conclusion: Discuss with your family how this information could be used to describe run-off in developed and natural (undeveloped) areas along the IRL.