

## Comparing Articles

### Like Black Smoke: The Black Death's Journey

Magazine Article by Diana Childress

### A World Turned Upside Down: How the Black Death Affected Europe

Magazine Article by Mary Morton Cowan

VIDEO TRAILER



KEYWORD: HML7-928

# How do we fight DISEASE?

#### COMMON CORE

**RI 1** Cite textual evidence to support analysis of what the text says explicitly. **RI 5** Analyze the structure an author uses to organize a text. **RI 9** Analyze how two authors writing about the same topic shape their presentations of key information.

Communities can do a lot to stay healthy and prevent disease. But people didn't always know what we know now. The articles you are about to read tell about a time during the Middle Ages when the bubonic plague affected so many people that it changed a society.

**LIST IT** What can we do to encourage good health for ourselves and others? List five guidelines that people can follow to prevent diseases from spreading. Be ready to explain why you included each guideline.



## Meet the Authors

### ● TEXT ANALYSIS: CAUSE-AND-EFFECT PATTERN OF ORGANIZATION

Nonfiction writers often use patterns of organization to help explain particular ideas. One commonly used pattern is **cause-and-effect organization**, which shows the relationship between an event and its cause or effect. Cause-and-effect organization

- can answer the questions “What happened?” and “Why did it happen?”
- uses signal words and phrases, such as *caused*, *because*, *led to*, *for this reason*, *as a result*, and *may be due to*

As you read these two articles, notice how the writers use cause-and-effect patterns to explain key points.

### ● READING STRATEGY: SET A PURPOSE FOR READING

In this lesson, your **purpose for reading** is to compare articles that use cause-and-effect organization. As you read, use a chart to note which topics are covered by each article. You will be asked to do more with this chart after you finish reading.

| Topics Covered       | “Like Black Smoke” | “A World Turned Upside Down” |
|----------------------|--------------------|------------------------------|
| Agricultural changes |                    |                              |
| How disease spread   |                    |                              |
| Loss of life         |                    |                              |
| Trade routes         |                    |                              |
| Worker shortages     |                    |                              |

Review: Interpret Graphic Aids

### ▲ VOCABULARY IN CONTEXT

The following words help provide information about the bubonic plague. Use the ones you know in a sentence. Look up the meaning of the others in a dictionary, and then write a sentence for each of those words.

|             |           |           |            |
|-------------|-----------|-----------|------------|
| <b>WORD</b> | artisan   | cope      | rampage    |
| <b>LIST</b> | bacterium | disarray  | recurrence |
|             | chronicle | hierarchy |            |

## Diana Childress

born 1940

### History Lover

Award-winning author Diana Childress has written numerous books and articles for young people, most of them based on her favorite subject—history.



## Mary Morton Cowan

born 1939

### Many Talents

Articles aren't the only thing Mary Morton Cowan writes for young people. She also writes folk tales, historical plays, photo essays, and puzzles.



### BACKGROUND TO THE ARTICLES

#### Devastation in the Middle Ages

The Middle Ages lasted from about A.D. 500 to A.D. 1500. One of the most significant events of this time period was the spread of the bubonic plague, or the Black Death. Those who caught the disease suffered fever and painful swellings, called buboes, in the lymph glands. The buboes, from which the disease gets its name, were followed by black spots on the skin. Next came a severe, bloody cough, and after that—death. At the time, no one knew what caused the disease.



Authors Online

Go to [thinkcentral.com](http://thinkcentral.com). KEYWORD: HML7-929



Complete the activities in your Reader/Writer Notebook.

## Analyze Visuals ▶

What are the individuals in this image doing?



Burying plague victims in coffins at Tournai in 1349. Flemish manuscript illumination, 14th century. The Granger Collection, New York.

### A SET A PURPOSE FOR READING

Read the title and scan the **subheadings**. What do you expect to learn from this article?

# Like Black Smoke

## The Black Death's Journey

*Diana Childress*

“We see death coming into our midst like black smoke,” wrote the poet Jeuan Gethin,<sup>1</sup> when plague invaded Wales in March 1349. This “rootless phantom which has no mercy” was especially frightening for those who witnessed it because they knew it was somehow contagious, but no one could halt or explain its relentless spread across Europe.

### Eastern Beginnings

The earliest evidence of the Black Death lies in a cemetery in what was once a prosperous town near Lake Issyk-Kul<sup>2</sup> on the fabled Silk Road<sup>3</sup> in Central Asia. An unusually large number of graves there are dated 1338 and 1339. Three headstones mentioning the cause of death provide a clue about why  
10 so many people died: the plague.

Did the Black Death originate near Issyk-Kul? No one knows for sure. Most medieval writers say that the plague began in the East. They name places like Cathay (China), India, and Turkey. Modern historians agree that

1. **Jeuan Gethin** (yā'en gēth'ĭn).

2. **Lake Issyk-Kul** (ĭ'sĭk-kŭl').

3. **Silk Road**: an important trade route on which both goods and ideas were exchanged between China and the countries of western Europe.

the epidemic started in Asia—more specifically, somewhere on the central steppes<sup>4</sup> or in the Himalayan lowlands on the border of India and China. In both regions, the plague **bacterium**, *Yersinia pestis*,<sup>5</sup> has long thrived among wild marmots, ground squirrels, and gerbils.

### On the Move

How did the disease travel from wild rodents to humans? According to **B** early accounts, before the Black Death broke out, earthquakes, floods, and famines devastated Asia. One theory is that these disasters drove wild animals into villages and towns in search of food. Fleas then spread plague germs to rats. . . .

When rats died of the plague, their fleas hunted for new hosts. Since rats nested in the adobe (sun-dried brick) walls and thatched roofs of medieval houses, the next meal for these fleas often came from people. . . . **C**

The disease spread more easily if an infected person’s lungs started filling up with plague bacteria. Then, every cough and sneeze spewed germs into the air, spreading pneumonic plague<sup>6</sup> directly to others.

If they are not among the lucky few who recover, people and rats soon die of the plague, but infected fleas can lurk in a rat’s nest, barnyard manure, or bedding and clothing for many months without eating. A medieval writer was not far wrong when he wrote that “even the houses or clothes of the victims could kill.”

. . . Cloth, grain, furs, and hides kept in rat-infested warehouses soon became delayed-action “plague bombs” waiting to go off. An account tells



Fleas infect rats with *Yersinia pestis*, the plague bacterium. Rats spread the disease to humans. Once human lungs fill with plague bacteria, the germ becomes airborne every time a person coughs or sneezes.

**bacterium** (băk-tîr'ē-əm)  
*n.* the singular form of *bacteria*, microscopically small living things that may cause disease

### **B** CAUSE AND EFFECT

The question in line 18 introduces a cause-and-effect chain of events. What explanation does the author give for the plague’s spread to villages and town?

### **C** CAUSE AND EFFECT

Reread lines 23–25. Why did fleas move on from rats to humans for their next meal?

### COMMON CORE RI.5

### **D** CAUSE AND EFFECT

When a writer describes a relationship that has multiple causes, multiple events, or is a series of causes and effects, the explanations can become complicated. Notice that Childress helps to clarify a series of causes and effects by illustrating it. Use the illustration and the information in lines 26–49 to understand how people spread the disease. Once people have the plague bacterium, what happens when they cough or sneeze?

4. **steppes**: treeless plains in southeastern Europe and in Asia.

5. ***Yersinia pestis*** (yər-sî'n'ē-ə pĕst'ĭs).

6. **pneumonic** (nōō-mōn'ĭk) **plague**: the most contagious and deadly form of the Black Death.

## Language Coach

### Multiple-Meaning

**Words** A word with more than one meaning is known as a multiple-meaning word. Which meaning of the word *galleys* is used in line 60?

- large ships driven by sails and oars
- small, narrow kitchens, such as those in campers
- long, metal trays used to hold type for a printing press

50 how four soldiers learned the hard way about contaminated goods. Looting houses in a deserted town, they stole a fleece off a bed and later slept under it. They were dead by morning.

Commercial caravans, Mongol armies, and other wayfarers<sup>7</sup> “carried” the Black Death in their baggage as they crisscrossed Asia. By 1345, it had traveled from Issyk-Kul to Sarai and Astrakhan,<sup>8</sup> the major cities of the Golden Horde<sup>9</sup> (a part of the Mongol Empire that is today southwestern Russia).

### From Asia to the Mediterranean

At the time, Italian merchants from Genoa and Venice had established trading posts at Kaffa, a city on the Crimean Peninsula that juts out into  
60 the Black Sea. Since the mid-1200s, their galleys had transported Asian horses, furs, and slaves to Syria and Egypt and silks and spices to Italy. When plague began to spread to the Crimea, many of the Europeans tried to escape by sea, but the Black Death sailed with them.

7. **commercial caravans . . . wayfarers:** Commercial caravans are bands of merchants or traders traveling together for safety. Mongols had a large empire covering most of Asia and eastern Europe. Wayfarers are generally people who travel on foot.
8. **Sarai** (sā-rī') . . . **Astrakhan** (äs'trə-kän').
9. **Golden Horde:** a name for the Mongol army.

## E INTERPRET GRAPHIC AIDS

According to the map, in what direction did the Black Death first travel? Note how many continents were affected.



The following summer, plague broke out in Constantinople. From there, it crossed the Mediterranean region. That fall, ships brought the plague to Alexandria, Egypt, one arriving with only 45 of its original crew of 332 men still alive. Another fleet came to Messina, Sicily, its crew so ill that a **chronicle** reports that the men had “sickness clinging to their very bones.”

70 The epidemic reached Genoa on New Year’s Eve 1347 aboard three galleys laden with spices from the East. On discovering that many seamen were sick, the Genoese chased the ships from the port with “burning arrows and engines of war.” Plague-ridden rats, however, had already jumped ship. The galleys sailed off along the coast of France, still hoping to find a place to sell their deadly merchandise.

### Following the Trade Routes

Following 14th-century trade routes, the Black Death swept across Europe, North Africa, and the Middle East. After it assaulted the seaports, smaller boats carried it to neighboring towns and to river ports far inland. It could not be stopped. Although some towns refused entry to travelers from  
80 infected areas, and people learned to mistrust “plague goods,” few noticed the dead rats, and no one thought of the fleas. **F**

Reports of plague in 1348 show how the circles of infection widened. In the east, it hit Cyprus, Aleppo, Damascus, Jerusalem, and even pilgrims

**chronicle** (krŏn’ĭ-kəl)  
*n.* a record of historical events in the order in which they took place

**F CAUSE AND EFFECT**  
Reread lines 76–81. Why did the plague spread around the globe?



visiting Mecca. From Genoa and Venice it crept down the Italian boot toward Florence and Rome. Going west, it struck Marseilles, Tunis, and Barcelona. By June, the epidemic was storming Paris, causing the French royal family to flee to Rouen,<sup>10</sup> where it soon followed. That summer, it overran Germany, Poland, and Hungary and crossed the channel to southern England.

90 Winter did not slow its progress. The weather was unusually mild and wet, perhaps warm enough for fleas living on house rats to remain active. Huddled indoors, people were also exposed to air contaminated both by those suffering from pneumonic plague and by the dust from rodent droppings. **G**

### **G CAUSE AND EFFECT**

What conditions might have caused the plague to spread in winter?

As the disease moved northward through England, citizens of Lincoln wrote wills at 30 times the normal annual rate. At first, the Scots avoided the plague, but when they assembled troops to invade England, pestilence<sup>11</sup> struck, perhaps imported by soldiers from France.

100 The Black Death landed in Scandinavia on a ship carrying wool from London to Norway. The ship had run aground near Bergen because all the crew had died. From there, plague spread across Norway, into Sweden, and across the Baltic Sea to Russia.

### **The Journey Ends**

In 1350, plague peaked in Scotland and Scandinavia, while in southern Spain, it killed King Alfonso XI of Castile. The following year, it stretched to Greenland, where it helped wipe out the Norwegian colony, and to Yemen, at the tip of the Arabian peninsula. In 1353, it closed in on Moscow, killing both the patriarch of the Russian church and the grand duke of Muscovy.

110 Finally, the Black Death petered out somewhere in Kiev, having come almost full circle back to Kaffa. During its long **rampage**, between one-third and one-half of the population of Europe, North Africa, and the Middle East died. No natural disaster before or since has caused such devastation of human life over such a large area. It was one of the greatest catastrophes in human history.

**rampage** (răm'pāj') *n.* a wild or violent outbreak



A priest blesses plague-infected monks. Illumination from *Omne Bonum* (about 1370), Jacobus Anglicus. Ms. Royal 6, E VI, fol. 301. © British Library/akg-images.

10. **Rouen** (rōō-ān'): a city in France, about 84 miles northwest of Paris.

11. **pestilence** (pēs'tē-lens): any disease that spreads rapidly and causes many deaths.

## Comprehension

- 1. Recall** Where do most historians think the Black Death started?
- 2. Recall** How did boats spread the disease?
- 3. Summarize** Summarize how the plague spread from rodents to people.

### COMMON CORE

**RI 1** Cite textual evidence to support analysis of what the text says explicitly. **RI 5** Analyze the structure an author uses to organize a text.

## Text Analysis

- 4. Identify Fact or Opinion** Reread the last statement in the article. Is this sentence a fact or an opinion? Explain why you think so.
- 5. Understand Cause and Effect** During the rampage of the plague, why did people believe that “even the houses or clothes of the victims could kill” (lines 31–52)?
- 6. Analyze Author’s Purpose** What do you think are the main points Childress wants readers to learn from this article? Explain your reasoning.
- 7. Evaluate Events** Create a timeline of the key events that contributed to the spread of the Black Death. Which event do you think was most critical? Support your choice with details from the article.

## Comparing Articles

- 8. Set a Purpose for Reading** Review what you recorded in your chart. Choose one of the topics and describe its cause-and-effect relationship with the plague.

| <i>Topics Covered</i>       | <i>“Like Black Smoke”</i> | <i>“A World Turned Upside Down”</i> |
|-----------------------------|---------------------------|-------------------------------------|
| <i>Agricultural changes</i> |                           |                                     |
| <i>How disease spread</i>   | X                         |                                     |
| <i>Loss of life</i>         |                           |                                     |
| <i>Trade routes</i>         |                           |                                     |
| <i>Worker shortages</i>     |                           |                                     |





Detail of *Triumph of Death* (1597), Jan Brueghel. Oil on canvas, 119 cm × 164 cm. Steiermärk. Landesmuseum Joanneum. © akq-images.

## A WORLD TURNED UPSIDE DOWN: HOW THE BLACK DEATH AFFECTED EUROPE

Mary Morton Cowan

### **A** SET A PURPOSE FOR READING

Reread lines 1–4.

**Paraphrase** the main idea that this article will explore.

**hierarchy** (hī'ə-rār'kē)  
*n.* an organization of people according to rank

**S**ubstantial changes in population often have dramatic effects on society. The bubonic plague, which in just four years killed up to one-third of the people in Europe, almost literally turned Europe's social structure upside down. **A**

Life in the Middle Ages centered around a **hierarchy** called the feudal system. Noble lords lived in castles or manors, which were surrounded by acres of land. The nobles depended on peasants to farm their land. In turn, peasants received protection, shelter, and a small plot of land to plant their own crops. According to the Christian church, the feudal system was God's  
10 plan, and no one questioned the authority of the church.

In the 300 years before the Black Death, the European population tripled. Additional land was cultivated, but food was still scarce. Some peasants left



### ◀ Analyze Visuals

What might the skeletons in this painting symbolize, or stand for?

for a better life in the city, where merchants and craftsmen were beginning to thrive. The now-crowded cities, however, could not handle the overflow of unskilled laborers.

After gunpowder was invented, the lords had found it harder to defend their castles. They also experienced some bad harvests, and many had to **cope** with the consequences of a war between France and England. Yet, they remained in control.

20 **T**hen, without warning, the Black Death swept through Western Europe, killing 25 million people. Some families were wiped out. Large estates were left without heirs. Survivors moved in and claimed any property they could find. Cities and towns lost people by the thousands. Monasteries,<sup>1</sup> which previously had as many as 150 monks, now had only seven or eight. In all, thousands of villages were abandoned. **B**

Agriculture was also in **disarray**. The tools and land were there, but suddenly the workers were missing. Food prices dropped, and there was even a surplus of food where once many had barely had enough to stay alive.

30 Because workers were scarce, peasants who survived the plague now had bargaining power for the first time. Resentment among the working class led to violence and revolt in the centuries that followed, as Europe teetered between the old feudal system and a new economic system.

**cope** (kōp) *v.* to struggle with and act to overcome

### **B** CAUSE AND EFFECT

Reread lines 20–25. What effects of the Black Death does the author describe?

**disarray** (dī's'ə-rā') *n.* a state of disorder; confusion

1. **monasteries:** buildings where religious men called monks live, work, and pray together.

**artisan** (är'tī-zən) *n.* a person who is skilled in a trade

**C CAUSE AND EFFECT**

Reread lines 30–45. What clue words help you recognize the pattern of organization?

**recurrence** (rĭ-kūr'əns) *n.* the act of happening again; return

**D INTERPRET GRAPHIC AIDS**

What was the population of western Europe in the early 1300s?

The shortage of skilled craftsmen caused an industrial crisis. Unlike agricultural workers, craftsmen require long apprenticeships, and now  
40 there were few replacements when any skilled **artisan** died. Reduced production forced prices of saddles, farm tools, and other goods to soar. **C**

This depopulation crisis, however, encouraged technological developments. The most notable labor-  
50 saving invention was the printing press, developed around 1450. One such press replaced hand-copying by hundreds of scribes.<sup>2</sup>

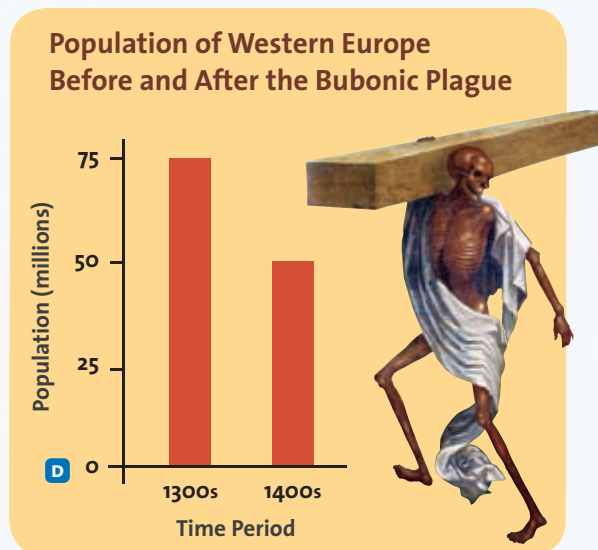
**T**he Black Death affected the entire medieval social structure. When the pestilence returned a few years later, people were even more terrified. Its unpredictable **recurrence** in the following decades was enough to keep Europeans in constant fear. A mood of gloom swept  
60 across Europe, and many began to question the authority of the church. In fact, they began to have doubts about their entire world view. Yet, it was this questioning that led to far-reaching reforms in religion, art, medicine, and science. Without a doubt, the Black  
70 Death forever changed Europe's economic and social structure.

2. **scribes:** people whose job was to copy manuscripts.



Survivors of the plague use a printing press to copy manuscript.

Illumination from *Chants royaux* (about 1500). Bibliothèque Nationale. © akg-images/VISIOARS.



Detail of *Danse Macabre. Pope* (1500s), Bernt Notke. Oil on canvas, 160 cm × 750 cm. St. Nicholas' Church, Art Museum of Estonia, Tallinn, Estonia. © Bridgeman Art Library.

## Comprehension

- 1. Recall** How long did it take for the bubonic plague to wipe out one-third of Europe's population?
- 2. Recall** Why did the depopulation of Europe encourage technological developments?
- 3. Summarize** What was life like in Europe in the Middle Ages before the Black Death swept through?

## Text Analysis

- 4. Identify Author's Main Idea** Writers choose the details that will best support the main idea they want to convey. What main idea is Cowan supporting in this article?
- 5. Examine Cause and Effect** Why did food prices drop after the Black Death swept through western Europe?
- 6. Analyze Graphic Aids** What information does the bar graph on page 938 give you that the text does not?
- 7. Evaluate** Which topics were emphasized in each article? Which article do you think provided the most effective discussion concerning the spread of the disease? Support your opinion with details from the articles.

## Comparing Articles

- 8. Set a Purpose for Reading** Review your completed chart. Then use the information to help you compare the two articles.

| <i>Topics Covered</i>       | <i>"Like Black Smoke"</i> | <i>"A World Turned Upside Down"</i> |
|-----------------------------|---------------------------|-------------------------------------|
| <i>Agricultural changes</i> |                           |                                     |
| <i>How disease spread</i>   | X                         |                                     |
| <i>Loss of life</i>         |                           | X                                   |
| <i>Trade routes</i>         |                           |                                     |
| <i>Worker shortages</i>     |                           |                                     |

### How do we fight DISEASE?

Even today, doctors and scientists disagree about some of the causes of the bubonic plague, so they continue to research this and other historical diseases. Do you think it is important for medical researchers to continue to investigate historical diseases? Explain why or why not.

### COMMON CORE

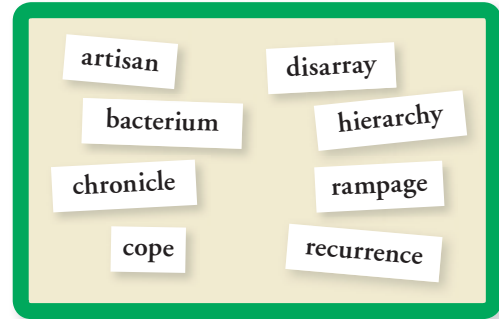
**RI 1** Cite textual evidence to support analysis of what the text says explicitly. **RI 5** Analyze the structure an author uses to organize a text. **RI 9** Analyze how two authors writing about the same topic shape their presentations of key information by emphasizing different evidence.

## Vocabulary in Context

### ▲ VOCABULARY PRACTICE

In each item, choose the word that differs most in meaning from the other words. Refer to a dictionary if you need help.

1. (a) record, (b) listing, (c) chronicle, (d) clock
2. (a) artisan, (b) police officer, (c) firefighter, (d) sanitation worker
3. (a) turmoil, (b) commotion, (c) caretaker, (d) disarray
4. (a) hierarchy, (b) anarchy, (c) chaos, (d) disorganization
5. (a) class, (b) frenzy, (c) rampage, (d) uproar
6. (a) bacterium, (b) germ, (c) pandemonium, (d) microorganism
7. (a) reappearance, (b) renounce, (c) repetition, (d) recurrence
8. (a) instruct, (b) teach, (c) cope, (d) educate



### ACADEMIC VOCABULARY IN WRITING

- area
- domain
- hypothesis
- objective
- resolve

Pretend that you are a survivor of the Black Death. Using several Academic Vocabulary words, write about what has changed in your life and how you hope to resolve the problems you face. Base your story on information in the two articles.

### VOCABULARY STRATEGY: SPECIALIZED VOCABULARY

Recognizing a word that is often associated with disease or its prevention or treatment can help you better understand issues related to health. Ancient Latin and Greek cultures made major contributions to the medical field, so many medical terms come from the Latin and Greek languages. For example, the word *antibiotic* comes from the Greek prefix *anti-* added to the Greek word *biotikus*.

**PRACTICE** Match the word in the first column with its definition in the second column. Refer to a dictionary or a science textbook if you need help.

- |                |   |
|----------------|---|
| 1. virus       | a. medicine for treating infections caused by bacteria      |
| 2. antibiotic  | b. free from germs  |
| 3. pandemic    | c. substance used to build immunity to a disease            |
| 4. inoculation | d. process of administering a vaccine                       |
| 5. vaccine     | e. decrease or disappearance of symptoms of a disease       |
| 6. remission   | f. very small particle that can cause many types of disease |
| 7. sterile     | g. a very widespread or worldwide epidemic                  |

#### COMMON CORE

**L6** Acquire and use accurately grade-appropriate general academic and domain-specific words.

Interactive Vocabulary **THINK** central

Go to [thinkcentral.com](http://thinkcentral.com).  
KEYWORD: HML7-940

## Writing for Assessment

### 1. READ THE PROMPT

In writing assessments, you might be asked to compare and contrast two informational texts that have a similar subject but differ in other ways.

In three or four paragraphs, **compare and contrast** “Like Black Smoke” and “A World Turned Upside Down.” Point out how each article makes use of **cause-and-effect** organization. **Support** your response with details from the two articles.

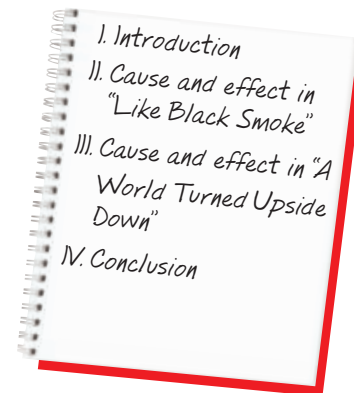
#### ◀ STRATEGIES IN ACTION

1. I have to note **similarities** and **differences** between the two articles.
2. I must **tell** which **key points** each writer explains with **cause-and-effect** organization.
3. I should **give examples** from each article to prove my points.

### 2. PLAN YOUR WRITING

Review the chart you filled out on page 939. Use the chart to help you identify how the articles are alike and different. Write a position statement that conveys your main idea about how the articles compare. Then think about how to best present the similarities and differences.

- Review the articles to find examples and details that support the similarities and differences.
- Create an outline to organize your ideas. The sample outline shows one way to organize your paragraphs.



### 3. DRAFT YOUR RESPONSE

**Introduction** Introduce the topic mentioned in the prompt. Include your position statement.

**Body** Use your chart and outline as guides to writing the key points of your comparison. Support your points with details from the selections.

**Conclusion** Leave your readers with a final thought comparing how each writer used a cause-and-effect organizational pattern to share important information.

**Revision** Use words that make your ideas clear. Proofread your response.