

WORDS TO KNOW

structure

cause and effect

sequence

compare and contrast

problem and solution

key concept

Lesson 27

ANALYZE THE STRUCTURE OF A PARAGRAPH 8.RI.CS.5

INTRODUCTION

Real-World Connection

SCIENCE CONNECTION

Josh is passionate about outer space and spends most of his free time either reading about it or building models. Lately, he has been working on a model of the solar system. To complete the model successfully, each individual piece needs to be correctly connected to the next. Although each of these parts has a different function, they all work together to make the whole model work. Josh wonders, "How is the structure of a paragraph like the pieces of a model?" We will practice the skills in **Guided Instruction** and **Independent Practice** and revisit Josh's outer space model to see how it is like a paragraph.

What I Am Going to Learn

- How to analyze in detail a specific paragraph in a text
- How to analyze the role of particular sentences in developing and refining key concepts in a paragraph

What I May Already Know 7.RI.CS.5

- I know how to analyze the structure an author uses to organize text.
- I know how the major sections of a text contribute to the whole text and to the development of the ideas.

Vocabulary in Action

As you learn about analyzing the structure of a paragraph, you will come across these words.

- Text structure refers to how the information in a text is organized. Individual paragraphs in a text can also have certain structures. The structure of a paragraph is how the paragraph is organized. The following are types of structures you might come across in an informational text.



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- Cause and effect describes the reasons why something happened. Words like *therefore*, *as a result*, *because*, and *so* signal cause-and-effect relationships.
- Sequence tells what happened in the order that it happened. Words like *first*, *second*, *then*, and *finally* are often used to indicate chronological order.
- Compare and contrast shows how two subjects are both alike and different. Words and phrases like *the same*, *yet*, *however*, *but*, and *in contrast* are used to show comparison-contrast relationships.
- Problem and solution presents an issue or dilemma and how it might be resolved. Phrases such as the following signal problem-solution relationships: *the question is*, *to solve this*, *one reason for the problem is*, and *one answer to this is*.
- A key concept is what the author wants you to understand after reading the text. An informational text has one or more key concepts. By using specific paragraph and sentence types, the author develops these key concepts.

GUIDED INSTRUCTION

Read the following excerpt about Pluto from Josh's favorite science magazine. Notice how different types of structures work together in sentences and paragraphs to create the structure of the entire text. Underline words in the first paragraph that signal the type of structures used.

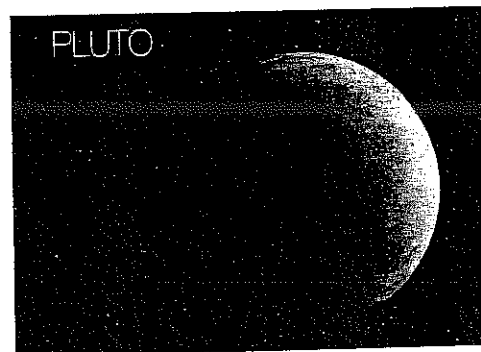
What is Pluto?

Pluto was a planet, then it wasn't, and now it is up for consideration again! It was removed from the list for a few reasons. The first reason is because of its relatively small size, in comparison to Earth or Saturn. Pluto also does not orbit the Sun the way other planets do, but rather it moves in more of an elliptical pattern. Scientists state that because it does not have a clear orbital path around the sun, it may not be a true planet. Lastly, Pluto orbits in a band of debris, rocks, ice, and basic space trash. This means its gravitational field is not strong enough to pull all the debris to its surface or expel it into space. For all these reasons, some scientists do not consider it a planet.

Space probes help scientists identify and discover what is out in space. Many earlier scientists found various stars and objects in space without modern technology, but technology has made it easier to identify smaller and smaller objects. Space probes are very helpful in confirming information from earlier scientists while collecting new information to be studied. A space probe orbited Pluto in 2015 to answer questions about Pluto and its moons. Now, Pluto is considered to be a dwarf planet. A dwarf planet orbits the sun, just like other planets, but it is much smaller.

TIPS AND TRICKS

You can often find signal words within sentences and paragraphs that will help you identify the structure. Circle or underline these signal words when you see them.



Now, read this page from Josh's favorite magazine, *Stargazing*. Try to figure out why these paragraphs were included. Then, answer the question that follows.

The Planets

There are eight official planets: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune. Of these eight planets, Jupiter and Saturn are giants, with Uranus and Neptune about half their size. Mercury, Venus, Earth, and Mars are barely one quarter the size of those giants. Pluto is less than a quarter of the size of Earth.

This size disparity is one of the reasons that Pluto was taken off the list of official planets. Because of its diminutive size, many scientists are stating that it is neither a planet nor a dwarf planet because it is so small, and conclude that it is just another piece of debris that is found in the Kuiper Belt. To further aggravate the issue, one astronomer found an object in the Kuiper Belt that is more than 25% larger than Pluto.

▶ TURN AND TALK

Discuss the organizational structure of each paragraph. Remember, a paragraph can have one or more organizational structures.

▶ HINT, HINT

Which phrase is based on the information in the paragraph?

Part A

Which phrase best describes the purpose of the structure in paragraph 1?

- (A) to explain how the planets became planets
- (B) to show the correct steps of defining a planet
- (C) to explain the problem with calling Pluto a planet
- (D) to compare the size of Pluto to that of other planets

Part B

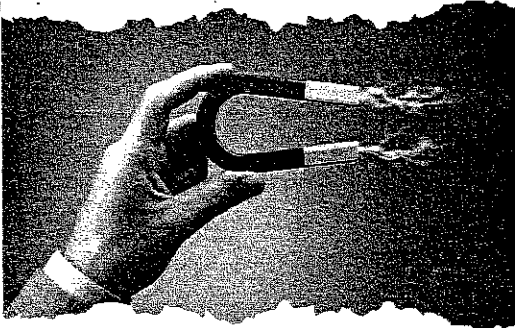
Underline one sentence in the text that best supports the answer to Part A.

INDEPENDENT PRACTICE

Read the article. Then answer the questions that follow.

Electricity and Magnetism

Genre: Magazine Article



► THINK ABOUT IT

To figure out the structure of a paragraph, think about why the author has included it.

- 1 Electricity is all around us. While we can occasionally see it in a flash of lightning during a storm or a spark of static electricity on a metal doorknob, it exists even when we cannot see these effects. To put it simply, electricity is the flow of positive and negative charges. Swimming around us are billions of atoms, each containing a stable nucleus of positively charged protons and uncharged neutrons. Orbiting this compact center are negatively charged electrons; these particles are extremely small and move incredibly fast. Because an atom's protons are trapped and cannot move, electricity is created by the electrons' movement.
- 2 How do electrons create electricity? While it is nearly impossible for an atom to gain or lose a proton, electrons can be gained or lost. Friction is one way for electrons to be separated from their atoms and added to other atoms. An atom with more electrons than protons has a negative charge, while one with fewer electrons than protons has a positive charge. These atoms are also called negative and positive *ions*. The movement of electrons that creates ions is what produces electricity.
- 3 Electricity moves through conductive materials, such as gold, copper, and silver. These conductors allow flows of charge, or currents, to be transmitted from one point to another. However, some materials do not allow ions to flow easily. This is the reason why electric wires are usually made from metals and not from plastic, glass, or rubber.
- 4 Another interesting fact about ions is attraction. Positive and negative ions attract one another, while ions with the same charge repel one another. This attraction and repulsion is known as an *electric force*. The closer the two charged particles are to one another, the stronger the electric force; similarly, electric force is much weaker between two particles that are far away from each other. An area surrounding a charged particle is known as an *electric field*. Objects are attracted or repelled in this field.
- 5 This idea of attraction and repulsion may sound very similar to another concept: magnetism. While electricity is the force responsible for electric currents and fields, magnetism is responsible for magnetic forces and fields. The movement of electric charges creates magnetism. Although electricity can be present even in materials that do not conduct charges well, such as glass or rubber, magnetism can only exist where charges are moving.
- 6 Many magnets, however, get their strength from a little electric boost. At a junkyard, very large magnets are sometimes used to separate

and steel from other materials for recycling or reuse—or even to and move old cars! In many cases, these are special magnets called *electromagnets*. Electromagnets are made from miles of metal wire coiled in a doughnut shape. Inside these coils is a ferromagnetic material. When an electrical current is sent through the wires, a very strong magnetic field is created. Because it is the electric current and not the magnet itself that produces this magnetic field, an electromagnet can be turned on and off, just like other electronics.

Like electricity, magnets are present wherever we look. Earth itself has a very powerful magnetic field. The core of Earth is composed of several ferromagnetic elements, and the current that flows in Earth's center makes our planet one very large electromagnet that cannot be turned off. This electromagnetism enables us to use compasses, whose needles are usually composed of natural magnets such as lodestone, to detect the Earth's north and south poles, no matter where we happen to be. In our modern world, electricity and magnetism work together to help televisions, computer disks, and credit cards function properly.

Part A

Which sentence best describes the structure of the text?

- A It explains how to create electromagnetic fields.
- B It explains how electricity causes magnetic attraction.
- C It compares electricity and magnets by explaining how each works.
- D It compares electricity and magnets by explaining how each was discovered.

Part B

Which sentence from the text best supports the answer to Part A?

- A "Electricity is all around us." (paragraph 1)
- B "While electricity is the force responsible for electric currents and fields, magnetism is responsible for magnetic forces and fields." (paragraph 5)
- C "Many magnets, however, get their strength from a little electric boost." (paragraph 6)
- D "This electromagnetism enables us to use compasses, whose needles are usually composed of natural magnets such as lodestone, to detect the Earth's north and south poles, no matter where we happen to be." (paragraph 7)

◀ TIPS AND TRICKS

Read all the answer choices before answering a question and see if there are any you can eliminate.

2. Describe the structure of paragraph 2.

3. Read this sentence from paragraph 4.

The closer the two charged particles are to one another, the stronger the electric force; similarly, electric force is much weaker between two particles that are far away from each other.

► **HINT, HINT**

Look for signal words that will help identify the organization of the passage, which will help you identify the important elements that are compared.

How does this sentence refine a key concept in paragraph 4?

- (A) It uses cause and effect to explain the location of an electrical field.
- (B) It uses comparison to provide a deeper explanation of electrical force.
- (C) It uses sequencing to illustrate that there are different kinds of electric fields.
- (D) It uses cause and effect to show that particles move to be closer or farther from other particles.

4. Part A

Which statement best explains the key concept introduced in paragraph 5?

- (A) Magnetism creates electricity.
- (B) Magnetism and electricity are the same force.
- (C) Magnetism and electricity have different properties.
- (D) Magnetism can move through more materials than electricity.

Part B

Underline the sentence in paragraph 5 that uses a compare-and-contrast structure to best support the answer to Part A.

Part A

How does the structure of paragraph 7 refine the key concept that electricity and magnets help society?

- (A) Its comparison structure explains how electricity is different from magnets.
- (B) Its cause-and-effect structure clarifies that magnets need electricity to work.
- (C) Its cause-and-effect structure proves that we need both electricity and magnets.
- (D) Its comparison structure explains how electricity and magnets combine to create power.

Part B

Which sentence from paragraph 7 best supports the answer to Part A?

- (A) "Like electricity, magnets are present wherever we look."
- (B) "Earth itself has a very powerful magnetic field."
- (C) "The core of Earth is composed of several ferromagnetic elements, and the current that flows in Earth's center makes our planet one very large electromagnet that cannot be turned off!"
- (D) "In our modern world, electricity and magnetism work together to help televisions, computer disks, and credit cards function properly."

Describe the primary structure of paragraphs 5–7. Explain how you know.

EXIT TICKET

8.RL.CS.5

Now that you have learned how to analyze the structure of a paragraph, let's revisit the Real-World Connection.

Josh wonders how the structure of a paragraph is like the pieces of a model. Using the paragraph below, write a paragraph explaining to Josh how the words and pieces of a text, like the pieces of a model, fit together to make the entire text work. Make sure to discuss the organizational structure the author uses and the signal words that helped you identify the structure.

Both white sharks and dolphins have bodies that are perfect for life at sea. They have similar shapes, with long bodies, dorsal fins on their backs, pectoral fins on their bodies, and tails. The shark's tail is vertical, but the dolphin's tail is horizontal. On the whole, white sharks are bigger than dolphins. Most dolphins are no more



than 8 feet long, but white sharks often grow to be 16 feet long! Though sharks and dolphins have similar coloring, their skin feels completely different. Sharkskin is like sandpaper, while dolphins have smooth, rubbery skin. One other difference is that a shark has gills because it breathes water as do other fish. A dolphin, however, is a mammal, so it has a blowhole for breathing air.

Handwriting lines for the student's response.