

Salt Dough STEM Activity

A simple, hands-on STEM activity inspired by Discovery Space enrichment programs.

Salt Dough Recipe

- 1/2 cup flour
- 1/4 cup salt
- Up to 2 Tbsp water

Instructions

1. Mix the flour and salt in a bowl.
2. Gradually add water until a dough forms.
3. Adjust as needed. Too sticky? Add flour. Too dry? Add water.
4. Knead until the dough is smooth and workable.
5. Shape your dough into flat shapes, 3D creations, texture impressions, anything!
6. Air dry for 24–48 hours or bake at 200°F until firm, ~2-3 hours for most flat shapes.

Things to Try Next

- Press your dough with **leaves, shells, pinecones, or toys** to explore textures.
- Make **2D and 3D shapes** and compare how they dry.
- **Paint and decorate** once fully dry.
- **Add food coloring** for colored dough.
- Compare **air-drying versus baking**. What works faster?
- Notice **how your shapes change** as they dry: texture, weight, color, and rigidity.
- Ask question as you go: **“What do you think will happen next?”**

STEM Skills

You may remember salt dough as an art activity, but it *starts* with chemistry: mixing ingredients, adjusting ratios, and observing changes before we even *begin* to create.

STEM SKILLS:

Measuring & Ratios

Kids learn how ingredient amounts affect texture.

Properties of Matter

Dough consistency teaches about solids, liquids, and mixtures.

Evaporation & Drying

Air-drying vs. baking shows how water leaves a material.

Observation Skills

Kids notice changes: cracks, firmness, texture, color.

Experimentation & Problem-Solving

Adjusting water or flour = testing hypotheses!



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