

It has been a busy few weeks at Praxis, and as a result inspiration for this week's experiment stems from some things that might have been growing in my fridge... or at the very least would have started had I not used it up for this great activity! Let's get started!

***Remember to ask an adult before doing this experiment.**

Materials

skim milk
vinegar
measuring cups
microwave
bowl (microwave safe)
fine strainer
mixing spoon

Procedure

1. Measure 375 mL (1 1/2 cups) skim milk.
2. Carefully pour the milk into the bowl.
3. Measure 20 mL (4 teaspoons) of vinegar and slowly pour into the milk.
4. Mix gently.
5. Place the bowl in the microwave for one minute (note: depending on the strength of your microwave, this will vary). **If you are not allowed to use the microwave by yourself, be sure to ask an adult for help.**
6. Carefully remove the bowl from the microwave.
7. Observe.
8. What do you see?
9. There should be some lumps and liquid separating out. If it is not happening yet, return it to the microwave for 10 seconds. Repeat until you see this happen.
10. It may be hot, so be careful and allow it to cool so you do not burn yourself.
11. Strain the solid from the liquid using the fine strainer.
12. Touch and feel the solid mass.
13. What does it feel like?

What is going on?

After about one minute, you should have seen the milk and vinegar separate into two distinct parts. There will be a solid (feel it) and a liquid. By adding the vinegar to the milk, you created a chemical reaction. Do you remember the nursery rhyme 'Little Miss Muffett'? You created curds and whey (I bet you always wondered what that was!). If you let the solid blob cool down, you can play with it, and even mold it into different shapes. It feels like plastic. If you leave it out and it will harden into the different shapes you made.

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