



TEACHING OBJECTIVES

- Students will analyze how cultural characteristics make places both similar and different
- Students will classify a series of historical events and developments as examples of change and/or continuity
- Students will use evidence to develop a claim
- Students will analyze historical events and developments
- Students will analyze forces and interactions
- Students will analyze and interpret data

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

ISSUE THEME

Fire and fire-related technologies have had both constructive and destructive consequences for human societies.

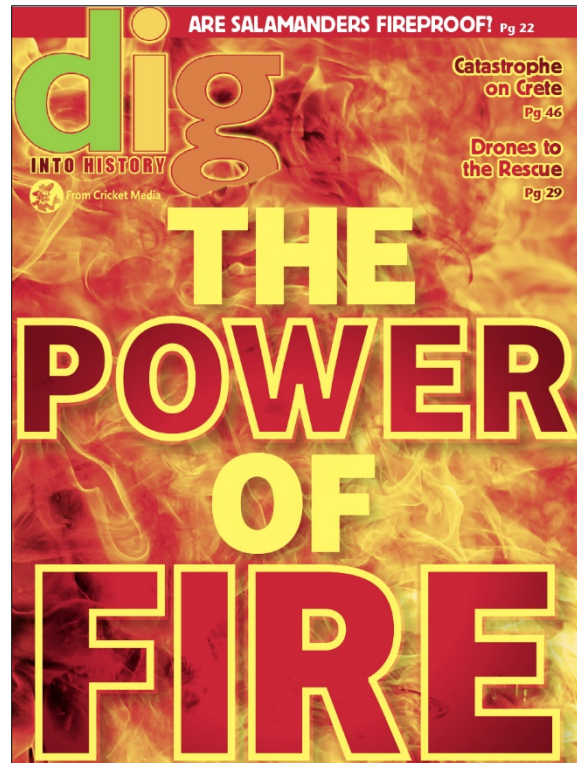
CONVERSATION QUESTION

How have fire and fire-related technologies created change in human societies?

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SELECTIONS

- **Fire Magic**
Expository Nonfiction, ~1150L
- **For Joy . . . and Sorrow**
Expository Nonfiction, ~1050L
- **Out of the Ashes**
Expository Nonfiction, ~1250L

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Fire Magic

pp. 10–12, Expository Nonfiction



THE ARTICLE

This article explains how various human societies have used fire for mystical or religious purposes. Use the article to teach students how to analyze and compare cultural characteristics of different places.

OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will analyze how cultural characteristics make places both similar and different
- Students will analyze historical events and developments

KEY VOCABULARY

- **reaction** (p. 10) a chemical transformation or change
- **atom** (p. 10) the smallest part of an element
- **hearth** (p. 12) an area within a building used for starting and containing fire

ENGAGE

Conversation Question: How have fire and fire-related technologies created change in human societies?

Before reading the article, have students preview the illustrations. Ask them to discuss with a partner the details they notice, specifically noting how fire is used in the images. Finally, have students use what they notice to help them discuss the following question as a class: Why do humans use fire?

INTRODUCE VOCABULARY

Together, review the vocabulary words and read them aloud. Have students copy the words and then scan the article with a partner to locate them. Using context clues, students suggest definitions. Finally, students look up the words and correct any of their misconceptions.

READ & DISCUSS

Have students read the article with a partner. Then display the questions below and have partners use them as prompts for discussion.

- How have people used fire for religious or mystical purposes?
- How has the use of fire for religious or mystical purposes had both positive and negative effects on people?
- In what ways are the uses of fire mentioned in the article alike? In what ways are they different?

CONCEPT FOCUS: Analyze Place

INSTRUCT: After reading the article, have students work in small groups to analyze how the uses of fire discussed in the article are similar and different. Then, ask groups to draw conclusions about how the use of fire creates change within a society. For example, using fire for religious purification might lead to more people wanting to live better lives. This in turn could lead to other outcomes. No answer is wrong in this sense. Students are merely noting possibilities of how fire creates change.

ASSESS: Have students choose two different cultures mentioned in the article. Then have them list one similarity in the way these cultures use fire and one difference in the way they use fire.

EXTEND

Social Studies Explain to students that the Aztec fire ceremony called *Toxihuhmolpilia* was timed to occur when the Pleiades star cluster was directly overhead, which happens every 52 years. Have students conduct research to find examples of other cultures that have ceremonies timed to specific star positions. Invite students to share their research with the class.

For Joy ... and Sorrow

pp. 14–19, Expository Nonfiction

Lexile Score: ~1050L



THE ARTICLE

This article explains how different societies have used fire-related technologies for military purposes, from ancient China to World War II. You can use the article to teach students how to classify events.

OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will classify a series of historical events and developments as examples of change and/or continuity
- Students will analyze forces and interactions

KEY VOCABULARY

- **metallurgy** (p. 17) the science and technology of metals
- **excavated** (p. 18) to have dug out and removed an object
- **napalm** (p. 19) a substance made from aluminum soaps that is used to thicken gasoline

ENGAGE

Conversation Question: How have fire and fire-related technologies created change in human societies?

Before reading the article, ask students to hypothesize the ways that fire and fire-related technologies have had negative consequences for human societies. Help students understand that while humans have used fire for many beneficial purposes, they have also learned to use fire for many destructive purposes, including warfare.

INTRODUCE VOCABULARY

Together, review the vocabulary words and read them aloud. Have students copy these words and then scan the article with a partner to locate them. Using context clues, students suggest a definition. Finally, students look up the words and correct any of their misconceptions.

READ & DISCUSS

Read the article with a partner, and then discuss these questions:

- What are the major events in humans' discovery and use of gunpowder?
- How did gunpowder change how militaries fought?
- Why might modern warfare place a burden on the environment?
Hint: Think about how explosives are made.

CONCEPT FOCUS: Classify Events

INSTRUCT: Explain to students that historical events can sometimes mark a change in how things were done, while at other times they represent a continuation of how things were done in the past. Have students work in groups to classify historical events and developments related to the use of fire and fire-based technologies as examples of either historical change, historical continuity, or both.

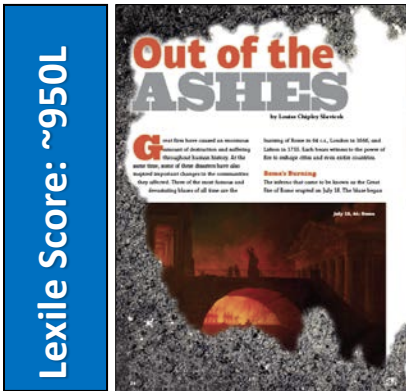
ASSESS: Invite student groups to create an annotated timeline with at least three fire-related developments from the article that represent examples of historical change.

EXTEND

Science Fire and explosion have been used for military purposes for centuries, but they have also been used for scientific purposes. Have students research online and in the library to determine the role that fire and explosive materials play in modern rockets used by NASA to help propel astronauts and other objects into space.

Out of the Ashes

pp. 24–28, Expository Nonfiction



THE ARTICLE

This article explains how fire has both devastated human communities and helped inspire people to rebuild them in better ways. Use it to help students learn how to develop a claim.

RESOURCES

- **Develop a Claim Organizer**

OBJECTIVES

- Students will read and analyze a nonfiction article
- Students will use evidence to develop a claim
- Students will analyze and interpret data

KEY VOCABULARY

- **inferno (p. 24)** a large and dangerous fire
- **blustery (p. 26)** blowing in a stormy and noisy way
- **epidemic (p. 27)** an occurrence in which a disease spreads very quickly and affects many people

ENGAGE

Conversation Question: How have fire and fire-related technologies created change in human societies?

Before reading the article, direct students' attention to the illustration on page 28. Ask them to discuss the details with a partner. Then ask the following question: How does the image show people responding to the crisis?

INTRODUCE VOCABULARY

Together, review the vocabulary words and read them aloud. Have students copy these words and then scan the article with a partner to locate them. Using context clues, students suggest definitions. Finally, students look up the words and correct any of their misconceptions.

READ & DISCUSS

Have students read the article with a partner and then discuss these questions:

- What are some examples of major fires that have led to change in human societies?
- What are some examples of how societies have changed as a result of major fires?
- How can fire lead to positive change for human societies?

CONCEPT FOCUS: Develop a Claim

INSTRUCT: After reading the article, distribute the **Develop a Claim Organizer**. Read aloud the claim, or position statement, listed on the organizer: *Fire leads to both destructive and constructive change in human society*. Have students work in small groups to use facts and details from the article to develop this claim. Remind students to be as detailed as possible when completing the organizer.

ASSESS: Tell students they will be creating and presenting a short, 30-second speech that explains their position on the claim from the **Develop a Claim Organizer**. Explain that the speech should include at least 3 pieces of supporting evidence from the article that support their position.

EXTEND

Technology Ask students to read and watch a short video about how technologies can help city fire departments prevent large fires from spreading, available here:

<http://www.nbcnews.com/tech/innovation/how-technology-can-stop-massive-fires-destroying-cities-n263951>. Then, invite students to imagine future technologies that could also help firefighters control fires within cities. Have students discuss their ideas in small groups.

Develop a Claim

CLAIM: Fire leads to both destructive and constructive change in human society.

Follow the steps below to develop this claim.

1. Identify and record evidence, or facts from the article that support, question, or deny the claim.
2. Determine the conclusions this evidence supports.
3. Decide whether your evidence, when used together, helps you to support, question, or deny the claim. Then write your position on the claim.

Evidence that <u>supports</u> the claim	Evidence that <u>questions</u> the claim	Evidence that <u>denies</u> the claim

What conclusion does the evidence support?	What is your position on the CLAIM?
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