

Puffy Paint Planets

Explore planet colors and textures through this hands-on activity!

Materials:

Tempera paint or food coloring, plain paper plate or cardboard circle, paper towels.

For puffy paint: 1 cup flour, 1 cup water, 1/2 tsp salt, 1 ½ tsp baking powder, mixing bowl, whisk or fork, and spoon.

This can be a messy project! Protect surfaces by covering them with paper towels or newspapers.

Instructions:

Step 1: Mix flour, water, salt, and baking powder together until the mixture is smooth. This is your puffy paint base mix.

Step 2: Spoon some of the puffy paint onto your paper plate or cardboard circle. Add a few drops of tempera paint or food coloring. Spread with a spoon or with your hands. (Caution: food coloring will temporarily stain skin.)

Step 3: Play with colors and texture to create a planet on your round plate. Add more drops of color, or plain puffy paint. Make swirls of colors for clouds and storms. Tell a story about your planet!

This craft is about the process more than the product. However, if you wish to save your artwork, you can let it dry overnight on a plate.

Planet Colors and Textures

Our eyes see the planets of the solar system as brightly as stars in the night sky. Closer up, planets can appear to be different colors. Space images often use "false color" to better study the surfaces of planets, adding color to help us see more details.



Mercury appears a gray color. It is a rocky planet covered in craters.



Venus is also a rocky planet, but it is covered with a thick atmosphere of carbon dioxide and sulfuric acid. From Earth it looks like a star, but closer up, it is a bright yellowish-white.

Earth is our home planet. It is uniquely blue and green, the colors of life.



Mars is nicknamed the Red Planet because of rusty iron in the ground. It is a rocky planet, and its surface shows traces of water.

Jupiter is a gas giant. It is covered in swirling clouds and storms, has different colors of reds, orange, yellows, and greens. Its famous Great Red Spot is a storm that has been raging for hundreds of years!

Saturn, like Jupiter, is made of gases (helium and hydrogen). Ammonia ice crystals and clouds are thought to give it different shades of color.

Uranus has methane in its atmosphere, which makes it appear blue. The planet also has rings, but they are faint and hard to see.



Neptune is made of a thick fog of water, ammonia, and methane over a solid core. The methane makes it look blue. It is a very windy planet!