

## Activity # 1 - DIY Cinnamon Ornaments

Making cinnamon ornaments is a fun and educational STEM (Science, Technology, Engineering, and Mathematics) activity for students in preparation for the holiday season. This activity explores aspects of chemistry, sensory exploration, and basic engineering.

### Below is a step-by-step recipe:

#### Materials Needed:

##### 1. Ingredients:

Below is the ratio of applesauce to begin with:

- 1 cup ground cinnamon
- 1 cup applesauce

##### 2. Equipment:

- Mixing bowl
- Rolling pin
- Cookie cutters (for shaping)
- Parchment paper or non-stick surface
- Baking sheet
- Straw or skewer (for making a hole for hanging)
- Ribbon, string, or twine (for hanging)

#### Instructions:

##### 1. Mix the Ingredients to create the dough:

- a. In the mixing bowl, combine equal parts of cinnamon and applesauce, 1 cup each. Stir the ingredients together until you have a thick dough. You may need to use your hands to knead the dough, too. If the dough is too sticky, add more cinnamon. If the dough is too dry, add more applesauce. The goal is to achieve a playdough-like consistency that can be easily rolled out and cut into shapes. Remember that the moisture content of applesauce can vary, so it is a good idea to add the applesauce gradually and adjust until you get the right texture. You can scale up the recipe if you are making a larger batch. Feel free to experiment and have fun with the process!

##### 2. Roll Out the Dough:

- a. Next, sprinkle some extra cinnamon on a non-stick surface or parchment paper. Roll out the dough to about ¼ -inch thickness using a rolling pin.

3. Cut Out Shapes:
  - a. Use cookie cutters to cut out different shapes from the rolled-out dough. (Note for Coordinator: This is where you can incorporate STEM concepts by discussing geometry and shapes.)
  - b. Carefully transfer the cut shapes onto a parchment paper-lined baking sheet.
4. Make a Hole for Hanging:
  - a. Use a straw or skewer to make a small hole near the top of each ornament. This is where you will thread the ribbon or twine for hanging. (Note for Coordinator: Discuss the concept of structural integrity and how the hole affects the overall structure.)
5. Bake:
  - a. Preheat your oven to 200°F (93°C).
  - b. Place the baking sheet with the ornaments in the oven and bake for 2-2.5 hours or until they are completely dry. Keep an eye on them to prevent burning.
6. Cool and Decorate:
  - a. Allow the ornaments to cool completely.
  - b. Kids can decorate the ornaments with acrylic paint, glitter glue, buttons, jewels, sequins, bells, and other creative materials once the ornaments are thoroughly cooled. You may want to add the SECME theme “Space is the Place.”
7. Add Ribbon or Twine:
  - a. Thread a ribbon or twine through the hole made earlier, creating a loop for hanging.
8. Hang and Enjoy:
  - a. Hang the cinnamon ornaments on a Christmas tree, in windows, or anywhere

This activity is credited to [It is Always Autumn.](#)