**Water on a Slope**

**Objectives**:

Students will discover how water reacts on a sloped surface.

(A **slope** is a slated or tilted surface)

**Question:**

1. Does water always flow downhill?
2. How does changing the slope or quantity of water change the speed at which water flows?

**Hypothesis**:

I think… (Read Question 1 and 2, then write what you think will happen when beads of water are placed on a slope).

**Experiment**

To prove my hypothesis, I will work with my partners and place several drops of water on a sloped tray covered with wax paper. I will observe how the water drops move. I will document my results on the Water on a Slope worksheet. Next, we will place several different sized drops and observe which drop moves the fastest. I will document my results on the Water on a Slope worksheet.

**Materials**

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| * 1 tray |
| * 1 Shammy |
| * 1 dropper per person |
| * 1 cup of plain water |
| * 1 large piece of wax paper |
| * 1 text book (about 2 inches thick) |
| * Student Worksheet No. 4 |
| * 1 plastic container (1 qrt) |

**Procedure Pt 1**

1. Document your Hypothesis.
2. Get the materials (see Materials List).
3. Cover the tray with the large piece of wax paper.
4. Place the tray on the edge of the text book to create a slope.
5. Squeeze the dropper in the cup of water to collect the water.
6. Place one drop of water per person on the wax paper.
7. Observe if the water moves on a slope.
8. Document your observations on the ‘Water on a Slope’ worksheet.

**Procedure Pt 2**

1. Document your Hypothesis.
2. Get the materials (see Materials List).
3. Cover the tray with the large piece of wax paper.
4. Place the tray flat on the table top
5. Squeeze the dropper in the cup of water to collect the water.
6. Place one bead of water using 1 drop on one end of the wax paper.
7. Place a second bead of water using 2 drops next to the 1st bead on the wax paper (do not put the beads close together)
8. Place a third bead of water using 3 drops next to the 2nd bead on the wax paper (do not put the beads close together)
9. Place a fourth bead of water using 4 drops next to the 3rd bead on the wax paper (do not put the beads close together)
10. Place a fifth bead of water using 5 drops next to the 4th bead on the wax paper (do not put the beads close together)
11. Use an empty dropper to move the beads into a straight line.
12. Carefully place the tray on the edge of the text book to create a slope.
13. Observe if the water moves on a slope.
14. Document your observations on the ‘Water on a Slope’ worksheet.