Faux Fossil

Celebrate National Fossil Day by learning what can happen to bones that have been buried!

Materials

- Sponge
- Medium Bowl
- Plate
- 1 cup of warm water
- 1/3 cup Epsom salt + a little extra Epsom salt is another name for magnesium sulfate, a naturally occurring mineral.

Make a mineral bath

- 1. Pour the warm water into a bowl.
- 2. Add the Epsom salt and stir well. If all of the salt dissolves, add more until you can no longer mix it in and a little salt remains at the bottom of the bowl. This ensures that your water is supersaturated with the magnesium sulfate.

Soak it up

- 3. If you'd like, use scissors to cut your sponge into a bone shape.
- 4. Place the sponge in the bowl and allow it to soak up as much of the solution as it can.
- 5. Pick up the sponge and place it on a plate. Make sure you don't squeeze the sponge or wring it out!

Dry it out

- 6. Allow the sponge to dry completely. This may take a few days.
- 7. Once the sponge is dry, pick it up and make some observations. Compare it to a normal dry sponge or one that has just been dipped in water. How are they similar? How are they different?

What's happening?

Fossils are the preserved remains of plants and animals from long ago. Some fossils form when the remains of an animal or plant are covered with water. Minerals carried by the water are then able to fill in all of the open spaces within that plant or animal. This process is called permineralization. This type of fossilization is particularly helpful to scientists because it can preserve internal structures and organs, rather than simply getting an imprint of the organism.

In this experiment, the sponge represents a bone that has been buried. When you dip the sponge in the salty water it absorbs the liquid. As the sponge dries out, the water evaporates leaving the minerals (magnesium sulfate) behind.



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