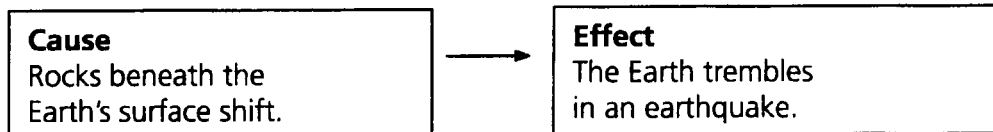


LA-C-B-7.2 Analyze examples of cause and effect and fact and opinion.

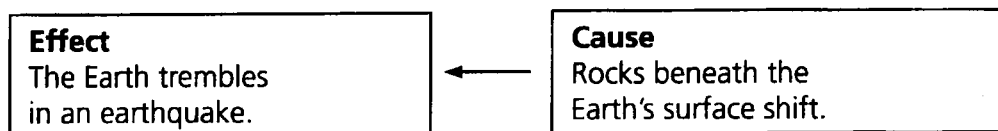
Text structure refers to the way information in a text is organized. One way a writer can organize information is by using **cause and effect**. A cause shows a reason why something happens. An **effect** shows the result of the cause.

Cause and effect is especially useful when you want to show what happened and why—for example, why an earthquake happened and what occurred as a result of the quake. It's also useful when you write "what if" articles—for example, "What would happen if the oceans dried up?" Many articles about health issues use cause and effect to show the dangers of certain foods or activities or what you can do to prevent certain illnesses. Cause-and-effect organization may be presented in different ways.

- The author may present causes and effects throughout the article.
- The author can explain or state the cause or causes first, and then explain the effect or effects:



- The author can explain the effect or effects first, and then explain the cause or causes:



When you read information organized by cause and effect, try keeping notes in charts like the ones above.

Name: _____

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Lesson 22

Understand Cause and Effect

Guided Reading Instruction

Directions: Read the passage below. Use the questions in the margin to guide your reading. Then answer the questions that follow.

What If There Were No Soil

by Steve Parker

1 You wouldn't get scolded for getting your clothes dirty! But there would be hundreds of problems. Earthworms, moles, ants, and millions of other burrowing creatures would be homeless. Plants could not set down their roots in soil, or take in water, nutrients, and minerals for their growth. We'd have no farm crops, and nothing for farm animals to eat. We'd all starve.

A Game of Two Halves!

2 Many sports, from football to soccer, are played on soil. Rather, on soil covered with well-mown grass. It's fairly soft and doesn't hurt too much if you fall. Without grass and soil, we'd have to play these sports on artificial turf.

Those Feet Were Made for Walking . . . ?

3 Only a few types of trees can survive without soil. They grow from the thin dust in cracks on rocky mountainsides. Nearly all other trees need soil. The tree's roots anchor it in the soil as well as take in nutrients and water. Without soil, tree animals, like monkeys, would have to walk more, and would get sore feet.

Sweat and Soil

If there were no soil, it might be possible for us to make our own. We might grow flowers, fruits, and vegetables in tubs of sand or gravel. But we'd have to keep adding plenty of water and fertilizers containing minerals and nutrients, or the plants would soon shrivel up and die. Natural soil has these nutrients, and does not need a lot of extra care.

The Amazing Graze!

4 Sheep, cows, and many other farm animals eat grass, which grows in soil. Without farm animals, there would be much less meat to buy. Wild animals such as deer also eat grass and leaves. Without them, hunting animals, such as lions and tigers would run

Understand Cause and Effect

Lesson 22

Guided Questions

out of food, too. Food chains, and the whole web of life would be unbalanced.

Going Underground

5 Rabbits, shrews, foxes, badgers, prairie dogs, and hundreds of other creatures dig their homes in the soil, making tunnels and chambers. Moles live underground almost all their lives, digging through the soil and eating worms, slugs, and other small soil creatures. If the soil ever disappeared, they would need a lot of help to tunnel, as they would be faced with the hard rock beneath!

1. Read the first paragraph again. Then fill out the cause-and-effect chain below.

Cause: There is no soil

Effect: Burrowing animals

Effect: Plants

Effect: Farm crops

Effect: Human beings

Guided Questions

6 If there were no soil, what would be the final effect on human beings?

7 What would be the effect on football and soccer?

8 What would be the effect on most trees?

9 What would be the effect on the food chain?

2. Did this cause-and-effect article help you understand the importance of soil? Explain.

Layers of Insulation

- 5 You can keep your family toasty by having them dress in several thin layers that trap warm air. Wear synthetic, lightweight underwear; it draws perspiration away from the body. Avoid cotton, if possible; it soaks up moisture like a sponge and holds it next to your skin. Moisture on the skin causes the body to lose heat faster—whether the dampness comes from rain, snow, or perspiration.
- 6 Next, put on a T-shirt or turtleneck and pants or leggings. Then pull on a polar fleece sweatshirt. This should all be topped off with a breathable, windproof, and waterproof jacket. Snow pants or overalls are also good if the activity calls for it.
- 7 Because a large amount of blood flows to the head, heat from this area quickly escapes when exposed to cold weather. Symptoms of exposure include a flushed face, runny nose, and constricted pupils.
- 8 To be safe, heads should be covered, preferably with wool or fleece hats that also cover the ears. Use neck warmers or gaiters made of polar fleece to cover the neck. They are less itchy than wool scarves and will not get caught in sleds or equipment, causing a choking hazard.

Winter Exercise Tips

- Wear helmets (bicycle helmets work well) for winter sports, such as skiing, skating, and sledding.
- Face the front of the toboggan or sled at all times.
- Prevent injuries during winter sports (especially skiing or skating) by providing:
 - proper equipment
 - instruction
 - supervision
- Limit exposure to very cold weather. Check frequently to see if anyone is getting cold. If there is any doubt, have him or her go indoors to warm up.
- Watch for frostbite. Tell-tale signs include: numbness, pain, or whiteness in the skin at the tips of the fingers, toes, nose, cheeks, or ears; or skin that is blistered, hard-to-the-touch, or glossy.
- Warn children not to handle or play with salt or salt substitutes used to de-ice sidewalks and roads. These chemicals can cause severe injury to the skin.
- Apply an SPF 15 sunscreen to exposed skin to prevent "snowburn."
- Drink plenty of fluids before and during rigorous winter activities, such as cross-country skiing or snow hiking. The fluids not only prevent dehydration, they also help regulate body temperatures.

Apply the Ohio Standards

Directions: Read the passage below. Then answer the questions that follow.

Parts of Ohio can be a winter wonderland, but the cold weather can cause many problems. What can you do to protect yourself when you are outside? What can you do when you supervise younger brothers or sisters or other children? The article below will tell you.

Braving the Deep Freeze

by Elizabeth G. Terry

- 1 OK, you've been persuaded that playing outdoors in cold weather could be fun. And it will be, for both you and your family . . . until someone gets cold and cranky. Now if you could just keep everyone nice and warm, there'd be no problem. A little freeze prevention is in order. Taking a few precautions not only helps you enjoy "invigorating" temperatures, it keeps you safe.
- 2 **Blinging in the Fleece**
When exposed to cold weather, our bodies reduce circulation to our extremities to conserve core body heat. This makes it difficult to keep the extremities warm (especially the feet) during cold weather.
- 3 Polar fleece socks can help keep toes warm in shoes and lined boots. Polar fleece is as warm as wool and isn't as scratchy. During wet conditions, children should wear waterproof, lined boots that aren't too tight so that the air can circulate around the feet. Children should also wear boots instead of athletic shoes to school when the weather is wet, cold, or both. Because athletic shoes are neither insulated nor waterproof, children could wind up sitting in class with cold, wet feet—and a pre-frostbite condition called "trench foot."
- 4 Fingers keep their warmth much better in mittens than in gloves. When fingers touch each other, body heat increases and warms the air around them. If mittens, gloves, shoes, or boots become wet, change into a dry pair.

Date: _____
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1. In cold weather, circulation to the extremities is reduced. What is the effect on hands and feet?

2. What could be the result of wearing sneakers to school in cold, wet weather?

3. What should you wear in order to draw perspiration away from your body?

4. If you wear cotton while you exercise outdoors on a cold day, what might be the effect?

5. Why should you wear a hat in cold weather?

Use the passage to answer questions 1 – 6.

1. In cold weather, why do our bodies reduce the amount of blood that goes to the hands and feet?
- A. to keep the extremities warm
B. to conserve energy
C. to use up excess energy
D. to prevent the blood from freezing
2. When it is wet outside, why should you make sure that the boots you wear aren't too tight?
- A. There needs to be enough room for air to circulate.
B. This allows you to wear very heavy, thick socks.
C. You want to be able to remove the boots quickly.
D. Your feet expand when it is cold outside.
3. Why do your fingers stay warmer in mittens than in gloves?
- A. Mittens are made of warmer material than gloves.
B. When your fingers touch, your body heat goes down.
C. Cold outside air cannot penetrate the mittens.
D. The air around your fingers heats up when they touch.

4. Why should you try to keep your skin dry at all times in cold weather?
- A. Moisture causes the body to lose heat faster than air.
B. Moisture causes your skin to get red and crack.
C. Moisture is colder than the air around it.
D. Moisture ruins the clothes that you are wearing.
5. Which of the following is not a reason why wearing a neck warmer or gaiter is better than wearing a scarf?
- A. A scarf can get caught in a sled or equipment and cause an accident.
B. A scarf does not cover the neck as effectively as a neck warmer or gaiter.
C. A scarf is usually made of wool, which is itchy.
D. A scarf can cut off blood circulation to the head.
6. In the winter, is it better to wear one heavy layer or several thin layers? Use information from the selection and your own knowledge to support your response.

2 Write your answer on a separate sheet of paper.