

# Types of Sugars: Samples & Descriptions

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Points: /10

"Sugars" are mono- or disaccharides- simplex carbohydrates used in baking. In the past, sugar almost always referred to white granulated sugar derived from sugar cane. Today, sugar comes from both sugar cane and sugar beets. Sugars exist in various types and are used in a variety of ways to make baked goods delicious.

Explore More! Visit the Home Baking Association Glossary for more about sugar [HomeBaking.org/glossary/#s](http://HomeBaking.org/glossary/#s) or see Types of Sugar explained [sugar.org/sugar/types/](http://sugar.org/sugar/types/)



Instructions: Below are five common types of sugars. Write a description for each type of sugar. Also attach a sample of the type of sugar indicated.

<b>Brown Sugar (Dark and Light)</b>	
<i>Attach a sample here</i>	<i>Describe</i>
<b>Granulated Sugar</b>	
<i>Attach a sample here</i>	<i>Describe</i>
<b>Confectioner's Sugar</b>	
<i>Attach a sample here</i>	<i>Describe</i>
<b>Molasses</b>	
<i>Attach a sample here</i>	<i>Describe</i>
<b>Coarse Sugar</b>	
<i>Attach a sample here</i>	<i>Describe</i>

# Sugar Functions Chart

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Points: /10

Sugars provide sweetness and change the physical properties of a baked good. Depending on what techniques and ingredients are used, the sugar functions differently. The chart below includes the variety of functions that sugar can perform.

Instructions: Describe how each function is performed and provide at least one example of a baked good that engages the function. The first function is done as an example.

**Need help?** Check out **Sugar's Functions in Baked Goods** [sugar.org/resources/video/](http://sugar.org/resources/video/) or **How Different Sugars Affect Baking Goods** [chsugar.com/baking-tips-how-tos/how-different-sugars-affect-baking](http://chsugar.com/baking-tips-how-tos/how-different-sugars-affect-baking)

Sugar Function	Description	Examples of Baked Goods
Browning	Sugar in any form causes a brown color on the crust when baked. When the surface becomes hot, the sugar starts to caramelize.	Add milk to any product, most commonly yeast bread or pies. The lactose will aid in caramelization and browning.
Aeration		
Tenderness		
Moisture Retention		
Egg Foams: Tenderizer & Stabilizer		
Spread		
Fermentation		
Caramelization		
Sweetness		

# Sugar Detectives: Gathering the Clues Lab Preparation Sheet

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Kitchen: 1 2 3 4

Instructions: Before completing the sugar detective lab, answer the following questions.

1. Read through the entire recipe that you will be preparing in your lab. What questions do you have relating to the ingredients, measurement, or baking techniques used?

2. Circle the type(s) of sugar used in the recipe.

*Confectioner's Sugar*

*Granulated Sugar*

*Brown Sugar*

*Molasses*

*Coarse Sugar*



3a. What function do you predict the sugar serves?

3b. What clue(s) does the recipe give that indicates sugar's function(s)?

# Sugar Detectives: Evaluating the Evidence

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Name:

Date:

Points: /20

Instructions: After completing your lab, evaluate your own lab first using the questions below. Use the Sensory Analysis Form on page 4 of **Matter of Taste** [homebaking.org/wp-content/uploads/2019/07/final\\_kitchenscience-1.pdf](http://homebaking.org/wp-content/uploads/2019/07/final_kitchenscience-1.pdf) to assist with descriptive categories.

1. Describe the sensory characteristics of the recipe. What does it look like? Taste like? Feel like? Smell like? Be descriptive. (3 points)
2. How would the sensory characteristics of the recipe change if the sugar was removed? Remember to include taste, texture, and appearance changes. Explain why. (3 points)
3. Based on the prepared products, were the sugar thieves correct? Is sugar not important to recipes? Explain. (2 points)
4. Why do you think people typically think the only function of sugar is sweetness? (1 point)
5. Sugar comes from a variety of forms. Provide a list of types of sugar that must be protected from sugar thieves. (5 points)
6. Write one persuasive paragraph in response to the sugar thieves claim that sugar is not needed. (6 points)

# Solving the Sugar Mystery: Type & Function of Sugars

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Points: /16

**Instructions:** Each recipe uses different types of sugar in a variety of ways to complete different functions. Ask questions of each lab group, read through their recipe, and taste the product. Record your “clues” in the column. Refer to the function chart to help you identify the function. After gathering your clues, solve each sugar function mystery!

Sugar Mystery to Solve	Clues	Mystery Solved!
Yeast Bread		Type of sugar(s) used:  Function(s) of sugar(s):  I know this because:
Vanilla Cream Cake with Quick Caramel Frosting		Type of sugar(s) used:  Function(s) of sugar(s):  I know this because:
Molasses Ginger Cookies		Type of sugar(s) used:  Function(s) of sugar(s):  I know this because:
Angel Food Cake		Type of sugar(s) used:  Function(s) of sugar(s):  I know this because: