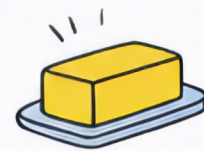




SCIENCE EXPERIMENT



MAKING HOMEMADE BUTTER

By shaking cream in a jar!

Name: _____

Date: _____

QUESTION



Can you turn cream into butter by shaking it in a jar?

HYPOTHESIS



I think _____

because _____



MATERIALS



- 1 pint (2 cups) heavy whipping cream
- 1 clean glass jar with a tight lid (pint size works well)
- (Optional) Pinch of salt
- (Optional) Fine mesh strainer
- Bowl
- Spoon

PROCEDURE



1. Pour the heavy whipping cream into the jar.
2. Screw the lid on tightly.
3. Shake the jar vigorously for 5–15 minutes. Shake, shake, shake! Don't stop!
4. After a few minutes, the cream will thicken into whipped cream.
5. Keep shaking! You will hear a sloshing sound. Soon, the butter will separate from the buttermilk.
6. When you see solid yellow butter and liquid buttermilk, you're done!
7. Pour off the buttermilk into a bowl.
8. (Optional) Add a pinch of salt and mix.
9. Rinse the butter under cold water in a strainer and squeeze out any extra liquid.
10. Shape your butter and enjoy!

OBSERVATIONS



Describe what happened at each stage.

Time	What I Observed
Start	
After ~5 minutes	
After ~10 minutes	
End	

RESULTS



Was your hypothesis correct? Circle one: YES NO

What did you learn?

THE SCIENCE BEHIND IT



Cream contains fat in tiny globules. When you shake it, the fat globules bump into each other and clump together. Eventually, they stick together to form butter. The liquid left behind is buttermilk.



FUN FACT: People have been making butter for thousands of years using this same idea—shaking or churning cream!