

Fun with Sugar cubes

You may have already looked at how objects absorb water. Today we are taking this a step further and trying to halt the process. We're going to investigate which materials are good absorbers and which are not.



What you need:

- Sugar cubes
- Plate
- Water
- Food coloring
- Aluminum foil
- Plastic wrap
- paper

Instructions

Add a few drops of food coloring to some water and pour onto the plate.

Add a stack of sugar cubes.

What do you think will happen?

Observe. The colored water should move up the stack of cubes and eventually make them collapse.

Try adding a small sheet of foil on top of one sugar cube and stack some more on top. Does this stop the water reaching the top cubes?



Try the same with some plastic wrap, and some paper or tissue. Which works the best?



Which falls down first?



The Science Bit

The water is absorbed by the sugar cubes as you can see by the color rising up through the cubes. Our foil and plastic wrap did stop the flow of water for a while, but eventually it found a way through. These were the last stacks to fall though. The paper absorbed the water easily and let it reach the cubes above. This is because paper is porous and lets water pass through it. The foil and plastic wrap prevent water passing through with ease.

Adapted from: <http://www.science-sparks.com/2012/06/11/fun-with-sugar-cubes/>