

Make Your Own Olympus Mons

Olympus Mons is a mountain of mystery. Taller than three Mount Everests and about as wide as the entire Hawaiian Island chain, this giant volcano is nearly as flat as a pancake.

Steps:

1. Set down something sturdy for the base, like a piece of wood or a couple of layers of tinfoil. Remember that the lava will flow onto this, so make it bigger than the volcano.
2. Put an empty 35 mm film canister at the middle of the base. This will be where the lava is stored.
3. Using papier-mâché or plaster, form the volcano around the top of the bottle. Make sure not to cover the top of the canister.
4. When the volcano is dry, paint it with orange, brown and red paint, to simulate the Mars' landscape.
5. If you want to use your volcano over and over, ask an adult to help you spray the volcano with a clear sealant, otherwise the lava will make the volcano all gooey.
6. Mix together 1 tablespoon liquid dishwashing soap, 1 tablespoon baking soda and a few drops of red food in a cup.
7. Slowly pour this mixture into the top of the volcano
8. Set the volcano outside.
9. Pour 2 ounces of vinegar into the canister and watch out!



Hints:

You can find plaster at most hobby shops.

If the lava is too thick, add a little water to the soap mix.

Mars' Olympus Mons, the largest volcano in the Solar System, is a shield volcano 374 miles in diameter (approximately the same size as the state of Arizona!) and 16 miles high (about 3 times taller than Earth's Mount Everest!). Olympus Mons is so big because of several reasons. First, Mars' gravity is only about 1/3 that of Earth's. The less gravitational pull, the higher and wider a volcano can grow. Also, Mars does not have tectonic plates, so the crust stays over a hot spot and continues to discharge lava, causing the volcano to grow to a size that would be impossible on Earth. But as big as it is, it will be a huge tourist attraction someday, since you could easily walk to the top of the mountain because the slope is so gentle!