Lesson 13
Comparing Text Structures, Part 2: Cause–Effect, Compare–Contrast

Learning Target

When you compare and contrast how the information in texts is structured, you will better understand the purpose of each text.

Read
How is a house different from a skyscraper? They each have a different structure and purpose. Authors use different text structures for specific purposes, too.

- The purpose of a cause–effect text structure is to tell about events and explain why they happen. Words and phrases like cause, effect, because, and as a result are sometimes used in a cause–effect structure.

- The purpose of a compare–contrast text structure is to describe how two or more things are similar and different. A compare–contrast text structure will frequently use words like both, unlike, similarly, and in contrast.

Comparing texts can help you see their structures and purposes.

Read the passages below. Look for evidence of the structure and the purpose of each one.

Passage 1: Octopuses and squids have ink sacks. When threatened, they defend themselves by shooting a thick cloud of dark ink into the water. Because the ink is thick and dark, it hides octopuses and squids from their attackers. As a result, octopuses and squids have time to escape.

Passage 2: Octopuses and squids live in salt water. Both have blue blood, hard beaks, and eight arms lined with suckers. Octopuses live in dens on the sea floor where they hunt for clams, lobsters, and crabs. In contrast, squids live in the open ocean and eat fish and shrimp.
**Think** What have you learned about text structures? Use the chart below to help you compare and contrast the purposes and text structures of the passages. Include evidence of the structure of each passage.

<table>
<thead>
<tr>
<th>Passage</th>
<th>Author’s Purpose</th>
<th>Text Structure</th>
<th>Evidence of Structure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>2</td>
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**Talk** Share your chart with a partner.
- Which text structure did the author of Passage 1 use?
- Which text structure did the author of Passage 2 use?
- How did each text structure support the author’s purpose for writing the passage?

**Academic Talk**
Use these words and phrases to talk about the text.
- text structure
- compare–contrast text structure
- cause–effect text structure
Why Are the Oceans Salty?

by Anupa Desai

1 For much of history, it was a mystery why the oceans were salty. Different cultures, assuming that the oceans began as freshwater and only later became salty, came up with their own explanations. The Vikings related a story of a sailor dropping a magical salt grinder to the bottom of the ocean. People in the Philippines told of a giant who carried sacks of salt from island to island but then accidentally dropped them all into the sea. Other cultures had similar stories to explain the cause of the ocean’s saltiness.

2 Scientists eventually figured out the truth. The stories were correct in one way: The amount of salt in the ocean has increased over time. Where did all the new salt come from? From the land. Most rocks contain salts, and over millions of years the forces of wind, rain, and ice break down the rocks and release the salts. Rainfall carries the salts to rivers, and the rivers carry the salts into the oceans. As a result, the ocean is salty.

Oceans and Seas

by Richard Green

1 Some people use the words ocean and sea interchangeably, but these words refer to different things. An ocean is an enormous body of salt water, such as the Pacific or the Atlantic. In contrast, a sea is a smaller body of salt water, such as the Mediterranean Sea between Africa and Europe. Oceans are so large that people view them as surrounding the continents. The opposite is true for seas: They are surrounded by other, larger geographic features. Some seas are entirely encircled by ocean: The Sargasso Sea in the Northern Atlantic is an example of this. Other seas, such as Hudson Bay in Canada, are enclosed on some sides by ocean and other sides by land. Finally, a few seas, such as the Caspian in Asia, are completely landlocked within continents. Despite their differences, however, all seas have two things in common: They are made of salt water, and they are smaller than the oceans.
### Think

1. Identify the purpose and text structure of each passage. Then tell what evidence helped you figure out the structure.

<table>
<thead>
<tr>
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<th>Author’s Purpose</th>
<th>Text Structure</th>
<th>Evidence of Structure</th>
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<tr>
<td>“Why Are the Oceans Salty?”</td>
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<tr>
<td>“Oceans and Seas”</td>
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**HINT** Be sure to quote words and phrases from each passage as evidence of its text structure.

### Talk

2. Share your charts. Look at the evidence you found for each text structure. How does each text structure support the author’s purpose? If your partner has good evidence that you do not, add it to your chart.

### Write

3. **Short Response** Explain how the text structure of each passage supports each author’s purpose for writing. Use text evidence to support your response. Use the space provided on page 226 to write your answer.
Both tsunamis (soo NAHM eez) and hurricanes are powerful storms. They flood lands and damage property. Each kind of storm is extremely dangerous.

Tsunamis occur mostly in the Pacific Ocean. They form when a large amount of water is displaced, or moved, by an earthquake or another event that disturbs the floor of the ocean. Such a disturbance creates a series of massive waves. This “wave train” may travel up to 500 miles per hour, destroying everything in its path. Luckily, tsunamis are relatively rare. There are only about six every century.

In contrast, hurricanes may occur on any coastline. Hurricanes form over warm ocean waters during the hotter months of the year. During a hurricane, heavy rains fall, and strong winds blow with speeds of more than 74 miles per hour. The winds rotate around an “eye,” which is the calm center of the storm. In the center, winds are low and skies are clear. On average, a hurricane travels at speeds of only about 15 to 20 miles per hour.

Both tsunamis and hurricanes have earned their names. The term hurricane comes from a Spanish word for “storm.” The term tsunami comes from two Japanese words meaning “harbor” and “wave.” Since 1979, weather agencies have given men’s and women’s names to specific hurricanes. In contrast, weather agencies do not normally give names to tsunamis. Regardless of their names or where the words come from, hurricanes and tsunamis alike are fierce storms that most people would rather not experience.
A tsunami is a series of huge waves. Earthquakes cause many tsunamis. Erupting volcanoes or underwater landslides may also trigger tsunamis. Nearly all tsunamis occur in the Pacific Ocean within the “Ring of Fire.”

Warning signs tell us when a tsunami is approaching. The first warning sign of an approaching tsunami is called *drawback*. The ocean suddenly recedes, or draws back, and then roars forward violently with a chain of extremely high waves. These surging waves can reach from 30 to 100 feet above sea level. They can crash onto land at speeds of 500 miles per hour, causing damage to buildings and injuring or killing animals and people.

There have been many record-breaking tsunamis throughout history. One of the largest tsunamis happened after Krakatoa, a volcano in Indonesia, erupted in 1883. The eruption caused some waves to rise more than 130 feet above sea level. As a result, about 36,000 people drowned.

The most deadly tsunami in modern times occurred in the Indian Ocean in 2004. People in India, Thailand, Indonesia, and other parts of Asia were taken by surprise when the tsunami slammed into the coast. This tsunami left millions homeless and killed more than 300,000 people.

More recently, a powerful earthquake rocked Japan on March 11, 2011. The earthquake caused 60-foot tsunami waves. This resulted in more than 15,000 deaths and more than 25,000 injuries. It destroyed buildings and damaged a nuclear power station. Although Japan has a good warning system, many Japanese could not escape from the dark wall of surging water.
**Think**  Use what you learned from reading the science articles to answer the following questions.

1. The box below gives details on how the articles by Tim Brown and Yuki Tanaka present information.

   **Details**
   - Describes how tsunamis and hurricanes are different
   - Explains what causes tsunamis
   - Explains what causes hurricanes
   - Gives examples of what happens when storms reach land
   - Explains what caused several tsunamis in the past
   - Gives reasons why tsunamis are deadly

   Write details from the list to complete the chart below. Use each detail one time.

<table>
<thead>
<tr>
<th>Article by Tim Brown</th>
<th>Article by Yuki Tanaka</th>
<th>Both Articles</th>
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2. Select one sentence from each article that provides the best evidence of each article’s text structure.

   A. “Such a disturbance creates a series of massive waves.” (“Tsunamis and Hurricanes”)
   B. “In the center, winds are low and skies are clear.” (“Tsunamis and Hurricanes”)
   C. “In contrast, weather agencies do not normally give names to tsunamis.” (“Tsunamis and Hurricanes”)
   D. “A tsunami is a series of huge waves.” (“Tsunami: A Wall of Water”)
   E. “There have been many record-breaking tsunamis throughout history.” (“Tsunami: A Wall of Water”)
   F. “This resulted in more than 15,000 deaths and more than 25,000 injuries.” (“Tsunami: A Wall of Water”)

3. In “Tsunami: A Wall of Water,” how is paragraph 3 different from the ones that come before and after it?

   A. It is the first paragraph that describes a specific tsunami.
   B. It is the last paragraph that explains the causes of tsunamis.
   C. It is the last paragraph that describes famous tsunamis in history.
   D. It is the first paragraph that explains how tsunamis damage buildings.

Talk

4. State the purpose of each passage. Then compare how each author presents information about tsunamis. Use the chart on page 227 to organize your ideas and evidence.

Write

5. Short Response  Compare and contrast the purpose and text structure of “Tsunamis and Hurricanes” with that of “Tsunami: A Wall of Water.” Use details from each passage in your response. Use the space provided on page 227 to write your answer.

HINT Briefly state how the passages are alike. Then discuss how their purposes and structures differ.