Lesson Plan: The Great Paper Bake-Off!

Materials Needed:

- **Base Structure:** An empty box (cereal, oatmeal, tissue), a plastic jug, or a cylindrical container. Multiple boxes can be used for a tiered cake.
- **Paper:** A variety of construction paper, tissue paper, scrapbook paper, and even foil or cellophane in different colors.
- **Adhesives:** White school glue, glue stick, and tape (clear and/or double-sided).
- **Cutting Tools:** Child-safe scissors (standard and decorative edge scissors if available).
- **Embellishments:** Glitter, sequins, beads, pom-poms, yarn, ribbon, buttons, or any other fun craft supplies.
- **Design Tools:** Pencil and paper for sketching.
- **Optional:** Markers, crayons, or paint for adding details.

Subject/Focus	Art, Design, Engineering (Project-Based Learning)
Grade Level	Age 9 (Approximately 3rd-4th Grade)
Time Allotment	60-90 minutes (can be split into two sessions: design/construction and decoration)
Learning Objectives	By the end of this lesson, the student will be able to: • **Design:** Brainstorm and sketch a unique, multi-layered cake design. • **Problem-Solve:** Select appropriate materials and techniques to transform a 2D material (paper) into a 3D structure that resembles cake, frosting, and decorations. • **Construct:** Use scissors and adhesives to accurately measure, cut, and attach paper to a base container, creating a stable 3D model. • **Create:** Demonstrate creativity by crafting unique paper embellishments (e.g., spirals for frosting, rolled paper for candles, fringed paper for texture).
Instructional Activities	**Part 1: The Design Phase (15-20 minutes)** 1. **Engage - The Cake Inspiration (5 min):** ◦ Start by looking at pictures of incredible, elaborate cakes online or in books. Discuss what makes them look so amazing. Ask questions like: "*What shapes do you see?*" "*How do you think they made the frosting swirls or the flowers?*" "*What theme would you choose for your own incredible cake?*" 2. **Explore - The Blueprint (10-15 min):** ◦ Provide the student with a pencil and paper. Their task is to be a "Cake Architect." ◦ Ask them to sketch a design for their cake. Encourage them to think about: ■ How many layers (tiers) will it have? ■ What color will the "frosting" be? ■ What kind of decorations will it have? (Sprinkles, flowers, drips, candles?) ■ What is the name of their cake creation? (e.g., "The Unicorn Volcano Surprise," "The Chocolate Galaxy Explosion"). **Part 2: The Construction Zone (25-30 minutes)** 1. **Explain - Building the Foundation (15 min):** ◦ First, choose the base container(s). If making a tiered cake, stack and glue the boxes together. ◦ Guide the student through the process of "frosting" the cake base. This involves measuring and cutting a large piece of construction paper to wrap around the sides of the container. This is a great practical math application! ◦ Secure the paper "frosting" with glue or tape. Cut a circle or square for the top and glue it on. 2. **Elaborate - Creating the Decorations (10-15 min):** ◦ This is where problem-solving shines. Challenge the student: "*How can we make paper look like piped frosting?*" ◦ **Demonstrate a few techniques:** ■ **Frosting Swirls:** Cut thin strips of paper and wrap them tightly around a pencil to create curls. ■ **Drips:** Cut a wavy, dripping pattern from a piece of paper and glue it around the top edge of a cake layer. ■ **Sprinkles:** Use a hole punch on different colored paper, or simply snip tiny rectangles to create paper sprinkles. ■ **Roses:** Cut a paper circle into a spiral, then roll it up starting from the outside edge to create a simple, beautiful rose. **Part 3: The Grand Decoration (20-40 minutes)** 1. **Elaborate - Final Touches (20-40 min):** ◦ Let the student take the lead! Using their sketch as a guide, they will now add all the pre-made and new decorations to their cake. ◦ Encourage them to use the various embellishments (glitter, pom-poms, ribbons) to make their cake truly spectacular. This is a time for pure creativity and artistic expression. **Part 4: The Presentation (5 minutes)** 1. **Evaluate - The Bake-Off Showcase:** ◦ Once complete, have the student present their creation. ◦ Ask them to share the name of their cake and describe its features. ◦ Ask reflective questions: "*What was the most challenging part of making your cake?*" "*What part are you most proud of?*" "*If you made another one, what would you do differently?*"

Differentiation & Inclusivity	• **For extra support:** ◦ Provide pre-cut paper strips and shapes. ◦ Focus on a single-layer cake to simplify the construction process. ◦ Offer more direct guidance on how to attach pieces and suggest specific decoration ideas. • **For an extra challenge (Extension):** ◦ Challenge the student to build a cake with three or more tiers that tells a story or follows a complex theme (e.g., a fairytale castle, a scene from a favorite book). ◦ Ask them to create a "cut slice" on the side of the box that shows the different paper "layers" and "fillings" inside the cake. ◦ Have them write a creative recipe for their paper cake, listing the "ingredients" (materials) and "baking instructions" (construction steps).
Assessment	Assessment is informal and based on observation and the final product. • **Process Checklist:** Did the student successfully sketch a plan? Did they measure and cover their base? Did they attempt to create 3D decorations from 2D paper? • **Final Product Review:** Does the final cake reflect the student's initial design? Does it show creative effort and fine motor skill application? • **Student Reflection:** The student's answers to the presentation questions will reveal their understanding of the process, their problem-solving skills, and their pride in their work.