

Teacher's Guide March: Severe Storms



Ka-Boom! Stay Ahead of the Storm

While a springtime shower might ruin a field trip, a severe thunderstorm can lead to a dangerous situation. Thunderstorms can produce lightning, flash floods, hail, and damaging winds. Severe storms can even spawn tornadoes, leaving behind broken tree limbs, downed power lines, and other debris. While City officials closely monitor weather in our area, severe weather can occur with little or no warning.

Did you know?

- According to the National Weather Service, the Empire State Building is hit by lightning an average of 25 times a year.
- The safest place during a thunderstorm is indoors.
- If you see lightning, count the seconds before you hear thunder. If it's less than 30 seconds, take cover indoors. Once indoors, wait 30 minutes after the last clap of thunder before going back outside.

Let's get ready and stay safe when storms come our way!



Department of Education
Office of Emergency Management

Guidelines for staying safe during a thunderstorm

- The safest place during a thunderstorm is indoors. Exposed structures like bus shelters do not provide adequate protection.
- Do not use an electrical appliance that is connected to a building's electrical wiring.
- Do not use showers, sinks, or any device connected to a building's plumbing system.
- If you are in a car, do not touch any metal surfaces.
- If you are caught outdoors with no shelter, crouch down, grab your ankles, bend forward, and lower your head. Do not lay flat on the ground.
- Pay close attention to local weather forecasts and bulletins.
- Make sure your family's disaster plan and emergency supply kit are current.



Reinforce the message of what to do during severe thunderstorms and lightning and build skills across the curriculum with these simple activities:



Language Arts

Ask your students to imagine that they are outside with friends playing at a park when suddenly, the sky darkens, they see flashes of lightning in the distance, and the wind starts to blow. Have each student write a narrative describing how he or she would move to safety. Make sure they use dialogue to describe their actions, thoughts, and feelings.



Math

You can tell how many miles away lightning is from your current location by counting the number of seconds between a flash of lightning and the sound of thunder. Divide that number by 5 to get an estimate of the number of miles. Remember that if you are outdoors and the time gap is less than 30 seconds (which, when divided by 5, means the lightning is 6 miles away), you should immediately take cover. If the time gap is more than 30 seconds, don't wait; move toward a protected area right away.



Social Studies

When there is a Thunderstorm Watch or Thunderstorm Warning, the National Weather Service may alert you via television, radio, or cell phone. Research the difference between a Severe Thunderstorm Watch and a Severe Thunderstorm Warning. Write a public service announcement explaining this to citizens.



Science

Rain isn't always accompanied by lightning. What causes lightning to form? What causes thunder? Investigate the science behind storms and then create posters explaining storm science and safety.

To Learn More:

Office of Emergency Management, http://www.nyc.gov/html/oem/html/hazards/weather_thunder.shtml

NYC Office of Emergency Management, www.NYC.gov/oem

OEM on Facebook, www.facebook.com/NYCEmergencymanagement

OEM on Twitter, [@nycoem](https://twitter.com/nycoem)

Notify NYC, Register for emergency notifications by visiting NYC.gov/notifynyc, calling 311, or following [@NotifyNYC](https://twitter.com/NotifyNYC) on Twitter

<http://www.redcross.org/prepare/disaster/thunderstorm>

<http://www.nws.noaa.gov/om/severeweather/resources/ttl6-10.pdf>

<https://www.facebook.com/US.NationalWeatherService.NewYorkNY.gov>