

Lesson Plan: The Great Cookie Mission - An Introduction to Baking

Subject: Life Skills, Family & Consumer Sciences

Grade Level: High School (Approx. Age 15)

Time Allotment: 90 minutes

Materials & Resources Needed

Kitchen Equipment:

- Large mixing bowl
- Medium mixing bowl
- Electric mixer (hand or stand) or a whisk/sturdy spoon
- Measuring cups (for dry ingredients)
- Measuring spoons
- Liquid measuring cup
- Spatula
- Baking sheets
- Parchment paper or non-stick spray
- Cooling rack
- Oven mitts
- Sink, soap, dish towels, and sponges/scrubbers

Cookie Ingredients (for a classic Chocolate Chip Cookie recipe):

- 1 cup (2 sticks) unsalted butter, softened
- $\frac{3}{4}$ cup granulated sugar
- $\frac{3}{4}$ cup packed brown sugar
- 2 large eggs
- 1 teaspoon vanilla extract
- 2 $\frac{1}{4}$ cups all-purpose flour
- 1 teaspoon baking soda
- $\frac{1}{2}$ teaspoon salt
- 1 $\frac{1}{2}$ cups chocolate chips
- *Optional Mix-in:* $\frac{1}{2}$ cup of walnuts, pecans, or M&Ms

Handouts:

- Printed copy of the Chocolate Chip Cookie recipe
 - "Kitchen Safety & Measurement Cheat Sheet" (see content below)
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1. Learning Objectives

By the end of this lesson, the student will be able to:

- **Demonstrate** the correct technique for measuring both dry (flour, sugar) and liquid (vanilla) ingredients.
- **Identify and apply** three critical kitchen safety rules related to oven use, food handling, and cleanliness.
- **Successfully follow** a multi-step recipe from start to finish to produce a batch of cookies.
- **Practice** the "clean as you go" method to maintain an organized and safe workspace.

2. Standards Alignment

This lesson aligns with National Standards for Family and Consumer Sciences Education and general life skills curriculum by focusing on:

- **8.2.1:** Analyze factors that contribute to food safety and sanitation.
- **8.5.3:** Demonstrate ability to select, store, prepare, and serve nutritious and aesthetically pleasing foods.
- **Applied Mathematics:** Utilizes fractions, measurements, and sequencing.

3. Instructional Strategies & Lesson Activities

Part 1: The Mission Briefing (15 minutes)

1. **Introduction (The "Why"):** Begin with a discussion. "Baking is like a fun science experiment you can eat! But for the experiment to work, accuracy and safety are key. Today's mission is to master the basics by baking classic chocolate chip cookies."
2. **Safety First:** Review the "Kitchen Safety & Measurement Cheat Sheet."
 - **Safety Focus:** Point out the oven, discuss preheating, and demonstrate how to use oven mitts safely. Emphasize washing hands before, during (especially after handling eggs), and after baking. Discuss keeping the floor clear of spills.
 - **Measurement Focus:** Show the difference between a dry measuring cup and a liquid measuring cup. Demonstrate the "scoop and level" method for flour and the "pack" method for brown sugar. Show how to measure liquids at eye level.
3. **Cleanliness Command:** Introduce the "clean as you go" rule. "A great baker keeps their station clean. It prevents accidents and makes the final cleanup much easier. We will wash bowls and utensils as we finish with them."

Part 2: The Baking Operation (50 minutes)

1. **Set Up (Mise en Place):** Guide the student to wash their hands and gather all necessary equipment and ingredients. This reinforces organization. Preheat the oven to 375°F (190°C).
2. **Guided Practice:**
 - Walk the student through the first few steps of the recipe: creaming the butter and sugars together.
 - Ask the student to measure and add the eggs and vanilla, providing feedback on their technique.
 - In a separate bowl, guide the student to combine the dry ingredients (flour, baking soda, salt). This is a great time to ask, "Why do you think we mix the dry ingredients separately first?" (Answer: To ensure the leavening agent, baking soda, is evenly distributed).

3. **Independent Application:** Allow the student to take the lead in combining the wet and dry ingredients and stirring in the chocolate chips (and any optional mix-ins they choose).
4. **Shaping & Baking:** Guide the student on how to drop rounded spoonfuls of dough onto the parchment-lined baking sheet. Discuss why spacing is important (cookies spread). Set a timer and place the cookies in the oven.
5. **"Clean As You Go" in Action:** While the first batch bakes, direct the student to begin washing the used mixing bowls, spatulas, and measuring cups.
6. **The Finish Line:** Demonstrate how to check for doneness (golden brown edges). Use oven mitts to safely remove the baking sheet and transfer cookies to a cooling rack.

Part 3: Mission Debrief & Reward (25 minutes)

1. **Final Cleanup:** While the cookies cool, work together to finish washing the last of the dishes and wipe down all counters. The kitchen should look as clean as it did when you started.
2. **Taste Test & Reflection:** Enjoy a warm cookie! While eating, conduct a short "debrief."
 - "What was the most challenging part of following the recipe?"
 - "What's one measuring tip you'll remember for next time?"
 - "Why is the 'clean as you go' rule helpful?"
 - "On a scale of 1-5, how confident do you feel about using the oven safely now?"

4. Assessment Methods

- **Formative (During the lesson):**
 - Use an informal **observational checklist** to note if the student is washing hands, measuring ingredients correctly, and handling equipment safely.
 - Ask **probing questions** during the process to check for understanding (e.g., "Show me how you would measure $\frac{3}{4}$ cup of flour.>").
- **Summative (End of lesson):**
 - **Product Evaluation:** The final cookies serve as a tangible result. Are they baked correctly and look appealing? (This is a low-pressure, fun assessment).
 - **Oral "Exit Ticket":** The reflection questions during the "Mission Debrief" serve as a summative check of the key safety, cleaning, and measurement concepts.

5. Differentiation & Inclusivity

- **For Support:**
 - Pre-measure some of the more complex ingredients.
 - Use a recipe with whole-number or simple fraction measurements (e.g., 1 cup, $\frac{1}{2}$ cup).
 - Provide more direct, step-by-step modeling for every stage of the recipe.
- **For Extension/Challenge:**
 - **The Scientist:** Before baking, have the student research the function of one ingredient (e.g., "What does baking soda do?" or "Why use both brown and white sugar?").
 - **The Mathematician:** Ask the student to calculate how to halve or double the recipe before they begin.
 - **The Creative:** Encourage the student to invent a new cookie by suggesting different mix-ins (dried cranberries, white chocolate, etc.) and giving it a unique name.
- **Inclusivity:** The lesson uses collaborative language ("we," "let's"). Offering a choice of mix-ins provides student voice and ownership over the final product.

Handout Content: Kitchen Safety & Measurement Cheat Sheet

Safety First!

- **Wash Up:** Always wash hands with soap and water before you start, after touching raw eggs, and when you're all done.
- **Oven Hot:** Never touch the inside of an oven. Always use oven mitts to put things in and take them out. Ask for help if you're unsure.
- **Clean Station:** Wipe up spills immediately. Keep your baking area clear of clutter to prevent accidents.
- **Handle with Care:** Be careful with raw eggs. They can contain bacteria. Wash anything they touch (bowls, hands) right away.

Measure Like a Pro!

- **Dry Ingredients (Flour, Sugar):** Use dry measuring cups. Scoop the ingredient until it's overflowing, then use the straight edge of a knife to level it off. For brown sugar, pack it down firmly.
- **Liquid Ingredients (Water, Milk, Vanilla):** Use a liquid measuring cup with a spout. Place it on a flat surface and bend down to read the measurement at eye level for an accurate reading.
- **Small Amounts (Spices, Baking Soda):** Use measuring spoons. Level them off just like you do with the dry measuring cups.