

Cookie Math & Science Adventure!

Let's become bakers, mathematicians, and scientists today by making yummy cookies!

Introduction (5-10 minutes)

Ask your little baker: "Do you like cookies? What's your favorite kind?"

"Guess what? We're going to make our own cookies today! While we bake, we'll also be super counters and scientists."

Show the ingredients (pre-portioned nearby is helpful, but allow scooping from containers for the activity). "Look at all our ingredients! Let's count them together: Flour is 1, Sugar is 2, Butter is 3, Egg is 4, Vanilla is 5! We have FIVE ingredients!"

Activity: Measuring & Mixing (20-25 minutes)

Let's get started! Use a simple sugar cookie recipe. Focus on the actions:

1. **Flour Power:** "We need 1 cup of flour. Can you help scoop the flour into the 1-cup measure? Let's dump ONE cup into the bowl." (Math: Counting, Measuring)
2. **Sweet Sugar:** "Now for the sugar! We need half a cup ($\frac{1}{2}$ cup). Find the half cup measure. Help me scoop and dump it in." (Math: Measuring)
3. **Soft Butter:** Add softened butter (pre-measured is easiest here). "Let's add the soft butter. What do you think will happen when we mix it with the flour and sugar?" Mix together. "Is it crumbly?" (Science: Observation, Mixing solids)
4. **Egg-cellent Addition:** "We need to add ONE egg. Let's crack it carefully together." (Adult help needed). "How many eggs did we add? Just ONE!" (Math: Counting). Mix it in. "Wow, look! How did the egg change our mixture? Is it sticking together more?" (Science: Observation, Binding ingredients)
5. **Vanilla Scent:** "Let's add ONE teaspoon of vanilla for yummy smell and taste!" Use the teaspoon measure. (Math: Counting, Measuring). Mix again.

Activity: Shaping & Baking (15-20 minutes - includes baking time observation)

1. **Shape Fun:** Pat the dough flat or use a small rolling pin. "Let's use cookie cutters! Can you make TWO circle cookies and TWO star cookies?" (Math: Counting, Shapes).
2. **Count 'em Up:** Place the cookies on a baking sheet lined with parchment paper. "Let's count all the cookies we made! 1, 2, 3, 4..." (Math: Counting)
3. **Heat Magic (Adult Step & Supervised Observation):** The adult places the cookies in the preheated oven. Watch safely through the oven door (if possible). "What do you see happening? Are the cookies changing? The heat is baking them! Are they getting flatter? Bigger? Darker around the edges?" (Science: Observation, Effects of Heat)
4. **Cool Down:** Adult removes cookies and places them on a cooling rack.

Conclusion & Tasting (10 minutes)

Once cool enough to handle:

"Remember how the dough felt soft and squishy? How do the cookies feel now?" (Harder, crisp). (Science: Observation, Physical changes)

"Let's count our finished cookies one more time!"

"Time for the best part - tasting our delicious Cookie Math and Science experiment! What do they taste like? What do they feel like in your mouth?"