

5th Grade ELA Work Packet

Week of June 1-4, 2021

Name _____

*Please do not begin any assignments until
instructed by Ms. Eggink.*

Expert Group Text

"Tornado"

A tornado is a type of violent windstorm in which a rapidly rotating column of air extends from the base of a thunderstorm to the ground. Like a hurricane, a tornado is a type of cyclone. A cyclone is a low-pressure area with winds spiraling around the center. A low-pressure area is a region in which warm, light air is rising into the atmosphere.

Tornadoes can be various sizes, shapes, and colors. They can occur in most parts of the world, except in the polar regions. Most tornadoes, however, occur in the United States, where they are sometimes called twisters. Every year, there are about 1,000 tornadoes in the United States, especially in the Midwest. Most of them occur between March and June. But they can form at any time of the year.

How Tornadoes Form

Tornadoes typically develop within a large-scale low-pressure system. Winds circling this "low" bring warm humid air from one direction and colder dry air from another direction. In the Northern Hemisphere, winds circling counterclockwise bring warm humid air from the south to the eastern side of the low and colder dry air from the north to the western side of the low. Sometimes hot and dry air enters the low-pressure system from the southwest.

As these streams of air meet, they can form thunderstorms. If the temperature conditions are just right and strong jet stream winds are blowing, massive thunderstorms that extend 50,000 feet (15,240 meters) or more into the atmosphere can develop. Under certain conditions, these massive thunderstorms develop a rotation, and smaller rotations, or tornadoes, may form within the larger rotation.

These types of conditions occur most frequently in "tornado alley." Tornado alley is an area that runs northeastward from northern Texas into Illinois. About half of all tornadoes in the United States are reported in eight states. These are Texas, Oklahoma, Arkansas, Kansas, Missouri, Nebraska, Iowa, and Illinois.

Excerpt from: Mogil, H. Michael. "Tornado". *The New Book of Knowledge*. Scholastic Grolier Online, © 2017 Scholastic Inc. Used by permission. All rights reserved.

Characteristics of Tornadoes

Most tornadoes begin as a funnel-shaped cloud extending from the base of a thundercloud. At times, this funnel reaches the ground. At other times, it simply dangles from the base of the thundercloud. In general, if the funnel extends more than halfway down from the thundercloud, the circulating air of the tornado has already reached the ground. The only clue to its presence may be dust swirling on the ground.

Tornadoes occur individually or in small groups. Sometimes outbreaks of many tornadoes—called tornado clusters or swarms—may occur within a short period of time. For example, On April 10–11, 2001, 79 tornadoes struck the Midwest and Great Plains region of the United States. On May 22–25, 2008, more than 200 tornadoes hit ten states in the West, the Midwest, and the South. Meteorologists have noted an increase in the frequency of tornado clusters since the 1970s. This means that if a day does have a tornado, there is a much greater chance of having multiple tornadoes. This is despite the fact that the number of days with tornado activity has fallen slightly over the same span of time. The cause for this increase in tornado clusters remains unclear.

The rotating winds of tornadoes may range from about 40 miles (64 kilometers) per hour to more than 300 miles (480 kilometers) per hour. The extremely high winds of some tornadoes can cause enormous destruction. They flatten everything in their path and tear apart buildings with explosive force.

Tornadoes can be various colors. If they are illuminated by the sun, they appear to be white like other clouds. When filled with soil and debris, they appear to be shades of black, dark brown, gray, or even red. A fully developed tornado, with its twisting funnel and its hissing and roaring sound, is very frightening.

Classification of Tornadoes

Tornadoes in the United States and Canada are classified according to the Enhanced Fujita Scale, introduced in 2007.

On the enhanced scale, EF-0 is the weakest kind of tornado. An EF-0 tornado has estimated wind speeds of 65 to 85 miles per hour (105 to 137 kilometers per hour), which causes minimal damage. An example of the damage caused would be shingles stripped from the roof of a building. An EF-2 tornado has estimated wind speeds of 111 to 135 miles per hour (179 to 217 kilometers per hour). It can take entire roofs off houses and uproot large trees. An EF-5 is the most powerful kind of tornado. It has estimated wind speeds greater than 200 miles per hour (322 kilometers per hour). It is capable of completely destroying a well-built house, leaving only the foundation behind. An EF-5 can also rip pavement from roads and toss objects as big as cars hundreds of feet.

Tornado Warnings and Protection

Meteorologists and emergency management officials have created an effective system to alert citizens to tornadoes or to the possibility that they might occur. Tornado watches indicate areas where tornadoes may form within a certain period. The watches are issued by the Storm Prediction Center in Norman, Oklahoma. It is run by the National Oceanic and Atmospheric Administration (NOAA). Using this data and other information from storm spotters and Doppler radar, local offices of the National Weather Service (NWS) issue tornado warnings for specific parts of counties or states. Warnings indicate that a tornado has formed and is moving on the ground. People in areas that receive tornado warnings should seek shelter at once and follow tornado safety rules.

Natural Disasters Research Note-catcher

RI.5.1, W.5.7, W.5.8

Name: _____ Date: _____

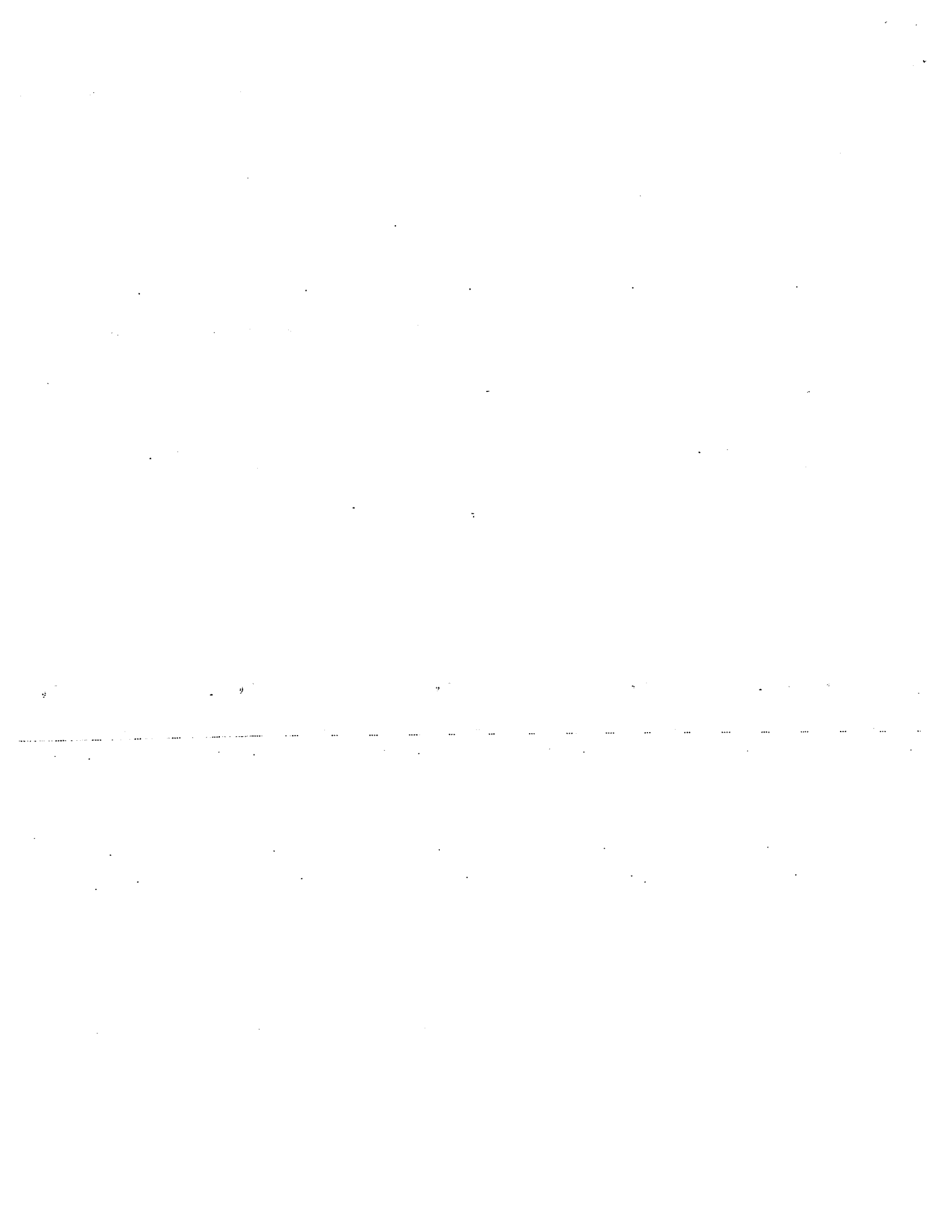
How do natural disasters affect the people and places that experience them?

The natural disaster I am researching is:

Research Question	Sources

Lesson 2

Research Question	Sources
Other interesting facts:	



Expert Group Text

"Earthquake"

The ground cracks open. Roads and bridges buckle and break apart, and buildings collapse. Throughout history, people have known the terror of great earthquakes.

Thousands of earthquakes occur on our planet each year. Many are so small that people can barely feel them. The largest cause deadly damage. They destroy property. They set off massive landslides. Some trigger devastating waves called tsunamis.

What causes these terrible events? A Japanese legend blamed the movement of a giant underground catfish. The ancient Chinese believed they were caused by a huge tortoise. And about 2,300 years ago, the Greek philosopher Aristotle said that underground winds shook Earth.

Today we know that earthquakes are natural events. They occur as part of the geological processes that form Earth's mountains, oceans, valleys, and plains. In learning about earthquakes, scientists have learned much about Earth itself.

Causes of Earthquakes

Seismologists are scientists who study the motion of Earth's crust. They now know that earthquakes result from forces deep inside our planet. There, heated rocky material is flexible. It moves slowly and steadily.

But near Earth's surface the rocky material cools into a crust. Earth's crust is formed of plates made of this material. The plates are brittle and cannot move easily. The slow movement of material deep in the interior builds up. It pushes on the brittle rocks near the surface.

Earth's plates move only a few inches every year. No one feels this movement except where the plates rub together or stretch apart. The slow movements create great pressure. This causes huge areas of rock to break and slip.

Excerpt from: "Earthquake." *The New Book of Knowledge*. Scholastic Grolier Online, © 2017 Scholastic Inc. Used by permission. All rights reserved.

During this violent fracture, some rock dives into Earth's interior. Other rock thrusts upward. These movements result in an earthquake.

Often a break in Earth's surface occurs at a fault. A fault is where two blocks of rock have previously moved past each other and created a break.

Measuring Earthquakes

Scientists use instruments called seismometers to measure the distance the ground moves during an earthquake. This tells them how strong the seismic waves are. There are thousands of seismometers in use all over the world.

Seismometers create records called seismograms. These records show how powerful an earthquake is. By looking at several seismograms, scientists can also figure out the source of the earthquake. This source is called the epicenter.

Frequency

Earthquakes occur thousands of times each year. Small earthquakes happen much more often than large ones. With each decrease of one magnitude, there are about ten times more earthquakes. For example, each year there are about 1,000 earthquakes of magnitude 5 or greater. But there are 10,000 of magnitude 4 or greater.

Predicting Earthquakes

Experts are learning how changes in Earth's crust may provide warnings of possible earthquakes. These warning signs include underground movements and changes in water levels. Still, earthquakes are impossible to predict.

Because of this, engineers have learned how to build quake-resistant buildings and bridges. And emergency teams hold practice exercises to keep their rescue drills fresh should a quake strike.

We cannot control earthquakes. But we can learn to live with them.

Natural Disasters Research Note-catcher

RI.5.1, W.5.7, W.5.8

Name: _____ Date: _____

How do natural disasters affect the people and places that experience them?

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Research Question	Sources

Lesson 2

Research Question	Sources
Other interesting facts:	

"How Well Is Your Community Prepared?"

In July of 1989, a family of fierce tornadoes swirled into Hamden, Connecticut. More than 40 buildings were destroyed. Power and phone lines were downed, and hundreds of uprooted trees and severed branches blocked most major roadways.

A tornado in Connecticut is as rare as a snowstorm in south Florida. But thanks to a well-organized emergency response plan, Hamden's town leaders and emergency workers were prepared. They handled the disaster with a minimum of confusion and outside help. Nobody was killed or seriously injured. And within days of the twisters, the town's usual peaceful atmosphere was restored.

Natural disasters can't be prevented. Often, they can't even be predicted. Phenomena such as earthquakes and tornadoes strike suddenly. Hurricanes can abruptly change course. An afternoon shower can turn into flooding rains. Harmless snow storms can explode into mighty blizzards.

Relief Agencies

There are several state, federal, and private agencies standing by to help communities when disaster strikes. But these organizations, like the Federal Emergency Management Agency (FEMA) and the American Red Cross, can take days to arrive at the scene.

In the most critical early phase of a disaster, a community will usually have to rely on its own resources to handle acute problems. The seriously injured must be rescued and treated. Fires must be extinguished. Threatened neighborhoods must be evacuated. And it's vital that local emergency forces prepare themselves with regular drills and exercises.

"Until we had serious floods, in 1982, our emergency plans were gathering dust in someone's office. We thought nothing could ever happen to us," says Hamden's deputy fire chief, Walter MacDowell. "We were totally unprepared for those floods. But after that, we made sure we knew what we were doing. When the tornadoes hit, we were ready."

Is your community vulnerable to a natural disaster? How well would your community cope? What can you do to help?

Any community can be prepared. And by understanding what your community is doing — or should be doing — to brace for disaster, you can become an important part of your community's preparedness effort.

Community Plan

Every community in America has a disaster response plan. And you can learn about the plan in your area by contacting the officials in charge of local emergency preparedness.

If you live in a large community, chances are there's an emergency preparedness office in your town. Smaller communities coordinate these services through the police or fire department. You can also get in touch with the emergency preparedness office in your state capital, or with FEMA via their website.

Emergency preparedness officials can tell you what they've been doing to prepare for disasters. But even more important, they can help you understand what you can do to prepare yourself.

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<https://www.scholastic.com/teachers/articles/teaching-content/how-well-your-community-prepared/>

Glossary:

- *acute*: very serious, important, critical
- *agency*: an organization that works for a purpose
- *critical*: very important
- *federal*: of or relating to such a central authority, often as opposed to state or local authority
- *local*: having to do with a particular place such as a neighborhood, community, or town
- *private*: of funds or other resources, not coming from the government

The Impact of Natural Disasters

- *phase*: stage
- *rely*: depend on
- *state*: pertaining to one of the areas belonging to a federation; in this case, pertaining to one of the fifty states in the United States.
- *vital*: very important, necessary

Close Reading Note-catcher: "How Well Is Your Community Prepared?"

RI.5.1, RI.5.4, RI.5.8, W.5.7, W.5.8, L.5.2a, L.5.4

Name: _____ Date: _____

Point:

Reason	Evidence

Exit Ticket:
**"How Well Is Your
Community Prepared?"**

RI.5.8**Name:** _____ **Date:** _____**Directions:** Answer the questions below.

1. Which evidence from the text best supports the author's point that it is important for a community to have an emergency response plan? (RI.5.8)
 - A. "Power and phone lines were downed, and hundreds of uprooted trees and severed branches blocked most major roadways."
 - B. "And within days of the twisters, the town's usual peaceful atmosphere was restored."
 - C. "There are several state, federal, and private agencies standing by to help communities when disaster strikes."
 - D. "If you live in a large community, chances are there's an emergency preparedness office in your town."

2. According to the author, which of the following are reasons why it is important for a community to have an emergency response plan? Underline all that apply. (RI.5.8)
 - A. Natural disasters can't be prevented or predicted, so it is important to be prepared.
 - B. State, federal, and private agencies help communities when natural disasters happen.
 - C. A community must be ready with its own resources to handle serious problems that can happen right after the disaster strikes.
 - D. Residents of a community can learn how to prepare themselves for natural disasters.

3. Read the following quote from the text and answer the question that follows:

"Until we had serious floods, in 1982, our emergency plans were gathering dust in someone's office. We thought nothing could ever happen to us," says Hamden's deputy fire chief, Walter MacDowell. "We were totally unprepared for those floods. But after that, we made sure we knew what we were doing. When the tornadoes hit, we were ready."

How does the author use this evidence in the article? (RI.5.8)

- A. To support the point that natural disasters can't be prevented.
- B. To support the point that state, federal, and private agencies help communities when natural disasters happen.
- C. To support the point that a community must be ready with its own resources when natural disasters happen.
- D. To support the point that floods can cause serious damage.

Text-Dependent Questions: *Eight Days: A Story of Haiti*

RL.5.1, RL.5.2, RL.5.4, L.5.4, L.5.5c

Name: _____ Date: _____

Directions: Work in your triads to read each question, reread the appropriate part of *Eight Days: A Story of Haiti*, discuss the response, and then record a response.

1. What happened to the narrator in this story? How do you know? (RL.5.1)

2. On page 1, the narrator, Junior, says, "I played in my mind." What does he mean by this? (RL.5.1, RL.5.2)

3. Who is Oscar, and what happened to him? You may have to infer the answer to this question. (RL.5.1)

Wednesday ____/____

Title: _____ Pages read: _____

Summary:

Thursday ____/____

Title: _____ Pages read: _____

Summary:

Friday ____/____

Title: _____ Pages read: _____

Summary:
