Milk and Vinegar Plastic





Materials:

1 cup Milk

4 Tbsps. Vinegar, more on reserve

Strainer with paper towels

Ask your little scientist:

What do you think will happen?

What do you observe?

(Use as many senses as you can!)

What did happen?

Why?

Directions:

Microwave 1 cup milk until boiling. (Must be cow's milk.)

Immediately add 4 Tbsps. vinegar and stir vigorously. Solid should appear, and then keep stirring for a few minutes. (More vinegar will make it work faster.)

Strain the liquid out and gently press out the excess. Press into desired shape and use a toothpick to poke a hole near the top if you want it to be a hanging or ornament.

Let dry a few days, flipping over at least once. Paint as desired.

Questions to ask:

What do you see happening? What other solids can we make from liquids? (Think ice from water, baking, etc.) Can you combine two liquids and make a solid? What could we change about this experiment? What if we put the vinegar into cold milk?

What they are learning:

The idea of a chemical reaction, two liquids mixing and forming a solid. That heating up a substance alters how it behaves. That there is more than one way to change a substance.