



Lava Layering Results

Directions: Use colored pencils to make a map on graph paper of the volcano model as seen from above. Label flows and features.

1. How many flows can you see?
2. In addition to the map, make a list of the lava flows, starting with the youngest flow at the top and finishing with the oldest flow at the bottom. Example: "Top flow is a long, skinny, green flow."
3. Can you easily determine the sequence of flows (which came first, which came last) or are there some flows where you can't say which are younger or older? Put a question mark by the uncertain flows in the list on the map.
4. Are there parts of any flows that might be covered? Which ones?
5. What would you need to figure out the sequence and shape of each flow? How could you get that information without lifting the play dough?
6. Think about what techniques will help you learn more about the interior of your volcano. Your teacher will lead a class discussion about these techniques before you experiment. **Stop here and wait for the teacher to continue.**



7. Document why each proposed experiment will be helpful in revealing information about your volcano. Conduct the experiments and record locations and information gained.

8. Finish your map. On a piece of paper, describe the sequence of flows that tells the history of the volcano. Compare your map and sequence to the map and history documented by the group that originally made the volcano. Was your interpretation accurate? Explain.

9. Why would it be harder to map lava flows on Mars using images taken by spacecraft?