MOON SAND

Have you ever looked up at the moon and noticed that the moon looks sort of like Swiss cheese? That's because the moon's surface is made up of craters and rocks. Craters are indentations in the Moon's surface formed by asteroids crashing into the moon. Using our DIY Moon Sand recipe, you can explore making your own moon craters.

Materials for Moon Sand

- 4 cups of all-purpose flour
- ½ cup baby oil or cooking oil
- Measuring cups
- Mixing bowl
- Round cake pan
- Rocks of various sizes

Materials for Gluten-Free Moon Sand

- 2 cups baking soda
- 2 cups of cornstarch
- 1 cup of baby oil or cooking oil
- Measuring cups
- Mixing bowl
- Round cake pan
- Rocks of various sizes

Directions:

1. Measure out the dry ingredients and add to mixing bowl.
2. Add oil to dry ingredients and either use your hands or a spoon to mix the ingredients together. This is a very nice sensory activity. The moon sand feels good in your hands.
3. Spread the moon sand in a round cake pan. Place the pan on the floor. Stand above the pan and gently drop different rocks into the moon sand. You can measure with a ruler how wide and deep your craters are and record your results to compare.
4. Try some variations and observe how your craters change. Instead of an even layer build up your moon sand into mountains and see what happens when you drop the rocks into the uneven surface. Experiment with how different shaped and sized rocks affect the craters they make. Drop the rocks from different heights. Does it make a difference?
5. Eventually your pan of moon sand will beginning looking like the surface of the moon with all the variety of craters.

Why does the moon compared to the Earth have so many more craters?

The Earth is surrounded by atmosphere. The atmosphere will burn up most of the asteroids before they are able to make contact with the Earth's surface. A shooting star is not a star at all. It is an asteroid burning up as it travels through our atmosphere. The moon, however, does not have any atmosphere to protect it so all the asteroids heading towards it will make contact. Only the very largest asteroids will make contact with the Earth's surface.