Curiosity Guide #503 Rocks



Accompanies Curious Crew, Season 5, Episode 3 (#503)

Making Sedimentary Rocks Investigation #3

Description

Some rocks are four million years old, but you can make these rocks in a couple of days!

Materials

- Sugar
- Water
- Sand
- Gravel
- Spoon
- 2 small paper cups
- Teaspoon
- Paper towel
- Sedimentary rocks, like limestone and sandstone

Procedure

- 1) Measure a spoonful of sand and fill the bottom of a paper cup.
- 2) Fill the spoon with gravel. Layer the gravel on top of the sand in the cup.
- 3) In the second cup, combine 1 teaspoon water with 5 teaspoons of sugar. Blend this mixture with a spoon. You may need to add a bit more water to better dissolve the sugar.
- 4) Pour the sugar water into the sand and gravel layers in the cup.

- 5) Wait a few minutes. Then soak up any excess water on the top with a paper towel by pressing firmly down onto the mixture.
- 6) Leave the mixture undisturbed for at least 2 days to harden.
- 7) Once the mixture is hard, tear the paper cup away to reveal the new rock.
- 8) Examine the rock under a magnifying glass and compare it to a piece of limestone or sandstone.
- 9) What do you notice?

My Results

Explanation

Sedimentary rocks, like sandstone, limestone, or conglomerate, are made when sediments of different sizes are deposited, compressed, and cemented together. The sediments are cemented with water and chemicals like silica, calcium carbonate, or iron compounds. In our example, the sugar acted as the bonding ingredient to hold the gravel and sand together.

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