

THE SCOOP ON ICE CREAM

This month's issue of ASK combines history, international studies, recipes, and BRAIN FREEZE! The articles contained in this guide concentrate on sweet, cold ice cream. Young readers will travel around the world to discover how this dessert varies from place to place, as well as learn how to whip up a batch for themselves.

CONVERSATION QUESTION

Who screams for ice cream?

TEACHING OBJECTIVES

- Students will learn about the history of America's favorite treat, ice cream.
- Students will learn about the different ingredients that make ice cream in countries around the world.
- Students will learn the about the materials, ingredients, and procedures for making ice cream.
- Students will examine problem-and-solution relationships.
- Students will obtain information from a nonfiction text.
- Students will demonstrate the ability to properly sequence and explain a studied process.
- Students will use graphics and words to design their own ice cream truck.
- Students will plot locations on a world map.
- Students will utilize whole numbers and fractions to scale given measurements.



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and crosscurricular activities.

SELECTIONS

We All Scream for Ice Cream Expository Nonfiction, ~650L
Ice Cream Around the World Expository Nonfiction, ~650L
Make Your Own Ice Cream Procedural Text, ~650L

We All Scream for Ice

Cream

pp. 10–13, Expository Nonfiction

"You do the Hokey Pokey and you turn yourself around, and that's what it's all about!" Students will learn why ice cream IS what it's all about. This article "churns" up interesting information about America's most popular dessert.



RESOURCES

Sweet Solutions

OBJECTIVES

- Students will learn about the history of America's favorite treat, ice cream.
- Students will examine problemand-solution relationships.
- Students will use graphics and words to design their own ice cream truck.

KEY VOCABULARY

- churn (p. 11) a container or machine in which ingredients are shaken and stirred to make ice cream
- *cupboard* (p. 11) a closet with shelves for dishes and cups
- hauled (p. 10) pulled with force; moved by dragging
- *penny-licks* (p. 13) small glasses that ice cream was sold in (early 1900s)

ENGAGE

Conversation Question: Who screams for ice cream?

Play an audio recording of the "Hokey Pokey." Invite students to participate in the dance. Discuss how the song is immediately recognizable. Tell students that the Hokey Pokey is more than a nonsense rhyme and ask if anyone knows what it means. List responses. Then read the speech bubble on page 10 for clues to its actual meaning. Have students use this information to make more informed guesses.

INTRODUCE VOCABULARY

Post and discuss the key terms. Be sure that students understand the definitions before reading the article. Tell students that they will need to use all of the vocabulary words when answering the second question in the Read & Discuss section below.

READ & DISCUSS

Reinforce comprehension of the facts presented in the article by using the following prompts to direct discussion.

- Why was sugar kept in a locked cupboard?
- What actions had to be taken if George Washington wanted ice cream for dessert? (Use key vocabulary in your explanation.)
- Why did Americans first call ice cream, "Hokey Pokey"?
- How was ice cream spreading germs in the early 1900s?
- Why was the first ice cream truck called "Good Humor"?

CONCEPT/SKILL FOCUS: Problems & Solutions

INSTRUCT: Inform students that they will be rereading the article with a partner and highlighting passages that depict how problems regarding the making and storage of ice cream were solved. Distribute copies of the graphic organizer, *Sweet Solutions*, and tell students that they will be responsible for recording the problem/solution relationships from the article. Pairs should discuss their findings as they complete their work and make changes as necessary.

ASSESS: Review the information that the students listed on their charts. Evaluate the thoroughness and accuracy of their statements.

EXTEND

Art Instruct students to return to pages 12–13 to study the photographs of ice cream trucks. Discuss the commonalities (compact size, bright colors, menu board). Distribute large pieces of paper to pairs of students and have them design their own ice cream truck. Remind them to include the important components such as a name, item list, prices, and a serving window.

Problems & Solutions

Sweet Solutions

Refer to the article, "We All Scream for Ice Cream," to record the problems of the ice cream–making process and how they were solved.

Problems	Solutions
Making ice cream was hard work. George Washington had to tell his cook before breakfast if he wanted ice cream after dinner because a lot of preparation was needed.	Over the next 100 years, a crank-handled churn was invented and ingredients became cheaper.
Most homes did not have refrigerators.	
	Harry Burt put a stick into his chocolate-covered ice cream bar.

Ice Cream Around the World

pp. 16–17, Expository Nonfiction

Milk, sugar, and . . . tapioca flour? This article takes young readers on a journey to foreign lands to explore how ice cream is made around the world.



RESOURCES

• The Land of Yummm

OBJECTIVES

- Students will learn about the different ingredients that make ice cream in countries around the world.
- Students obtain information from a nonfiction text.
- Students will plot locations on a world map.

KEY VOCABULARY

- *custard* (p. 17) a dessert made with milk, eggs, and sugar
- tree gum (p. 17) a sticky material or a sap that comes from some woody plants
- vendor (p. 16) a person offering something for sale, especially a trader in the street

ENGAGE

Conversation Question: Who screams for ice cream?

Ask your students to list the ingredients for ice cream. Write the responses on the board. Expand the discussion by asking if anyone knows the process for making ice cream and if anyone has made a batch at home. Take a quick survey of favorite flavors and begin reading.

INTRODUCE VOCABULARY

Post the key vocabulary terms on the board. Have the students use resources to define them and then display the given definitions. Ask the class to predict the content of the article. Then display the title, "Ice Cream Around the World," and reveal the questions below.

READ & DISCUSS

Post and discuss the questions prior to reading. Read the article aloud, pausing when answers to the questions are revealed.

- Which country's ice cream is most like the ice cream in the United States?
- How is the ice cream in Germany made to look like spaghetti?
- Which two countries typically drink their ice cream according to this article?
- Which country uses a metal tube sunk in snow to make their ice cream?
- What do you think is the most unusual ingredient discussed in the article?

CONCEPT/SKILL FOCUS: Obtaining Information

INSTRUCT: Guide students to obtain information from the text, captions, and photos in the article. Remind them that the article was written to teach readers about the ingredients used for making ice cream in countries all around the world. Introduce *The Land of Yummm* graphic organizer and instruct students to choose the word from the text box that accurately completes the sentence.

ASSESS: Review the answers that the students placed in each sentence. Have them make corrections if necessary.

EXTEND

Geography Instruct students to reread the article with a partner and to highlight all of the geographical locations contained in the text. Provide each pair of students with a blank map of the world and have them plot and label each location. Challenge students to research the word for "ice cream" in other languages and then plot these countries on the map as well.

The Land of Yummm

Collect information from the text, "Ice Cream Around the World," to decide which word is missing from the sentence. Find clues in the phrases and choose the correct word from the text box and write it on the line.

coconut milk	gelato	bean paste	dondurma
Ecuador	eggs	sharbat	Germany

- 1. ______ is a creamy ice cream made in small batches and served in Italy.
- 2. Russia's plombir is a frozen custard with lots of ______ and cream.
- 3. In ______, a fruit sorbet is made by spinning a pan filled with fruit, sugar, and cream in a bed of ice.
- 4. In Japan, traditional chewy rice cakes are filled with ice cream instead of
- 5. A frosty drink made with snow, honey, and fruit juice is called ______.
- 6. Vanilla ice cream is pressed through a pasta maker so it looks like a plate of spaghetti in
- 7. Turks add powdered tree gum for a chewy ice cream called ______.
- 8. Water buffalo milk or ______ is thickened with tapioca flour and served on bread in the Philippines.

Classification: *Put the words from the text boxes in the correct category.*

Country	v:	
000	,.	

Ingredient: _____

Foreign word for ice cream: _____

Make Your Own Ice Cream

pp. 22–23, Procedural Text

Mix it, squish it, and shake it! This article provides simple directions on how students can make their own ice cream at home using simple ingredients. A nondairy tweak to the recipe is also included.



RESOURCES

• Shake but DON'T Bake!

OBJECTIVES

- Students will learn how to make ice cream.
- Students will demonstrate the ability to properly sequence a studied process.
- Students will utilize whole numbers and fractions to scale given measurements.

KEY VOCABULARY

- *cup* (p. 22) a unit of measure that equals 1/4 of a quart or 0.24 metric liters
- *gallon* (p. 22) a common unit of capacity equal to 4 quarts or 3.79 metric liters
- *quart* (p. 22) a unit of capacity equal to 1/4 of a gallon or 0.94 metric liters

ENGAGE

Conversation Question: Who screams for ice cream?

Tell the students that this article is a procedural text that provides instructions for making ice cream. The ingredient list uses many kinds of measurements, including *teaspoon (tsp)* and *tablespoon (tbsp)*. Post the following equivalent on the board: 1 tbsp = 3 tsp. Display the following math conversion problem: *If a recipe calls for 6 tbsp of water, 2 tsp of milk, and 1 tbsp of oil, how many total teaspoons of liquid are needed? (18+2+3=23 teaspoons)*

INTRODUCE VOCABULARY

Post and review the vocabulary words. As per all dictionaries, reiterate that ASK magazine always posts the key terms in alphabetical order for easier reference. Have students rewrite the words and definitions so that they are listed by measurement amounts from smallest to largest.

READ & DISCUSS

Pose the following questions to the students to reinforce comprehension of details from the text.

- Other than the ingredients, what supplies do you need to make ice cream?
- How long should you shake and squish together the mixture in the bag of ice?
- Which steps should you do over a sink? Why?
- \circ $\;$ Why should you wrap a cloth around the icy bag?
- How can you make the ice cream firmer?

CONCEPT/SKILL FOCUS: Sequence and Process

INSTRUCT: Instruct pairs of students to reread the ingredient list and directions for making ice cream. Elicit from the students that it is necessary to follow recipes step by step and discuss why this is the case. Distribute the *Shake but DON'T Bake!* graphic organizer. Direct the class to refer back to the article and to properly sequence each step and to rewrite the procedure in their own words.

ASSESS: Circulate as students are working on the graphic organizer and discuss the information in the article. Collect the completed work to further evaluate the students' ability to sequence and explain a studied process.

EXTEND

Mathematics Instruct students to study the recipe on pages 22 and 23 for homemade ice cream. Have them consider the ingredients and the amounts and guide them to understand that this recipe is for one serving of ice cream. Discuss the mathematical term "scaling." Challenge students to rewrite the recipe so that it could serve two, four, and ten people.

Sequencing & Process

Shake but DON'T Bake!

Use information from the article, "Make Your Own Ice Cream," to rewrite the process for making America's favorite sweet treat.

Steps	Procedure
STEP 1	
STEP 2	
STEP 3	
STEP 4	
STEP 5	
STEP 6	