Fun With Weather!
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Activity 1
Coloring the Alley
Tornado Alley is a nickname given to an area in the southern plains of the central United States that experiences frequent tornadoes each year. Tornadoes in this region typically happen in late spring and occasionally the early fall.

With the information provided by your teacher, use the United States map at the end of this packet to color in the area associated with the Tornado Alley.

Activity 2
What is the Size of a Tornado?
The average United States tornado is about 500ft (150m) across and travels on the ground about 5 miles (8km). However, tornadoes can range in size from only 7 feet wide to over 2.5 miles (4 km) wide. The winds of a tornado can be as low as 40 mph and as high as over 300 mph.

To get a feel for the size take the average size of a tornado, go outside and in a large open space measure out 500ft. Mark this distance with a roll of adding machine tape or line people up across the distance so the distance can be visualized. Estimate how far it would travel by selecting a location about 5 miles from the school for an idea of how far this tornadoes destruction would reach.

Activity 3
How Far Away is a Thunderstorm?
You can estimate how far away a thunderstorm is by counting or timing the distance between when you see the lightning flash and when you hear the thunder. From the time you see the lightning flash count one Mississippi, two Mississippi, three Mississippi or time on the timer the length of time until you hear the thunder. For every five seconds the storm is one mile away.

Explanation: Light travels faster than sound. When the lightning occurs in the storm, if you are close to the storm you also hear the thunder quite quickly. The farther you are away from the storm the longer the distance so the slower sound wave has to travel and the farther apart the lightning and the sound become.

Activity 4
Tornado Safety
After reviewing the Spotlight on Safety in the Tornado Alley K-12 Educator’s Guide, describe, in your own words, what can be done to remain safe during a tornado sighting.

What safety rules do you practice at your school to keep the community safe? Take the time to review some of the plans around the safety rules.

New York State Standards
Standard 2: Key Idea 1
Standard 4: 1.1h, 1.2 systems
Standard 6: Key Idea 3
Activity 5
Reading Weather Instruments
Go to http://cnyweatherlab.org/most and try your hand at reading the instrumentation represented on the page. Check your answers by looking at the information listed on the left hand side of the page.

Activity 6
Weather Calendar
Create a classroom weather calendar by collecting daily weather data or go to www.weatherwizkids.com and put in your zipcode to get current weather information close to you.

Record daily, at the same time every day, the temperature, precipitation type, barometric pressure, barometric trend, cloud coverage, wind direction, wind speed, relative humidity.

Activity 7
Make Your Own Tornado!
Try Making a Tornado in a bottle from the Tornado Alley K-12 Educator’s Guide. How do you think the Tornado in the bottle is like a real tornado? How is it different?
Directions: Refer to your classroom monthly weather chart to answer the following questions.

Did you notice any relationship between barometric pressure and the precipitation? If so what was the relationship?
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Were there any trends that you noticed in your data? If so explain the trends.
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Were there any patterns between the cloud coverage and other weather variables?
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What observations did you make about the weather or gathering information for the weather chart?
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What questions would you like to investigate about weather and/or data we collect about the weather?
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What type of information is needed for meteorologists to be able to forecast the weather accurately?
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