



Baking & pastry arts

Volume 39 | Gr. 6–8

Time: 3 days
(40–45 min. class periods)



National FCS Standards for Food Production and Services

8.2 Demonstrate food safety and sanitation procedures.

8.2.7 Demonstrate safe food handling and preparation techniques that prevent cross contamination from potentially hazardous foods, between raw and ready-to-eat foods, and between animal and fish sources and other food products.

8.5 Demonstrate professional food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.

8.5.3 Utilize weights and measurement tools to demonstrate knowledge of portion control and proper scaling and measurement techniques.

8.5.10 Prepare breads, baked goods, and desserts using safe handling and professional preparation techniques.

Common Core Standard for English Language Arts

CCSS.ELA-LITERACY.WHST.9-10.4: Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

CCSS.ELA-LITERACY.W.11-12.2.D: Use precise language, domain-specific vocabulary, and techniques such as metaphor, simile, and analogy to manage the complexity of the topic.

Objectives

Students will...

- Identify the function of a variety of ingredients used in common baking recipes
- Develop analogies relating the baking terms with other common themes
- Demonstrate basic baking techniques in creating a given recipe, using safety and sanitation principles
- Use technology to create a visual recipe, while listing the function of each ingredient used in the recipe

Materials list

- Chart/Worksheet for Day 1 Activity (p. 3)

Day 1

Introduction (5–10 minutes)

Introduce the lesson by asking students what are some common ingredients used in baking. List these on the board. Examples should include things like flour, sugar, eggs, etc. Then ask students what they think would happen if one or more ingredients wasn't present. For example, what if we baked a recipe without using flour? Eggs?

Activity (25–30 minutes)

Working in pairs, have students complete the chart. In addition to listing the function of the ingredient, they should create an analogy, like the example provided.

Closure (10–15 minutes)

Students can report on their findings. Discuss the functions of the ingredients and the analogies students have created.

Day 2

Introduction (5 minutes)

Go over what the purpose of today's lab is — to see the importance of individual ingredients in baking. Each group will have a different recipe to create and then compare the results of each group.

Activity (35 minutes)

Provide each lab group with a different recipe. Suggestions for this include one group with the control recipe, one with half the amount of flour, one with half the amount of sugar, one with half the amount of fat, one with half the amount of leavener, one with no egg, and one with no flavoring (vanilla, salt, berries, etc.). A basic recipe to use might be for chocolate chip cookies.

Closure (5–10 minutes)

As the groups finish their recipes, have students bring them to the front and place with the label based on their modification. Make sure students are cleaning as they are baking and others are finishing the lab. When all groups are finished, compare the different products that were produced and have students relate to the previous day's discussion. Students may taste test and evaluate as desired. Save one baked item from each group to use for tomorrow's lesson.



Day 3

Introduction (5 minutes)

Remind students of yesterday's lab. Ask them to report on the results — how did each lab's baked item differ? Use the baked items remaining to show and remind students of the products created.

Activity (35–40 minutes)

With a partner, students will create an informational poster about the function of ingredients. Give each group a new standard recipe (no modifications) to base the poster on. An idea to create the poster would be to divide the space in half, drawing the food item from recipe and a house (or another item to use as an analogy) on each side, labeling the ingredients and the comparative item on the other side. Students can be creative in the manner in which they choose to present the information, but the ingredients, their functions, and analogies should be used.

Closure (5 minutes)

Remind students that baking is a science, and following recipes is vital to the success of the recipes. Ask students to explain what might happen if other ingredients were left out of recipes, or what might happen if too much of an ingredient was used.

Baking & pastry arts – worksheet

Name: _____ Date: _____

Ingredients	Function in a Recipe	Analogy
Flours	Provide bulk and structure; thicken liquids (for puddings and pie fillings); prevent foods from sticking.	Flour is to a cake as beams and walls are to a house.
Sugars and Sweeteners		
Fats		
Eggs		
Flavorings		
Leaveners		