



Stalactites – Student Activity

Student Homework



Limestone can dissolve in acids. Of course when there is a change of climate or conditions, the dissolved limestone (calcite) in water can come out of solution (appear again). These caves on the left were originally empty hollows dissolved out of the limestone but then conditions changed and dissolved limestone (calcite) in the drips formed stalagmites and stalactites.

Materials per student

- Two beakers or jam jars or glasses.
- A saucer or plate.
- A length of woollen or thick cotton thread or string. NOTE – the material needs to be made of natural fibre. To speed things up two or three strands can be twisted together to make a thicker band. The band should be long enough to stretch over the two jars and the saucer.
- Two clothes pegs or heavy objects to hold down the ends of the band.
- Baking soda *or* Epsom salts *or* Washing soda. These can be bought at the supermarket or hardware store.
- Large jug warm water and a mixing spoon.

Method

1. Fill the jug with warm water (not boiling)
2. Stir the baking soda into the water until no more will dissolve. A small disc of undissolved soda will remain on the base of the jug.
3. Attach the clothes pegs to the ends of the band.
4. Soak the band in the solution in the jug.
5. On a warm flat surface place the two jars with the flat plate between them.
6. Fill the jars almost to the top with the solution
7. Drape the ends of the band into the jars. The clothes pegs should hold them down
8. Let the centre of the band drape downwards towards the saucer below
9. Observe what happens over the next few days or weeks
- 10. The experiment must be left in a warm, draught free position.**

Stalagmites stand up with all their might.
Stalactites hang down holding on tight.

Minerals, which are weathered away from one part of Earth's surface, can be deposited as rock in another place. Landscapes in both areas change.