

GINGERBREAD HOUSE STEM

➤ 5 DAY LESSON

➤ HANDS ON ACTIVITY

➤ EASY TO TEACH

➤ SPED+ELEMENTARY



Caroline Koehler

STEM GINGERBREAD HOUSE DESIGN

Gingerbread House Builder Guide

I recommend giving each student a washed, rinsed, and dried empty milk carton for the house construction. Staple the open holes.

Flipping a bowl upside down, use a popsicle stick to dip into icing and spread it on the bottom of the milk carton. Then press the carton onto the base of the bowl creating a pedestal for the house to stand on.

Take the graham crackers and break them into squares.

Next, use a popsicle stick to spread icing across the milk carton. Add the graham crackers.

Continue using icing, graham crackers, and candy to decorate the house.

Place houses into paper bags with students' names to send home. I typically remove the pedestal bowl to do this.

*Feel free to do this activity without the milk carton base. Simply note that the activity will be more challenging and frustrating without a structure to build upon.

Gingerbread House Design

Gingerbread House Draw your house below.

Materials	# of squares	#
Types of candy		
House's name		

Our students will be designing and making their own candy houses this month for our STEM activity. If you are available to send white frosting, graham crackers, assorted candy, baby wipes, or Stenfloine tools to your name.

A second note will be sent home later indicating what supply for you to house creations.



I can send in supplies for the gingerbread houses!

Parent's Name: _____

Student's Name: _____

All send out what to send in the next week!

Gingerbread House Picture Guide

Add icing to bottom of bowl. Press milk carton on top.



Ice the sides of the milk carton. Add graham crackers.



Ice the bottom of candies and add to the house.



Gingerbread Houses

1.	Research gingerbread house designs.
2.	Create a design of your house.
3.	Use at least 3 types of candy.
4.	Use house materials to make a minimum of 16.
5.	Use at least 5 colors in your house.

Gingerbread Houses

If you are able, please visit us for our gingerbread house gallery walk at school. Our students have designed and built their own houses. Come to enjoy the houses and grab a sweet treat.

When: Friday, December 16th @ 1:30 p.m.

Where: Your child's classroom, #123

Who: Moms, Dads, Grandparents, Siblings, Aunts, Uncles, Friends, etc.

Why: To see student-made gingerbread houses.

*Please make sure you have a volunteer background check on file in the school's front office.

Math Vocabulary

6.	Create and identify an acute angle.
7.	Add geometric shapes to your house.
8.	Make one part of your design symmetrical.

Math Vocabulary

- Research
- Design
- Acute angle
- Right angle
- Obtuse angle
- Geometric shapes
- Type
- Create
- Minimum
- Maximum
- Material
- Pattern

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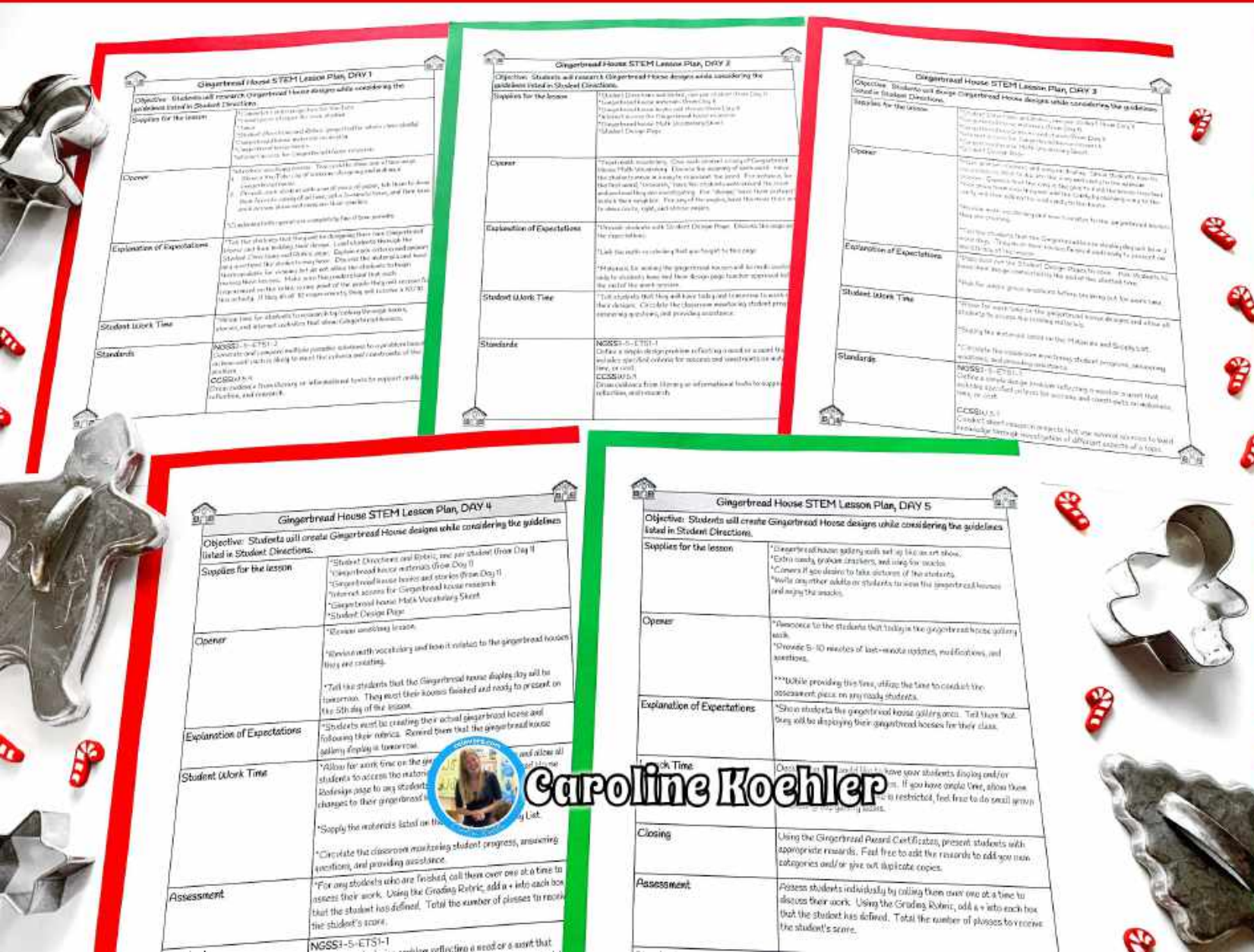
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Gingerbread House STEM Lesson Plan, DAY 1	
Objective: Students will research Gingerbread House designs while considering the guidelines listed in Student Directions.	
Supplies for the lesson	*Computer (video projection for YouTube) *1 small piece of paper for each student *Timer *Student Directions and Rubric (projected for whole class ideally) *Gingerbread house materials on display *Gingerbread house books *Internet access for Gingerbread House research
Opener	*Introduce weeklong lesson. This could be done one of two ways. 1. Show a YouTube clip of someone designing and making a Gingerbread house. 2. Provide each student with a small piece of paper, tell them to draw their favorite candy of all time, set a 5-minute timer, and then have each person show and compare their candies. *Combining both openers is completely fine if time permits.
Explanation of Expectations	*Tell the students that they will be designing their own House and then building their design. Lead students through Student Directions and Rubric page. Explain each criterion and any questions the students may have. Discuss the materials that are available for viewing but do not allow the students to begin making their houses. Make sure they understand that each requirement on the rubric is one point of the grade they will receive for this activity. If they do all 10 requirements, they will receive a 100%.
Student Work Time	*Allow time for students to research by looking through stories, and internet websites that show Gingerbread houses.
Standards	NGSS3-5-ETS1-2 Generate and compare multiple possible solutions to a problem and how well each is likely to meet the criteria and constraints. CCSSW.5.9 Draw evidence from literary or informational texts to analyze a topic, text, or issue, reflecting on what you have read, heard, seen, or tasted.

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