

Trains: All Aboard

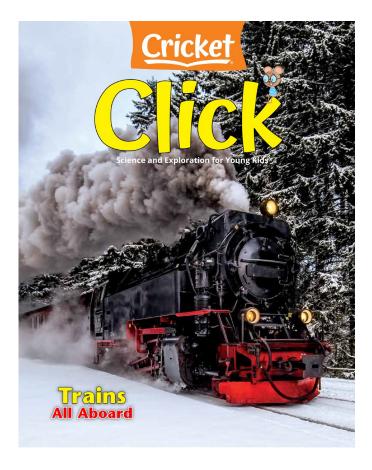
Buy a ticket and ride the rails with this month's issue of CLICK magazine. Students will learn how trains can transport everything--from freight to friends--and provide an exciting adventure along the way.

CONVERSATION QUESTION

How are trains useful?

TEACHING OBJECTIVES

- Students will learn about the features and functions of a variety of trains.
- Students will learn about the process of transporting freight.
- Students will learn about a young girl's experiences traveling aboard an overnight train.
- Students will collect evidence from the text to produce accurate statements.
- Students will obtain and recall information.
- Students will examine how information is processed using the five senses.
- Students will use subtraction to solve a mathematical equation.
- Students will identify words that make the long "a" sound.
- Students will become familiar with famous landmarks of Washington, D.C.



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

SELECTIONS

- Train Spotting
 Expository Nonfiction, ~700L
- At the Freight Yard
 Expository Nonfiction, ~1100L
- Rosie Rides the Train
 Personal Narrative, ~700L

Train Spotting

pp. 8-10, Expository Nonfiction

Young students will enjoy reading the rhyming text that details the function and speed of a variety of trains.



RESOURCES

Collecting Evidence

OBJECTIVES

- Students will learn about the features and functions of a variety of trains.
- Students will collect evidence from the text to produce accurate statements.
- Students will use subtraction to solve a mathematical equation.

KEY VOCABULARY

- glide (p. 10) to move in a smooth way
- rapid transit (p. 10) a system of buses and trains used in cities to quickly bring people to and from places
- route (p.10) a path of travel

ENGAGE

Conversation Question: How are trains useful?

As a prereading activity, begin a brainstorming web with the word *train* in the center. Activate prior knowledge by having the students assist in contributing information to the web. Encourage them to think about sights, sounds, and real-life experiences with trains. Post the title of the article, "Train Spotting" and prepare to read.

INTRODUCE VOCABULARY

Post and discuss the three vocabulary words and definitions. Have students Think-Pair-Share with a partner. Give them the following brainstorming directives, one at a time:

- Discuss things that glide
- Discuss why rapid transit is a good idea for cities
- Discuss regular routes you travel

READ & DISCUSS

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

- 1. Which trains are powered by boiling water?
- 2. How do rapid transit trains keep people away from street traffic?
- 3. What do maglev trains use to glide above their tracks?
- 4. Would you see more trains in the city or in the country? Why?
- 5. Where could you see a small train that goes round and round a single route?

SKILL FOCUS: Collecting Evidence

INSTRUCT: This article presents the reader with an abundance of information regarding different types of trains. Tell students they will look for errors in summary statements. Then they will collect evidence to help them to make the statements accurate and true. Explain that they will need to consult the article to gather the evidence. Distribute the *Collecting Evidence* graphic organizer to students and review the instructions. (Note: The activity can be done in pairs, groups, or as a whole class activity.)

ASSESS: The objective of this lesson is to allow students to practice the skills of discriminating information and collecting evidence. Create dialogue as students are working on their charts. Then collect organizers to evaluate individual understanding

EXTEND

Mathematics The article explains that steam trains were first used more than 200 years ago. Show students how to subtract 2 hundreds (200) from the current year to reveal when steam trains were first used. Discuss with students how life in the United States might have been different 200 years ago. Then provide books and other sources so that students can learn what life was like 200 years ago.

Train Spotting

Full Speed Ahead

Collecting Evidence Collect evidence from the text to replace the **bold** word. Look back at the article and write the word that makes the sentence true in the boxes below.

- 1. Steam trains run on steam made by freezing water.
- 2. Maglev trains use magnets to glide **below** the tracks.
- 3. Trains in big cities often run underground or overhead to keep them separate from **air** traffic.
- 4. The fastest trains in the world reach speeds of more than **500** miles per hour.
- 5. A **singlerail** train runs on one rail, not two.
- 6. People ride rapid transit trains every day to get around in **small towns**.

1.	4.
2.	5.
3.	6.

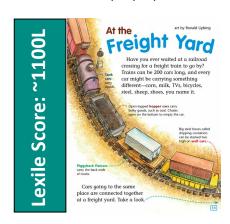


Which train would YOU like to ride?

At the Freight Yard

pp. 11-13, Expository Nonfiction

From bicycles to bananas, freight cars can transport just about anything.
Students will learn how every car on the tracks serves a unique purpose.



RESOURCES

• Obtain and Recall Information

OBJECTIVES

- Students will learn about the process of transporting freight.
- Students will obtain and recall information.
- Students will identify words that make the long "a" sound.

KEY VOCABULARY

- freight (p. 11) goods that are carried by trains, ships, trucks, or airplanes
- bulky (p.11) taking up lots of space
- container (p. 11) an object, such a box or a can, that can hold something

ENGAGE

Conversation Question: How are trains useful?

Show students a clip from freight train video (available on the web). Have students listen to hear the different sounds made by the trains and pay attention to the shapes of the different cars. Discuss the difference between freight trains and passenger trains. Invite students to share their experiences with trains, either riding passenger trains or watching passenger and freight trains pass by.

INTRODUCE VOCABULARY

Post and discuss the key vocabulary words and definitions on the board. Then display the following cloze sentences and have students supply the correct word:

- 1. Workers loaded the _____ onto the train.
- 2. In the gym, the basketballs are stored in a big .
- 3. My big stuffed teddy bear is too _____ to fit in my backpack.

READ & DISCUSS

As a post-reading activity, lead a discussion based on the following questions.

- 1. What do freight trains carry?
- 2. Why do hopper cars have chutes?
- 3. What does the switcher locomotive do?
- 4. What does a camera by the track tell the computer in the control tower?
- 5. What time of day do trains run?

SKILL FOCUS: Obtain & Recall Information

INSTRUCT: Guide students to locate the following highlighted terms in the text and captions of the article: *tank car, hopper car, piggyback flatcar, well car, refrigerator car, locomotive*. Remind students that this article was written to inform readers about the different types of train cars needed to transport freight. Instruct students to cut along the dotted lines of the *Obtain and Recall Information* worksheet. As a whole class activity, review the words and have students match each word with the correct hauling purpose. Allow them to reference the article.

ASSESS: Have students use the cards to play a memory game (matching the type of train to its purpose) with a partner by placing the cards face down in a 4x3 configuration on the tabletop. Circulate as students are playing to see that they are making correct matches.

FXTFND

Phonics Have students say the word *freight* aloud. Direct students to notice the long "a" sound in this word. Then have students work in pairs to come up with other words that have the long "a" sound. Create a word web with "long A words" in the center. Have students add words to the outer circles. Work with students to sort the words into groups based on the letters that make the long A sound.

On the Fast Track

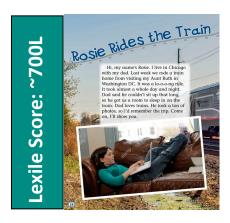
Obtain and Recall Information: Cut along the dotted lines. Use information from the article to match the train car with what it carries from place to place.

tank car	hopper car	well car
refrigerator car	piggyback flatcar	locomotive
This open-topped car carries bulky goods, such as coal. Chutes open at the bottom so it can empty out.	This car can carry the back parts of big trucks.	This car has a huge tank to carry liquids.
This car carries big steel boxes called shipping containers.	This car is nicknamed 'reefer' and it carries things that need to stay cold.	Once the correct cars are connected, this car pulls the train out of the yard.

Rosie Rides the Train

pp. 28-33, Personal Narrative

Pack your bag and take a journey with Rosie as she rides the rails overnight to visit her aunt. Text and photos detail Rosie's experiences along the train ride.



RESOURCES

Information Processing

OBJECTIVES

- Students will learn about a young girl's experiences traveling aboard an overnight train.
- Students will examine how information is processed using the five senses.
- Students will become familiar with famous landmarks of Washington, D.C.

KEY VOCABULARY

- board (p. 29) to get into or onto a train, plane, or bus
- observation car (p. 30) a type of train car with lots of windows that passengers can look out of

ENGAGE

Conversation Question: How are trains useful?

Read aloud to students Chris Van Allsburg's picture book, *The Polar Express*. Point out that although this is a fiction story, it contains realistic elements of a train ride, such as needing a ticket to board a train. Challenge students to notice other realistic details about the train ride. After reading "Rosie Rides the Train," work with the class to compare and contrast the two train adventures using a Venn diagram.

INTRODUCE VOCABULARY

Display the title of the article, "Rosie Rides the Train." Then post and discuss the vocabulary words and definitions. Have students look for photos in the article that show Rosie about to board a train and Rosie sitting in an observation car. Discuss other types of transportation that people board. Ask student to predict what Rosie might see from the observation car.

READ & DISCUSS

Have students study the photographs and listen as you read the text aloud. Reinforce comprehension by posing these questions as a post-reading activity.

- 1. Where did Rosie's train trip begin and end?
- 2. Why did Rosie's dad take tons of pictures?
- 3. What is the difference between the sleeping car and the coach car?
- 4. Which train car was Rosie's favorite place to sit? Why do you think she liked it so much?
- 5. How did Rosie get some privacy on the train ride?

SKILL FOCUS: Information Processing

INSTRUCT: Ask for volunteers to retell the story of Rosie's train ride. Guide students to notice that all five senses are used to describe her experience. Review the five senses and discuss how they help us to gather information about the world around us. Distribute the *Information Processing* graphic organizer and have pairs of students work together to complete it.

ASSESS: Meet with pairs of students to discuss completed organizers. Reread the article with students needing remediation. Guide them to notice sentences that express use of one of the senses.

EXTEND

Social Studies In the article, Rosie rides a train from Chicago to Washington, D.C. Use a map of the United States to show the class the route. Rosie's Aunt Ruth lives in Washington, D.C....who else lives there? *The President!* Show students a book or a video clip that shows some of the famous landmarks in our nation's capital. (White House, Capitol Building, Lincoln Memorial, etc.)

Rosie Rides the Train

Railroad Rosie

Information Processing Use information from the article to write or draw how Rosie used her five senses to describe her train ride. What did Rosie see, hear, smell, taste and touch? Is there any sense she doesn't use to describe her train ride?

