

Inquiry Question

How can I use the chemistry of mixtures to make bath bombs?

Name: Date:



Bath Bombs



Mixtures are all around us. Most things in nature are mixtures. Basically, anything you combine is called a mixture. When we bake in the kitchen, we are preparing mixtures with each different recipe creating a unique mixture.

When we discuss mixtures we are referring to physical properties of the substances rather than chemical properties. The individual components are near each other but the properties of each component remain unchanged when mixed. There is no reaction or chemical change when the species mix.

In this project you will make a mixture. You will be mixing solid (dry) ingredients and liquid (wet) ingredients to make bath bombs.



General Instructions

The goal of this project is to see how the chemistry of mixtures can be used to make bath bombs.

Materials you'll need:

- Dry ingredients:
 - 1 cup baking soda
 - 1/2 cup corn starch
 - 1/2 cup citric acid
 - 1/2 cup epsom salts
- Wet ingredients:
 - 3/4 tsp water
 - 2 tsp essential oils
 - 2 tsp oil
 - food colouring

Ideas and Hints:

- 1. Mix the dry ingredients in a bowl.
- 2. Mix the wet ingredients in a cup.
- 3. Pour the wet ingredients into the bowl.
- 4. Mix it all together well.
- 5. Put the mixture into small containers or moulds and pack the mixture. Ice cube trays work well.
- 6. Remove the bath bombs and package them for delivery to your favourite bathers.
- 7. Always clean up your work area afterwards.

You may want to check out a website such as https://www.rockymountainsoap.com/collections/bath-bombs to get some ideas on essential oil combinations.

Project submission:

Send your teacher a short written summary of your "making a mixture" project and a bath bomb or at least a photo of your finished product.