

## science page



# **HOMEMADE BATH BOMBS**





April is Stress Awareness Month in the U.S. Everyone feels stress sometimes, and people can do activities to feel less stress. Some people enjoy taking a warm bath to feel less stress. Some people use bath bombs in their baths. Bath bombs include essential oils that can release calming smells, such as lavender, rose, chamomile or jasmine. In this activity, your students can make homemade bath bombs and learn the chemistry behind them.

To make the bath bombs, you need both baking soda and cream of tartar. When they are in powder form, baking soda and cream of tartar do not react. When you mix the two powders with water, they do react. When you are making the bath bomb and spray the mixture with water, you should see a small reaction in which the powder fizzes a little. In a bath of warm water, the reaction should be much bigger. The reaction is between baking soda and cream of tartar. Baking soda is a base and cream of tartar is an acid. Bases and acids react to each other. When these two powders are mixed with water, they create something new. They create bubbles filled with a gas called carbon dioxide.

When making the bath bombs, students should use just enough food coloring to get a light, pastel color while still leaving the mixture powdery. If students are very sensitive to food coloring, they can omit this step. They should use 2-3 drops of an essential oil to scent their bath bombs. You may want to provide zip-top bags for each student to use to take several bath bombs home, but before the do, you will want to test the bath bombs in your classroom so you can answer the final questions. You can do this by dropping one bath bomb into a bowl of warm water and observing the reaction.

### **WARNING**

This science activity uses essential oils. Many teachers already use essential oils in their classrooms. However, if you currently do not use these oils, here is some information for you. Essential oils should always be kept out of reach of students. While the oils have many positive effects, direct contact can be irritating to the skin, so students should not touch the oils or the bottles directly. Be aware of students who are extra sensitive to smells as essential oils can be a respiratory irritant. Also, you should make sure that students do not drink the oils, as they can be toxic.



### What We Know:

April is Stress Awareness Month.



• Everyone feels stress sometimes.



People can do activities to feel less stress.



• Taking a warm bath can help people feel less stress.



• Smelling calming smells can help people feel less stress too.





#### What We Can Do:

We can use chemistry to make homemade bath bombs!





### Need:

2 C baking soda



2 T olive oil











large bowl



spoon



essential oils



spray bottle filled with water



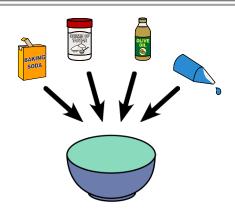
silicone ice cube trays



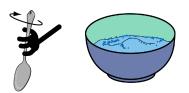


## **Activity Steps**

1. Put baking soda, cream of tartar, olive oil and food coloring into bowl.



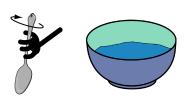
2. Stir with spoon. Mixture should be powdery.



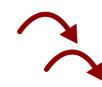
3. Spray 2-3 squirts of water onto mixture.



4. Stir mixture.



5. Repeat steps 3 and 4 until mixture is moldable.



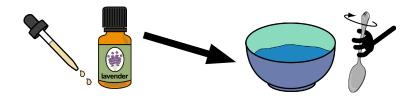
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### **Activity Steps**

6. Put 2-3 drops of essential oil into mixture. Stir.



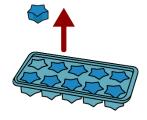
7. Press mixture firmly into silicone ice cube trays to form bath bombs.



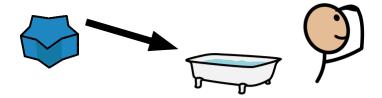
8. Let bath bombs sit in ice cube trays 1-2 days.



9. Remove bath bombs gently.



To use, put bath bomb into bath water.
Watch reaction.





### What I Learned

### 1. What was part of the bath bomb?



flour



baking soda



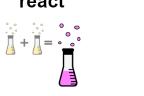
#### sand



### 2. What did the bath bomb do in the bath water?



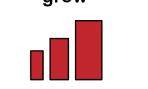
react



#### freeze



#### grow



## 3. What did the bath bomb react to?



#### dirt



#### grass



#### water



### **Questions for Class Discussion**

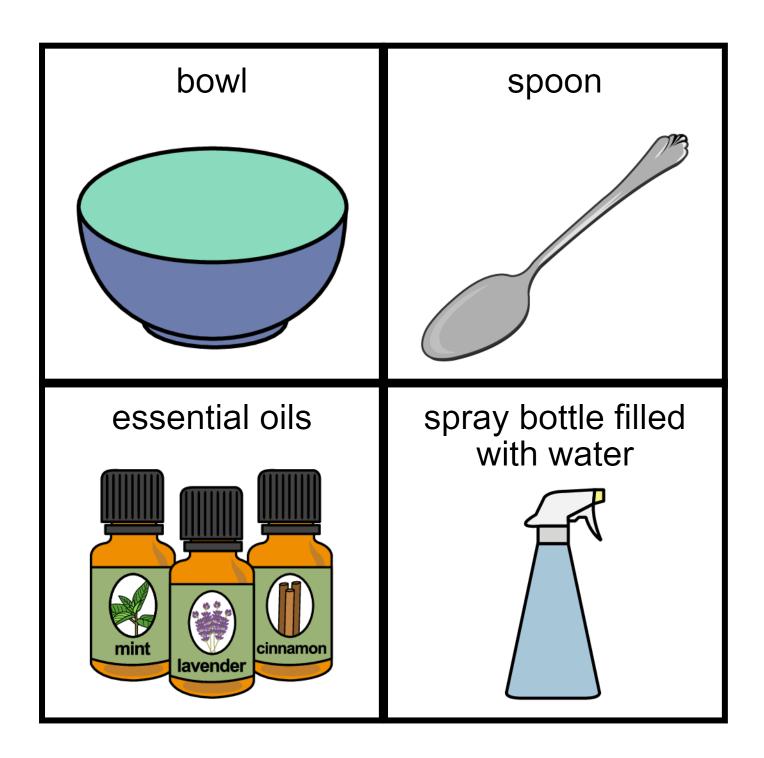


- Why do you think people like bath bombs?
- What would you like a bath bomb to smell like? Why?
- Describe what the reaction looked like.

Read, practice and post these words on classroom or craft area word walls.



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