

<b>Title:</b> Weather Informational Texts Choice Board	<b>Grade:</b> 5th Grade
<b>Content:</b> Reading- informational Text	<b>Duration:</b> Five Days

**Standard:**

- **RI.5.5:** Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution)

**Objective:**

Students will complete 5 activities from the choice board to respond to informational text.

**Materials:**

- Weather reading passages (see below or use link)
  - Tornado Scientists  
<https://www.readworks.org/article/Tornado-Scientists/b09416cd-804c-4614-bca0-df28e3381a75#!articleTab:content/>
  - *When Lightning Strikes*  
<https://www.readworks.org/article/When-Lightning-Strikes/dc6d4aa2-77e5-47bf-90fc-981be9f7e135#!articleTab:content/>
- Text structure reference sheet (below) or online
  - <https://drive.google.com/file/d/1eCcYjdcXhdasMezkuvFTWLKdXzJmitsp/view?usp=sharing>
- Pencil (highlighters, paper optional)

**Introduction Description:**

Students will read two informational texts and complete five activities from the choice board.

**Steps:**

- Each day choose one activity to do from the choice board for five days.

**Adaptations (optional):**

Students could

- Read/listen to text (use links above).
- Read aloud to/with someone else
- Have fewer choices.
- Take more than one day to complete each task.
- Find their own tornado and thunderstorm passages.
- Create their own choice board task.

**Finished Product:**

- Five Choice Board Tasks

# Tornado Scientists

by ReadWorks



Tornadoes form when strong winds spin. Wind is invisible, but we can see tornadoes because the spinning wind picks up water, dust, and debris. The spinning wind forms a funnel that connects thunderstorm clouds with the ground.

When a tornado is close, watch out. They can spin over 200 miles per hour and cause a lot of damage. As they move across the land, they can easily pick up cars, trucks, and even houses, and then throw them very far. It is important to find a safe place to take shelter if a tornado gets close.

A safe place could be a basement or the lowest floor, depending on where you are. If you are in a home without a basement, try to find a first-floor closet or bathroom without windows in the middle of your house. You should curl up into a ball and cover your head and neck with your hands. Stay in a safe place until the tornado passes.

But there are some people who actually want to get close to tornadoes. They are scientists who want to learn more about tornadoes. One of the best ways to do this is to get as close as possible to these twisters. They use special equipment and instruments to measure what is happening in and around a tornado.

One special instrument these scientists use is called a tornado probe. It is about six inches tall and looks like a short, orange construction cone. Inside the tornado probe, there are sensors to measure wind speed, temperature, pressure, and direction. Some probes even have cameras, so the scientists can see and understand what it's like to be in a tornado.

To be able to get these measurements, the scientists have to get a tornado probe near or into a tornado. Scientists will try to guess where a tornado will go next. Then they drive to that location and put down the probe. If they do not guess correctly, they pick up their probe and try another spot. If they are right, the tornado will go near or even right over the probe. Then they take all of the measurements from the probe and use them to predict where future tornadoes may form and travel.

Tornadoes are extremely dangerous, and the scientists who study them up-close are bold and brave. Their work is very important and has saved lives by giving people some warning to get out of the way of a destructive tornado.

# When Lightning Strikes

from ReadWorks.com

## Thunder provides a wake-up call to head indoors.



World Almanac for Kids

*"When thunder roars, go indoors," says meteorologist Ron Holle.*

Scientists say lightning strikes the surface of Earth about 100 times each second. Thunderstorms are most frequent during the spring and summer. Experts warn people to be especially aware of the dangers of lightning during those seasons.

## Play It Safe

Lightning strikes the ground in the United States about 25 million times each year! Although getting hit by lightning is unlikely, it is important to stay safe. In the United States, about 60 people are killed each year by lightning.

To stay safe, follow the golden rule—head for cover. "There is no place outside that is safe from lightning," Holle said firmly. "There are two safe places—inside a [permanent] building or a metal-topped vehicle."

# Forces of Nature

Lightning is the flash of light that occurs when electricity moves between clouds or between a cloud and the ground. The huge spark of electricity is like the tiny kind you get when you run a comb through your hair or scuff your feet on a carpet—only much stronger.

A lightning bolt that crackles through the air can reach a temperature of 60,000 degrees Fahrenheit. That is about five times hotter than the sun! The intense heat from lightning causes the surrounding air to expand, resulting in the loud sound known as thunder.

Thunder is nature's warning to head indoors. As meteorologist Ron Holle from Tucson, Arizona told *Weekly Reader*, "When thunder roars, go indoors." A meteorologist is a scientist who studies weather.

Holle also recommends following the 30-30 rule. If you hear thunder fewer than 30 seconds after you see lightning, head indoors—the storm is only about 6 miles away. After the storm ends, wait 30 minutes before going outside. To determine how far away lightning is, count the seconds between the flash and the thunder. Every 10 seconds equals 2 miles.

## Lightning Safety Tips

Lightning expert Ron Holle shared the following tips with *Weekly Reader*:

- Find shelter in a building or a metal-topped vehicle (not a convertible), and close the windows.
- If you're caught outdoors, stay away from open spaces, and avoid standing near tall objects, such as trees.
- Avoid using electrical equipment, such as computers, TVs, and phones. (Cell phones are safe to use.)
- Stay away from sinks and showers. Lightning can travel through water pipes.
- Wait 30 minutes after the last sound of thunder or flash of lightning before going outside.

## Tornadoes and Thunderstorms Choice Board

Choose 5 Activities from the Board. You may do one each day.

<p><b>Create a Venn Diagram or other graphic organizer that shows how tornadoes and thunderstorms are alike (compare) and different (contrast).</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Record yourself explaining this.</li><li>● Create a poster.</li><li>● Take a picture of your creation and share.</li><li>● Create a slideshow or other digital presentation.</li></ul>	<p><b>Make a list of causes and effects that you find in the articles. Try to find 2-3 in each article.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Highlight them in different colors if you have a paper copy.</li><li>● Write a list on paper.</li><li>● Record yourself explaining what you found.</li><li>● Think of your own causes and effects after you read both articles.</li></ul>	<p><b>Find and share 1-2 examples of sequence in both passages.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Write them down on paper.</li><li>● Create a poster.</li><li>● Make your own graphic organizer.</li><li>● Write a poem or song.</li><li>● Record yourself explaining them.</li><li>● Take a picture of your work and share it.</li></ul>
<p><b>Think of 2-3 problems each kind of storm could cause. Think of a solution for each problem. Draw a picture or write to explain your thinking.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Make a poster.</li><li>● Draw on paper.</li><li>● Record yourself explaining. .</li><li>● Take and share a picture of what you create if you can.</li></ul>	<p><b>Find somewhere in your home where your family could go for shelter during a severe storm. Draw, take photos, make a list of and explain why it's a safe place.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Take pictures and explain.</li><li>● Write about it on paper.</li><li>● Create a poster or other presentation.</li></ul>	<p><b>Create an emergency plan for your family for severe weather that you could put up somewhere in your home.</b></p> <p><b>Make a list of what you would need to do and what kinds of things you might need.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Make a list.</li><li>● Create a drawing or poster.</li><li>● Record yourself talking about it with your family.</li></ul>
<p><b>Watch or listen to the weather on tv, radio, or online. What kinds of information do they give to viewers?</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Make a poster.</li><li>● Draw on paper.</li><li>● Record yourself explaining. .</li><li>● Take and share a picture of what you create if you can.</li></ul>	<p><b>After you read both passages, make a list of 3 questions you have about tornadoes and thunderstorms.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Make a poster.</li><li>● Draw on paper.</li><li>● Record yourself explaining. .</li><li>● Take and share a picture of what you create if you can.</li></ul>	<p><b>Find 5 or more words from each passage that are new or that you think are important for understanding the passage. Use context clues to figure out what you think each word means.</b></p> <p>Options:</p> <ul style="list-style-type: none"><li>● Write on paper.</li><li>● Create a graphic organizer.</li><li>● Record yourself explaining.</li><li>● Highlight and write on the article if you have a paper copy.</li></ul>

## Text Structures Made Simple

Text structures are found in all kinds of reading and writing. They help us to better understand what the text means.

Text Structure	Explanation	Example	Signal Words
Cause/Effect	One thing causes something else to naturally happen as a result.	It rained all night so there were puddles all over the playground. 	because, as a result, since, so that, then, as a result, if...then, this led to, due to, consequence of, effect
Problem/Solution	There is a problem and someone <b>TAKES ACTION</b> to solve it.	My feet got wet while I was splashing in puddles, so I put on some dry shoes. 	so, therefore, because, as a result, since, solution, problem, recommend
Chronology (Sequence)	The order in which things happen.	First I need to do my math homework, then write in my journal, and finally practice reading my poem aloud. 	first, second, third, fourth, next, then, finally, before, after, now, later, after while, during, meanwhile
Comparison (Compare/Contrast)	How things are similar (compare) or different (contrast).	Cats and dogs live on land and dolphins live in the ocean. They are all mammals. 	but, instead of, as well as, similar to, different than, in contrast, alike, different, same, in comparison, but, on the other hand