



Lesson Plan: Weather

Grade Level: 3

Subject: Earth Science

Duration: 45–60

NGSS 3-ESS2-1: Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.

Learning Objectives

By the end of this lesson, students will be able to:

- **Define** weather as the condition of the air outside, including temperature, clouds, and wind.
- **Identify** tools used by meteorologists to measure weather, such as barometers and anemometers.



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science-grade-3-weather-1.pdf)

- Weather & Atmosphere Worksheet (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-weather-1-0.pdf>)
- Weather Tools Worksheet (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-weather-1-1.pdf>)
- Severe Weather Worksheet (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-weather-1-2.pdf>)



- Vocabulary Set 1 (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-weather-1-1.pdf>)
- Vocabulary Set 2 (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-weather-1-2.pdf>)

Lesson Procedure

Step 1: Introduction (5 minutes)

- Hook students by asking: 'What is the weather like outside today? Is it sunny, raining, or windy?'
- Show the cover of the Study Guide and define weather as the condition of the air outside. (<https://newpathworksheets.com/api/guide/study-guide-science-grade-3-weather-1.pdf>)

Step 2: Direct Instruction (15 minutes)



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- Have students complete the Weather & Atmosphere Worksheet to test understanding of general concepts. (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-weather-1-0.pdf>)
- Assign the Severe Weather Worksheet for students to identify storm characteristics. (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-weather-1-2.pdf>)

Step 5: Assessment (5 minutes)

- Review the answers to the Independent Practice worksheets.



- Ask the Lesson Checkpoint question from the guide: 'What is the difference between a weather watch and a warning?'

Differentiation Strategies

For advanced learners:

- Ask students to create a mock weather forecast script using correct terminology (humidity, pressure).

For learners needing support:

- Provide visual aids of weather tools while students complete the matching vocabulary exercises.



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- Worksheet 3 PDF (<https://newpathworksheets.com/api/worksheet/worksheet-science-grade-3-weather-1-2.pdf>)
- Vocabulary Set 1 PDF (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-weather-1-1.pdf>)
- Vocabulary Set 2 PDF (<https://newpathworksheets.com/api/vocabulary/vocabulary-science-grade-3-weather-1-2.pdf>)

WEATHER

What is the weather like outside? Weather is the condition of the air outside. **Weather** involves many things, such as clouds, temperature, water in the air, and the wind.

There are several different types of clouds. Different clouds cause different kinds of weather.

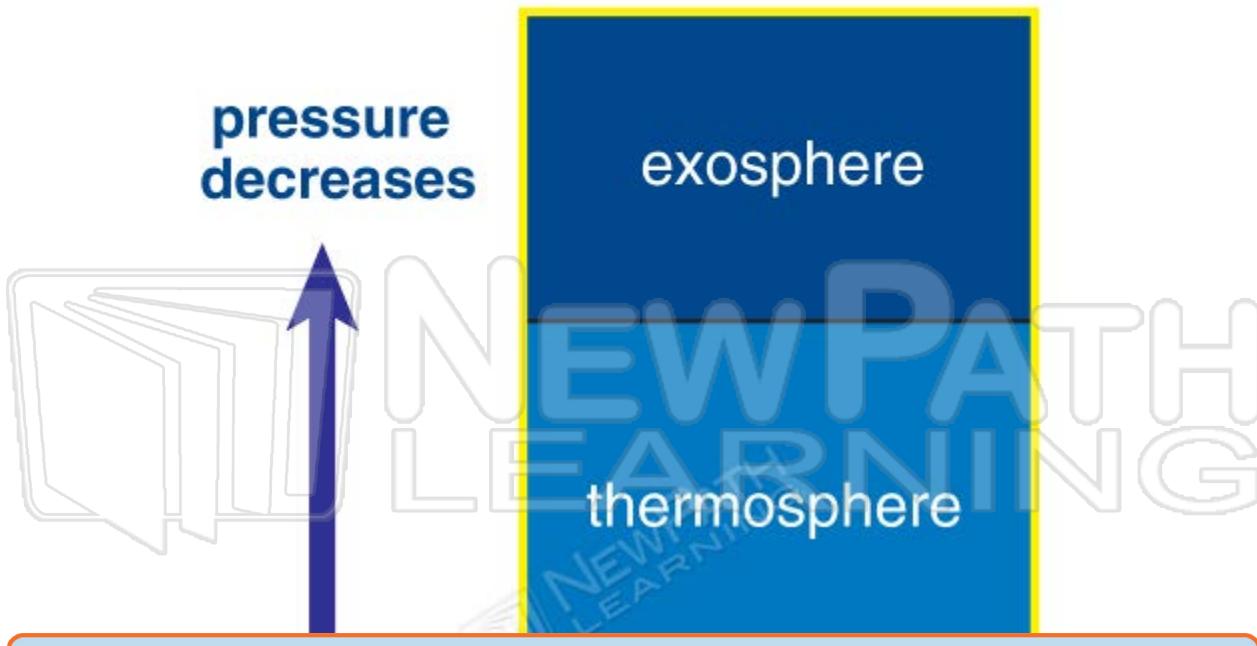
A meteorologist is a person that studies the weather. **Meteorologists** use many tools to help them predict the weather. One important thing they look at when doing so is the atmosphere, which is the air all around us. The Earth's **atmosphere** has different layers that are made up of gases.



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Lesson Checkpoint: What is a meteorologist?



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When the air in the atmosphere presses down a lot, it is known as HIGH air pressure. When the air in the atmosphere presses down just a little, that is known as LOW air pressure.

Air pressure affects the weather. LOW air pressure causes clouds to form and often rain. HIGH air pressure means it will most likely be sunny and the skies will be clear. Air pressure is measured with a barometer.



PREVIEW

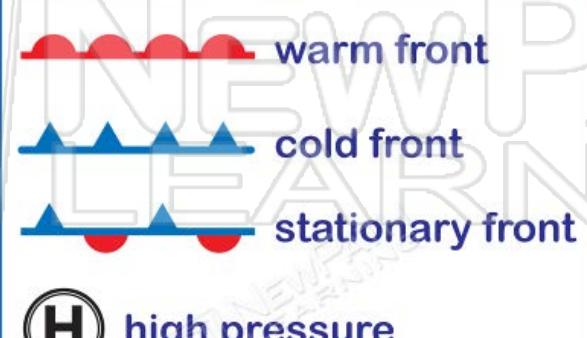
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the air which tells them how high the humidity will be. When the humidity is low, there is little water vapor in the air. When the humidity is high the air has a lot of water vapor in it.

Meteorologists use a rain gauge to measure the amount of rainfall. Meteorologists use weather maps to show what the weather will be like in large areas of the world.

Weather maps will often show your local temperatures as well as air pressure movements to let you know if you have cloudy or clear skies coming your way.

Weather Map Symbols



warm front
cold front
stationary front
H high pressure



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Weather satellites in space gather information from all around the world. These satellites take pictures from high above and send the pictures back to computers so that scientists and meteorologists can predict the upcoming weather in all areas.

The weather can also affect the **pollution** in many areas. A lot of pollution comes from the exhaust of cars which stays in the air causing the pollution to be high in particular areas.

Weather follows certain **patterns**. Depending on where you live, the pattern of your weather may differ from the weather of some place else on Earth. How much rain and snowfall you get (if any) often has to do with where you live. Areas near large bodies of water have different weather patterns than those areas that are very far away from the water. The average temperature will vary depending on where you live too. If you live closer to the equator, in Mexico or northern Africa for example, you will have warmer temperatures for many more days than those who live up far from the equator.

Weather can be extremely dangerous and powerful, causing great damage to places on Earth.

A hurricane is a storm called that forms over oceans that bring winds reaching over 74 miles/119 kilometers per hour. **Hurricanes** can be predicted before they strike land so people have time to prepare for the damaging storm.



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A tornado is a funnel shaped column of air that touches the ground destroying anything in its path. It is smaller but has heavier winds than a hurricane. **Tornadoes** form over land under storm clouds without warning, giving people no time to prepare for the damage they can cause.



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Lesson Checkpoint: What is the difference between a weather watch and a warning?



Name _____ Class _____ Date _____

1 What is the **condition** of the air outside called?

- A environment
- B ecosystem
- C weather
- D atmosphere

2 **Weather** involves many things, such as clouds, temperature, water in the air, and the _____.

- A wind
- B grass
- C soil
- D trees

3 There are several **different types of clouds**, and each _____.

- A is the same shape
- B brings different weather
- C looks like the others

4 A _____ is a person that **studies the weather**.

- A doctor
- B biologist
- C lawyer



5



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- C air pressure
- D cloud colors



- D high air pressure

9 Air pressure affects the weather. What type of weather will **low pressure** bring?

- A clear skies
- B hot temperatures
- C sunny skies
- D clouds and often rain

10 **High pressure** means it will most likely be _____.

- A clear and sunny
- B cloudy
- C rainy
- D freezing cold





Name _____ Class _____ Date _____

1

What is the **condition** of the air outside called?

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4

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D

5



A

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- B cloudy
- C rainy
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Name _____ Class _____ Date _____

1

Air pressure is measured with what **tool**?

- A a hygrometer
- B a barometer
- C a wind vane
- D a thermometer



2

Meteorologists test the _____ of our atmosphere with a **barometer** so they can understand weather patterns and predict the weather.

- A color
- B air pressure
- C sounds
- D feel



3

Meteorologists use tools to predict the weather, such as **wind vanes** to help measure the direction of the wind and _____ to measure wind speed.

- A anemometer
- B hygrometer



4

What does a meteorologist use to measure the amount of **water vapor** in the air, which tells them how high the **humidity** will be?

- A anemometer



5



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- C weather maps
- D ancient books



- B air pressure movements
- C every city name
- D street names

9

Weather satellites in space take pictures from high above the earth and send the pictures back to computers so that scientists and meteorologists can _____.

- A see all the planets
- B count the stars
- C predict the upcoming weather in all areas



10

The weather can affect the **pollution** in many areas. A lot of pollution comes from _____.

- A car exhaust
- B dogs
- C lakes
- D wetlands





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Name _____ Class _____ Date _____

1

Weather follows certain **patterns**. Depending on _____, the pattern of your weather may differ from the weather of some place else on earth.

- A what you are wearing
- B time of day
- C where you live
- D the color of your house



2

How much rain and snowfall you get (if any) often has to do with where you live. If you live near a large body of water, you have a **different weather pattern** than a person living near a desert.

- A true
- B false



3

If you live closer to _____ you will have **warmer temperatures** for many more days than those who do not.

- A the South Pole
- B the equator



4

Weather can be extremely _____ and powerful, causing great **damage** to places on earth.

- A dangerous
- B pleasant



5



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- B hurricane
- C tornado
- D tidal wave



- A over oceans
- C over land
- D over the water



9

Which is a **winter storm** that brings a lot of snowfall, blowing winds, and cold temperatures?

- A blizzard
- B hurricane
- C tornado
- D icicles



10

The **National Weather Service** sends out warnings on extreme weather to help keep you safe. A storm _____ means a storm may happen in your area and a warning means a storm is in or near the area in which you live.

- A picture
- B warning
- C watch
- D report



Name _____ Class _____ Date _____

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- A picture
- B warning
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Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Anemometer

Blizzard

Weather

High air pressure

Rain gauge

Wind vane

Barometer

Hurricane

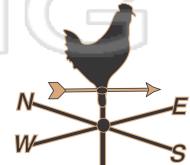
1.
in a specific place

- the condition of the atmosphere at a specific time



2.
of the wind

- a tool meteorologists use to measure the direction



3.
rainfall



4.

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6.
blowin

7.
- when the air in the atmosphere presses down a lot

AIR PRESSURE



8.
- an extremely large, tropical, rotating weather
system that has winds of at least 119 km/h





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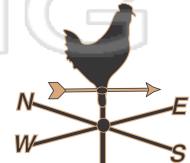
Barometer

Hurricane

1. weather - the condition of the atmosphere at a specific time in a specific place



2. wind vane - a tool meteorologists use to measure the direction of the wind



3. rain



4. anemometer

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6. blizzard
cold tem

7. high air pressure - when the air in the atmosphere presses down a lot



8. hurricane - an extremely large, tropical, rotating weather system that has winds of at least 119 km/h





Name _____ Class _____ Date _____

Match each of the following terms to its definition:

Hygrometer

Weather satellites

Low air pressure

Meteorologist

Weather

Tornado

Weather map

Hurricane

1. - an extremely large, tropical, rotating weather system that has winds of at least 119 km/h



2. - a tool meteorologists use to measure the amount of water vapor in the air which tells them the level of humidity



3. a little



4. predict



5. that to

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6. weath



7. - satellites in space that gather information that scientists and meteorologists use to predict the upcoming weather



8. - the condition of the atmosphere at a specific time in a specific place





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Weather satellites

Low air pressure

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Tornado

Weather map

Hurricane

1. **hurricane** - an extremely large, tropical, rotating weather system that has winds of at least 119 km/h



2. **hygrometer** - a tool meteorologists use to measure the amount of water vapor in the air which tells them the level of humidity



3. **low**
little



4. **me**
weather



5. **tor**
the gr

PREVIEW

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6. **wea**
will be



7. **weather satellites** - satellites in space that gather information that scientists and meteorologists use to predict the upcoming weather



8. **weather** - the condition of the atmosphere at a specific time in a specific place

