Remote Learning: TPS Science Grade 3, May 18 - May 29

Our Planet & Its Weather: Family Resource Sheet

This week's science work is focused on **weather** and **climate. Weather** is what we see and feel everyday outside. You can describe weather in many ways, especially in terms of temperature, precipitation, wind, and humidity. **Climate** describes weather patterns over a long period of time. Climate helps us understand what to expect in a specific area. Here's a good way to remember the difference: **Weathe**r tells you what to wear each day while **climate** tells you the types of clothing you should have in your closet for a season.

- ❏ Have an adult help you find the daily temperature and chance of precipitation in Taunton for three days. Go to page **S2** or CLICK HERE for a sheet to help you keep track. Do the same for a faraway place. You can pick anywhere you want but it has to be on Earth!
  - ❏ Can you look up the daily temperature for the last 30 days in Taunton and your faraway place? Use this information to make a prediction about future weather.
- ❏ Turn to page **S3** or CLICK HERE for an article about climate. Read the article and underline or circle important information.
  - ❏ On a separate piece of paper answer the following questions:
    1. Name 3 factors that affect climate.
    2. List 4 of the climates types from the article. Can you name a country or continent in each area?
    3. Choose a climate region that you would like to visit. Write a short paragraph about an imaginary trip to that place. Describe the weather you experienced (temperature, rain, and wind). What types of animals did you see? What did you do there?
- ❏ Even in the United States there are many different climate regions. Turn to page **S5** or CLICK HERE for an article about different climates in the United States. Read the article and underline or circle important information.
  - ❏ On a separate piece of paper answer the following questions:
    1. How is the Northeast region similar to the Northwest region? How are they different?
    2. How is the Midwest similar to the Southern Region? How do they differ?
    3. Write a short paragraph about where you would want to visit and why. Include the time of year or season, what you would pack to wear, and what you would do to have fun.
- ❏ If you can, visit BrainPOP at https://www.brainpop.com/science/weather/ Sign up for free. Click on "weather" and then "climate types" for an optional video.
- ❏ You can also check out www.weatherwizkids.com

EL Spotlight:
In your reading:
- Highlight words that you don't know?
- What do you think that word might mean based on the languages you know?

Weather Patterns

Collect the temperature and precipitation in the boxes below for Taunton and for a faraway place. Describe the weather in two words.

	Day 1	Day 2	Day 3
Taunton			
Write your place:			

What was the weather over the last 30 days? Fill in the boxes below and then answer the questions.

	High Temp	Low Temp	Description
Taunton			
Write your Place:			

Make a prediction about tomorrow's weather in Taunton.

When you were making your prediction, which information was more helpful the data from 3 days or 30 days? Why do you think that?

Weather and Climate: What is climate?

By Encyclopaedia Britannica, adapted by Newsela staff on 04.26.17
Word Count **443**
Level **530L**

Adelie penguins sit on an iceberg in Antarctica. They live in a polar climate. Photo by: Jason Auch via Flickr.

Different places around the world have different kinds of weather. The weather can change from day to day. But some places have certain kinds of weather more than others. For example, some places are very sunny and dry. Others are cold and rainy. The weather over a long period of time is called the climate.

"It rained yesterday" describes the weather. "The city only gets 10 inches of rain a year" describes the climate. The climate includes many weather elements. Some of them are temperature, rainfall and wind.

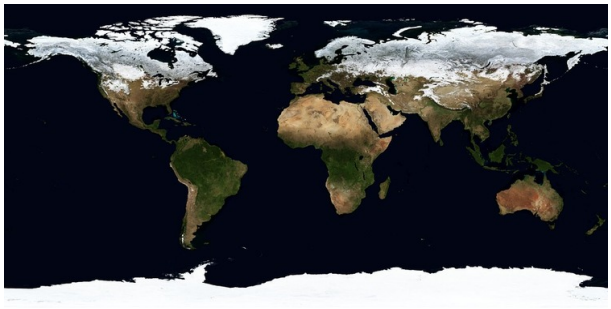
Studying Climates

Scientists have many tools for studying climates. On Earth, they use weather stations. These measure rainfall, temperature and wind speed. Scientists also use weather balloons. These take measurements from up in the sky. Then they send helpful information back to Earth.

Factors That Affect Climate

Many things affect climate. The sun, winds and human activities are all examples.

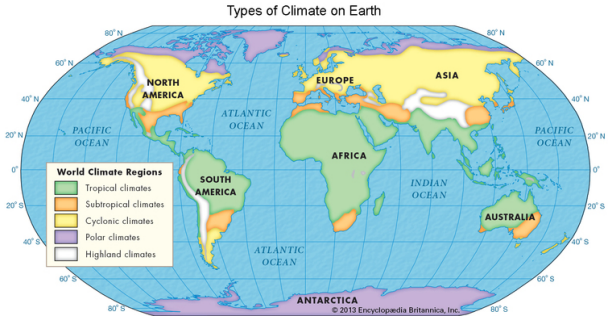
Sunlight falls on Earth unevenly. The equator is the imaginary line around Earth's middle. Places near the equator get lots of strong sunlight. This gives them a hot climate. Places far from the equator get weaker sunlight. This gives them a cooler climate.



Winds affect climate by carrying warm or cool air. They carry this air to different places. Winds also carry rain and snow.

Human activities also affect climate. One example is burning fossil fuels. These are fuels such as oil and coal. People burn them to run their cars and heat their homes. Burning the fuels releases greenhouse gases. These gases trap heat on Earth. As a result, the Earth is heating up. Scientists call this global warming.

Types Of Climates



There are a few common climate types. They are called tropical, subtropical, cyclonic, polar and highland.

Tropical climates are warm all year. They have no winter. These climates lie near the equator. Some tropical climates have a lot of rain. Others are dry.

Subtropical climates are found north and south of the tropical climates. Some subtropical climates are very dry. Others are humid. That means the air holds a lot of water. This makes the weather muggy.

Cyclonic climates are found mostly north of the equator. These areas have rain and snow. They usually have warmer summers. The winters are colder in these climates.

Polar climates are very cold. Snow and ice often cover the land.

Highland climates are found in the mountains. They are usually cooler than the lower lands nearby.

Different climates create chances for outdoor fun across the United States

By USA Today, adapted by Newsela staff on 11.18.19
Word Count **519**
Level **500L**

A landscape in Teton County, Montana, with the Rocky Mountains in the background. Photo by James Steinberg/Science Source

The United States is a huge country. It has many geographical features. It also has many climates. Climate is an area's average weather over many years. The climate depends on what region you're in. It also depends on the time of year. Weather is different from climate. Weather describes the temperature, rainfall or snowfall, and wind on a specific day and time. Climate is what you expect; weather is what you get.

There are big differences in climates across the U.S. For example, Alaska has ice-cold temperatures. They dip well below freezing. California's Death Valley sees extreme dry heat.

America's Four Climate Regions

The U.S. Census Bureau divides the U.S. into four main regions. The Northeast includes three middle Atlantic states and six states in New England. New England is the Northeastern part of the country. It has pleasant summer seasons. It has cold winters. There is snowfall. The farther north you travel, the colder it gets.

The Midwest includes 12 states such as Minnesota, Kansas and Illinois. Temperatures depend on the season. For instance, snow is common. Temperatures can be below zero. However, summers also can be very hot and humid.

There are 16 states in America's Southern regions. They have mild winter temperatures but also have hot summers. Temperatures can reach the 90s.

The mountain regions of the West include seven states such as Colorado, Utah and Nevada. The region has mountains. It has the coast and the desert, too. Temperatures can be extreme. Desert summers are very hot. Yet winter can be very cold.

There are four Pacific states. The Northwestern states of Oregon and Washington are the wettest part of the U.S. They get a lot of rain. Winters tend to be cold and wet. Summers are pleasant. They are never humid or overly hot. Parts of California enjoy moderate temperatures throughout the year. That is because it is close to the Pacific Ocean.

Hawaii is a chain of islands. It was formed by volcanoes. It has its own unique climate. It depends on elevation. Generally temperatures are warm year round.

Tourists Enjoy All Four Seasons

Spring is a wonderful time to travel around the U.S. New Orleans, Louisiana is a great place to visit. Washington, D.C. is too. Plan your visit there around the National Cherry Blossom Festival. This happens in March and April.

Summer means beach vacations. Ludington State Park in Michigan has amazing beaches. So does Florida. Many people love Hanauma Bay Nature Reserve in Hawaii. Summer is also a great time for hiking and camping at Rocky Mountain National Park in Colorado.

Fall is a beautiful time to visit the Northeast. The colorful leaves are spectacular. Other parts of the U.S. are colorful, too, like The Great Smokey Mountains in Tennessee and North Carolina. Early fall is also the perfect time to visit Mount Rainier National Park. It is in Washington state. There are smaller crowds. The rainy season typically doesn't start until mid- to late October.

Winter is snowy wonderland season. Head for Breckenridge, Colorado to ski. Or visit Park City, Utah. Another option is Lake Tahoe, California.