

Zedua Experiments

Title: Make Your Own Quicksand

Quicksand is a colloid hydrogel consisting of fine granular material (Such as sand, silt or clay), and water. Quick sand forms in a saturated loose sand when sand is suddenly agitated. When water in the sand cannot escape, it creates a liquefied soil that loses strength and cannot support weight.

Let the kids understand and observe how quicksand works.

Challenge: Can you Make Your Own Quicksand?

Materials Required:

1. 1 cup of maize cornflour
2. Half a cup of water
3. A large plastic container
4. A spoon

Procedure:

1. Mix the cornflour and water thoroughly in the container to make your own instant quick sand.
2. Stir slowly and drip the quicksand and show it as liquid to friends.
3. Stir it quickly will make the mixture hard and allows you to punch or poke it quickly (this works better if you do it faster).
4. Quicksand is messy, play with it outside and don't forget to stir just before you use it.

What's happening?

If you add just the right amount of water to cornflour it becomes very thick when you stir it quickly. This happens because the cornflour grains are mixed up and can't slide over each other due to the lack of water molecules between them. Stirring slowly allows more water between the corn flour grains, letting them slide over each other.

Poking it quickly makes substance very hard. If you poke it slowly it doesn't mix up the mixture, leaving it runny. It works the same way as real quick sand.



Source: pintrest