



Lava on the Run

During this activity, you will test the viscosity of three lava-like products and draw conclusions about the type of volcano they might form.

1. Choose roles for each team member— recorder, timekeeper, marker and measurer, and sample pourer.
2. Spread newspaper or plastic sheeting over activity areas for easier cleanup.
3. Use a marker to draw a start line at the top of the cardboard and, then prop the cardboard against an object at a steep angle.
4. Examine the three samples provided to your group (chocolate syrup, corn syrup, shampoo, oatmeal, jelly, ketchup, rubber cement, etc.)
5. On the student page, write your prediction about which sample is more viscous and will flow downhill the slowest, and which sample is least viscous and will flow fastest.
6. Measure 1 tablespoon of sample and hold it above the start line ready to pour when the *timekeeper* says go. Pour the sample onto the cardboard. After 10 seconds, the timekeeper will say stop, and the *marker* will draw a line where the “lava” was at that time. The *measurer* will determine the distance traveled during that time. The *recorder* writes the distance on the student page.
7. Perform each lava run twice. Average the results of each sample and record it.
8. On the back of this page, draw a graph of your results. Write on your graph which lava-like samples are more viscous (resistant to flow).



Lava on the Run - continued

Predictions:

Which sample will travel the greatest distance in 10 seconds? _____

Which sample will travel the shortest distance in 10 seconds? _____

Sample #	Distance (mm) 1 st time	Distance (mm) 2 nd time	Average

1. List factor(s) which control distances traveled by your lava-like flows.
2. List which products most closely resemble the behavior of lava flows on a shield volcano and a stratovolcano.