Ice Cream Science

Have you ever made ice cream from scratch? In this activity, you will make homemade ice cream while reviewing the concepts of liquid and solid. Your children will love making and trying their ice cream concoction while learning about scientific concepts.

What You Need:

- 1 cup of milk
- 1 tsp sugar
- 1 tsp vanilla
- Sealable plastic bag
- 1 tbsp salt
- Ice
- Clean round jar

What You Do:

1. Review the different types of matter with your child: liquid, solid, and gas. Explain that you're going to make your own ice cream while learning about liquids and solids.
2. Give several examples of liquids and of solids using common foods or household items, such as water, milk, apples, and bread. Explain that solids stay in the same shape, whereas liquids do not.
3. Ask your child whether they think ice cream is a liquid or a solid. Explain that you're going to try an experiment using ice cream.
4. Place sugar, milk and vanilla into the bag and seal it. Observe that two of these ingredients are liquids, and one is a solid.
5. Put ice into the jar until it is half filled.
6. Place the jar on the ground and roll it around for about 15 minutes. Now you will have made your own ice cream!
7. Ask your child if they can guess how the ingredients inside the bag might have changed by mixing them around. Discuss how adding the cold ice might have impacted the ingredients as well.
8. Remove the bag from the jar and observe any differences in its state of matter (liquid vs. solid) and temperature.
9. Lastly, taste the ice cream that you have created and see how it turned out!