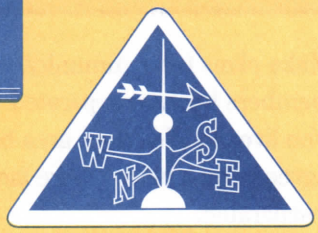
Cub Scout Academics: Weather



REQUIREMENTS

Tiger Cubs, Cub Scouts, and Webelos Scouts may complete requirements in a family, den, pack, school, or community environment. Tiger Cubs must work with their parents or adult partners. Parents and partners do not earn loops or pins.

Belt Loop

Complete these three requirements:

_____ 1. Make a poster that shows and explains the water cycle.

_____ 2. Set up a simple weather station to record rainfall, temperature, air pressure, or evaporation for one week.

_____ 3. Watch the weather forecast on a local television station. Discuss with an adult family member what you heard and saw. Follow up by discussing the accuracy of the forecast.

Academics Pin

Earn the Weather belt loop and complete five of the following requirements:

_____ 1. Explain to your den or an adult family member the meaning of these terms: *weather, humidity, precipitation, temperature,* and *wind.*

_____ 2. Explain how clouds are made. Describe the different kinds of clouds—*stratus, cumulus, cumulonimbus,* and *cirrus*—and what kind of weather can be associated with these cloud types.

_____ 3. Describe the climate in your state. Compare its climate with that in another state.

_____ 4. Describe a potentially dangerous weather condition in your community. Discuss safety precautions and procedures for dealing with this condition.

_____ 5. Tell what is meant by *acid rain.* Explain the *greenhouse effect.*

_____ 6. With your parent's or adult partner's permission, talk to a meteorologist about his or her position. Learn about careers in meteorology. Share what you learned with your den or an adult family member.

_____ 7. Make a weather map of your state or country, using several weather symbols.

_____ 8. Explain the differences between tornadoes and hurricanes.

_____ 9. Make a simple weather vane. Make a list of other weather instruments and describe what they do.

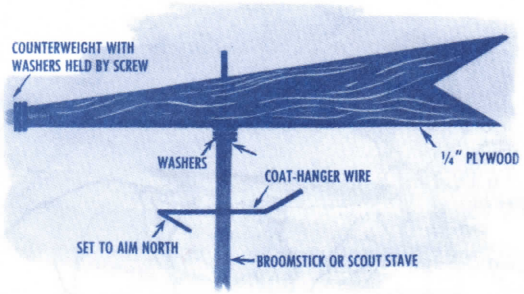
_____10. Explain how weather can affect agriculture and the growing of food.

_____11 Make a report to your den or family on a book about weather.

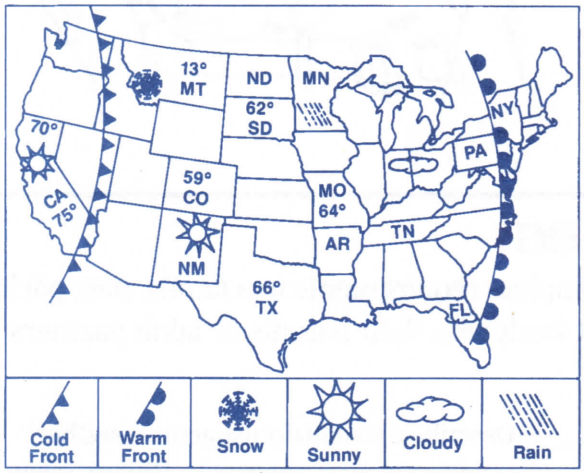
_____12. Explain how rainbows are formed and then draw and color a rainbow.

Weather Instruments

Anemometer, balloon, barometer, hygrometer, kite, radar, radiosonde, rain gauge, satellite, thermocouple, thermometer, and weather vane.



A simple weather vane



Weather symbols

Be Safe in Dangerous Weather!

No matter where you live, the weather can become dangerous. From tornadoes and hurricanes to floods and too much heat or cold, it's a good idea to know about the potentially dangerous weather in your area and have a family weather emergency plan.

The American Red Cross suggests taking these precautions:

- Decide where to go and where you would be safe if a flood, severe thunderstorm, or tornado warning is issued—whether you're at home, at school, outdoors, or in a car.
- Have a family disaster supply kit, and know where it is. The kit should include such items as a flashlight, batteries, a battery-operated radio, and a first-aid kit. (For a complete list of supplies that the American Red Cross recommends, contact your local Red Cross chapter.)

Resources

Besides books at your local library about weather, the Internet has many weather-related sites. You can learn about the weather all over the world and see radar sweeps that show current weather in any part of the country. Use a search engine to explore. (Be sure you have your parent's or adult partner's permission first.) Also, the National Weather Service may have a local office in your area and can be an excellent resource.

- Make plans for communication in case your family members become separated. Have a friend or relative who lives outside your area be the contact person.
- Agree upon a place where family members can meet if separated.
- Have a plan in place also for family pets. Contact your local Red Cross chapter for information on pet care during an emergency.

Types of Clouds

Clouds are made of particles of water or ice suspended in the air. When these particles come together, they form a cloud. Larger water droplets may get too big and heavy for the cloud to hold, so they fall to Earth as rain, sleet, or snow. There are four major types of clouds:

Cirrus clouds are the highest clouds, about 50,000 to 55,000 feet above Earth. They form feathery wisps and are made of ice crystals.

Cumulonimbus clouds are middle-level clouds at 6,500 to 24,000 feet. They are flat and dark on the bottom and billow upward. They can cause the heaviest downpours, often with thunder and lightning.

Cumulus clouds are white and puffy and are about 5,000 feet above Earth. They sometimes look like huge balls of cotton.

Stratus clouds are made of low layers of gray clouds that usually cover the whole sky. They are foglike and appear in flat layers.