

## N.C. Standard Course of Study and Grade Level Competencies

### Grade K— Competency Goal 2

The learner will make observations and build an understanding of weather concepts.

#### Objectives

2.02 Identify different weather features including:

Precipitation

Wind

Temperature

Cloud Cover

### Grade 2—Competency Goal 2

The learner will conduct investigations and use appropriate tools to build an understanding of the changes in weather.

#### Objectives

2.03 Describe weather using quantitative measures of:

Temperature

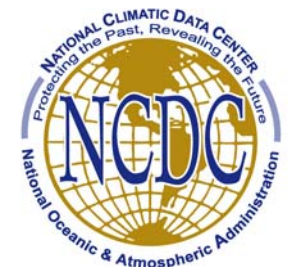
Wind Direction

Wind Speed

Precipitation



# Climate Activity Book



# Drought

**Drought is a long period of dry weather and continued lack of rain.**

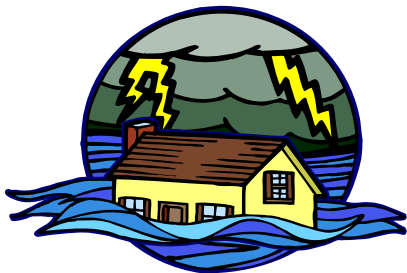


Drought is a period of little or no rain. They can lead to losses for crops of farmers and affects the wildlife. It creates conditions that spread insect pests and plant and animal diseases. Drought also create ripe conditions for forest fires.



# Floods

**Floods are the most common and widespread of all natural hazards.**



Even very small streams, gullies, creeks, culverts, dry streambeds or low-lying ground that may appear harmless in dry weather can flood.

# Fog

**Fog is a cloud of fine drops of water just above the earth's surface which causes a thick mist.**



Fog is a cloud that touches the ground. It is made of many small water droplets. Fog will form when warm air moves across a colder land or water surface, when moist air moves up over higher terrain; or when cold rain falls through a large amount of dry air.



# Hurricane

**A hurricane is a tropical storm with winds reaching 74 miles per hour or more.**



Hurricane winds blow in a large spiral around a relatively calm center known as the "eye". The "eye" is generally 20 to 30 miles wide, and the storm may spread outward as far as 400 miles. As a hurricane approaches, the skies will begin to darken and winds will increase. As a hurricane nears land, it can bring heavy rains, strong winds and extremely high tides.

# Thunderstorm

**Lightning always accompanies a thunderstorm.  
And lightning can strike the same place twice!**



A thunderstorm is a storm with lightning caused by changes in air pressure. Several thunderstorms can bring heavy rains (which can cause flash flooding), strong winds, hail, and tornadoes. At any given moment, nearly 1,800 thunderstorms are in progress over the face of the earth!

The sound of thunder can be especially frightening for young children. Take the “scariness” away by teaching them what to expect during a thunderstorm and how to be safe.

# Tornadoes

**Tornadoes are nature’s most violent storms.  
They can devastate an area in seconds.**



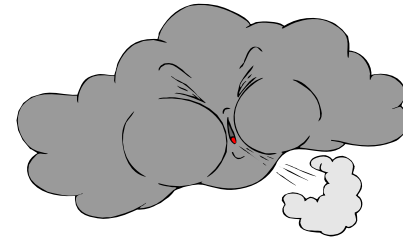
A tornado appears as a rotating, funnel-shaped cloud, striking the ground with whirling winds of up to 200 miles per hour. A tornado spins like a top and may sound like an airplane or train. Most tornadoes travel a distance of about 10 mile, although “tornado tracks” of 200 miles have been reported. Tornadoes can happen just about anywhere in the United States.

# Wind

**Air in motion; the wind varies in force from  
a slight breeze to a strong gale.**



Wind is air motion. A change in temperature will cause a change in pressure which will cause the air to move.



# Winter Storms

**A winter storm can range from several inches of snow over a  
few hours to blizzard conditions that last several days.**



Winter storms can last several days and be accompanied by high winds, freezing rain or sleet, heavy snowfall and extreme cold. People can become stranded on the road or trapped at home, without utilities or other services. Most of the United States is at some risk from winter storms.