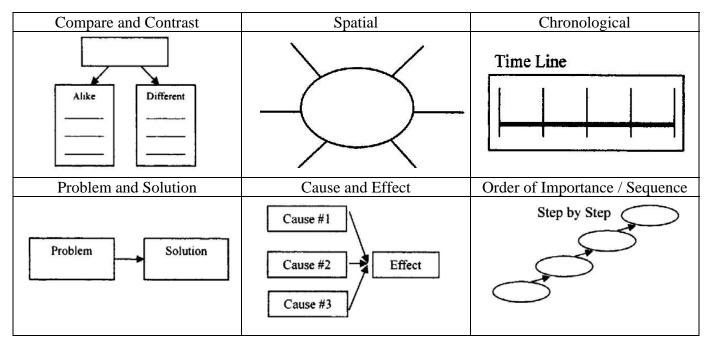
Identifying Text Structure 3

Directions: read the following passages and determine the text structure. Then, put information from the text into the appropriate graphic organizer. Remember to focus on the main idea of each paragraph.



1. The surface of the Earth is divided into pieces called "tectonic plates." These plates move. When the plates rub against each other, they do not move smoothly. When the plates do not move smoothly, earthquakes result. Some parts of the world get more earthquakes than other parts. The parts of the earth that get most earthquakes are near the edges of these plates.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

2. Some countries, such as Japan, or parts of a country, like California in the United States, have a lot of earthquakes. In these places it is a good practice to build houses and other buildings so they will not collapse when there is an earthquake. This is called seismic design or "earthquake-proofing".

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake. 3. The ability of a building to withstand the stress of an earthquake depends upon its type of construction, shape, mass distribution, and rigidity. Different combinations are used. To reduce stress, first, the building's ground floor must be flexible. One method is to support the ground floor with extremely rigid, hollow columns, while the rest of the building is supported by flexible columns located inside the hollow columns. A different method is to use rollers or rubber pads to separate the base columns from the ground, allowing the columns to shake parallel during an earthquake. Next, the outdoor walls should be made with stronger and more reinforced materials such as steel or reinforced concrete. Then, to help prevent collapsing, the roof should be made out of light-weight materials.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

4. A hurricane is a large storm with heavy winds and rain that begins in the ocean and builds up strength as it moves across the water. While some of the damage caused by hurricanes is from high winds, most of it is usually from tidal surge, flooding entire cities, and killing large numbers of people. A tornado is a storm that develops on land, with no warning, and moves in a circular motion with heavy winds with a funnel shape, picking up and carrying dirt, dust, and even objects. The damage caused by tornadoes is from the high velocity winds, which are extremely destructive and deadly. They can demolish entire neighborhoods in a matter of a few seconds to a few minutes. Tornadoes can form when hurricanes make landfall, as their winds at ground level slow down, while the winds near the top keep their momentum, but a hurricane cannot be created by a tornado.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

5. Hurricane Katrina began as Tropical Depression Twelve over the southeastern Bahamas on August 23, 2005. The depression later strengthened into a tropical storm on the morning of August 24 where the storm was also named *Katrina*. Katrina continued to move into Florida, and became a Category 1 hurricane only two hours before it made landfall around Hallandale Beach on the morning of August 25. The storm weakened over land, but became a hurricane again while entering the Gulf of Mexico.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake. 6. Fire needs three things to burn: oxygen, fuel, and heat. Fuels can be wood, tinder, coal, or any other substance that will easily oxidize. Therefore, a fire can be stopped in three different ways, by removing any of the three things it needs to burn.

- **The fuel can be removed.** If a fire burns through all of its fuel and extra nearby fuel is removed, the fire will stop burning.
- **The oxygen can be removed.** This is called "smothering" a fire. Fires cannot burn in a vacuum or if they are covered in carbon dioxide.
- The heat can be removed. The most common way to remove heat is to use water to absorb that heat, putting the fire out.

How is the text structured? _

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

7. Have you ever wondered what the inside of a volcano looks like? Deep underground is a magma chamber. The magma chamber is under the bedrock of the earth's crust. The conduit or pipe runs from the magma chamber to the top of the volcano. The conduit connects the magma chamber to the surface. Most volcanoes also have a crater at the top. Volcanoes are quite a sight, and you can enjoy this site all over the universe. Volcanoes are found on planets other than Earth, like the Olympus Mons on Mars.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

8. When a river receives a lot of extra water it may flood. During a flood there is plenty of water, and most people wouldn't think that dehydration was a serious risk, but flood waters are mostly polluted and not safe to drink. People who drink the contaminated water may suffer from illnesses or diseases such as typhoid. You can prepare for flooding by filling many containers with fresh clean drinking water. You can also use sandbags to protect your house and to soak up the water. Be prepared and be safe.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake. 9. Lightning and thunder are related events. Lightning is a sudden, violent flash of electricity that occurs between a cloud and the ground or between two clouds in the sky. A lightning bolt can be several miles long and can be straight or forked. It is very hot, with an average temperature of 34 000 degrees Celsius. This causes the air around the electric bolt to expand, producing lots of sound energy. It is this sound energy that we hear as thunder. So, lightning and thunder are caused by the same event, but lightning is light energy, or electromagnetic energy, whereas thunder is sound energy. Thus, we see lightning and hear thunder.

How is the text structured? _

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

10. Tsunamis are very long waves in the ocean, sometimes hundreds of miles long. Tsunamis usually start suddenly. They may begin as normal waves and change to big waves very quickly. After this change, tsunami waves will travel at great speed across the ocean with little energy loss. Just before they hit land, the water will draw back off of the coast. If the slope of the coast is shallow, the water may pull back for many hundreds of feet. People who are unaware of the danger may be drawn by this strange site and remain on the shore. When the tsunami finally hits, it may remove sand from beaches, destroy trees, damage houses and even destroy whole towns. Tsunamis are tremendously powerful.

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.

11. Avalanches (when a lot of snow falls from a mountain) may bury people under them. If the people are not found rapidly enough by rescue teams they will die of suffocation (not getting enough air) or of hypothermia (freezing cold). The chance of surviving an avalanche is as follows:

- 92% if found within 15 minutes
- 30% if found within 35 minutes (victims die of suffocation)
- nearly zero after two hours (victims die of injuries and hypothermia)

How is the text structured?

Put information from the passage into the graphic organizer: Use a separate sheet of paper if you need more room or make a mistake.