



**When thunder roars,  
stay indoors!**



# Today's Focus



Earth's  
Atmosphere

Factors  
Affecting  
Weather

Precipitation and  
Air Pressure

Weather

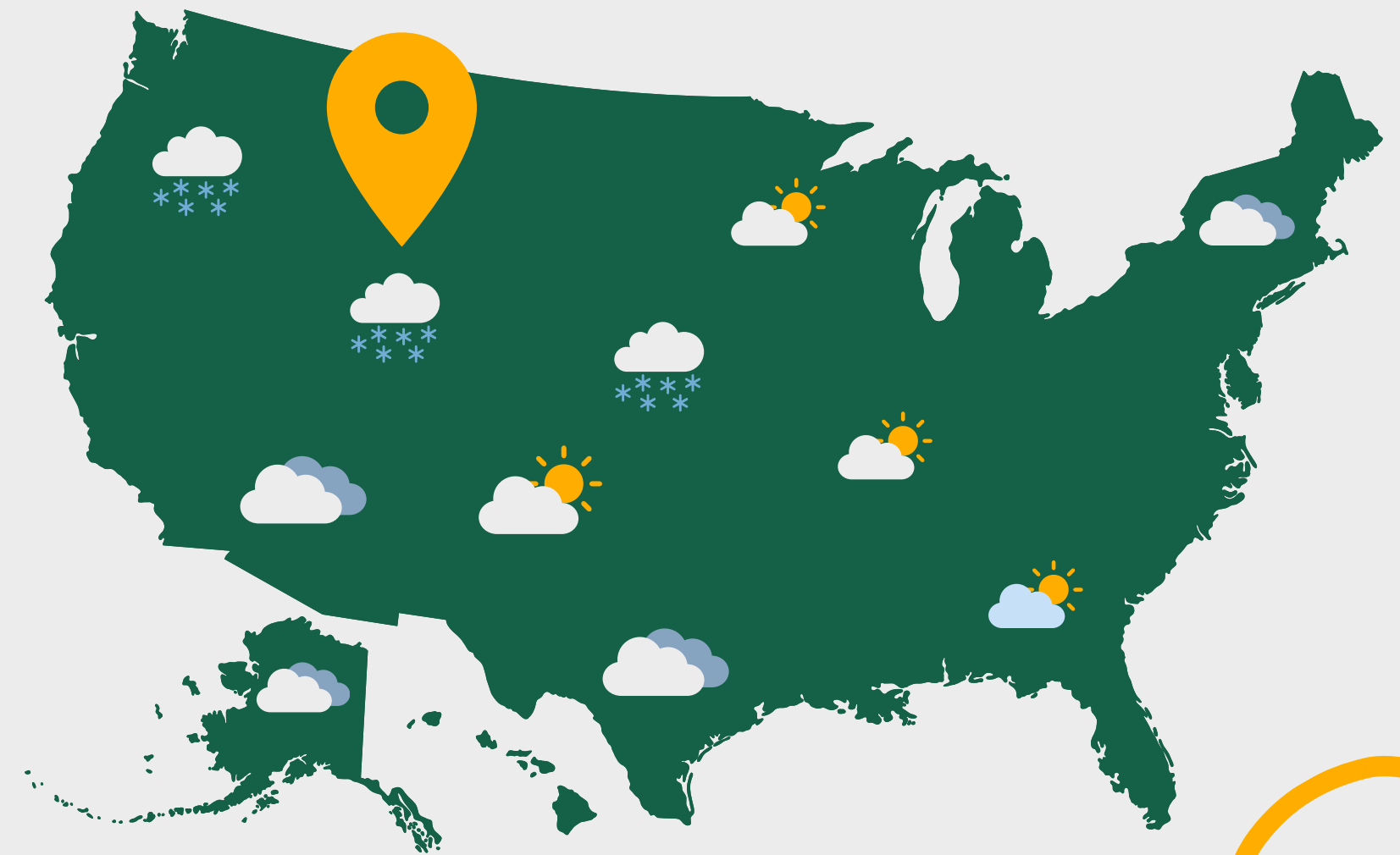
Predicting  
Weather



# Dress for the Weather

Jam lives in Wyoming and wants to go out on a Saturday morning to play.

What should she wear based on the weather forecast shown? The pinned location is Wyoming.

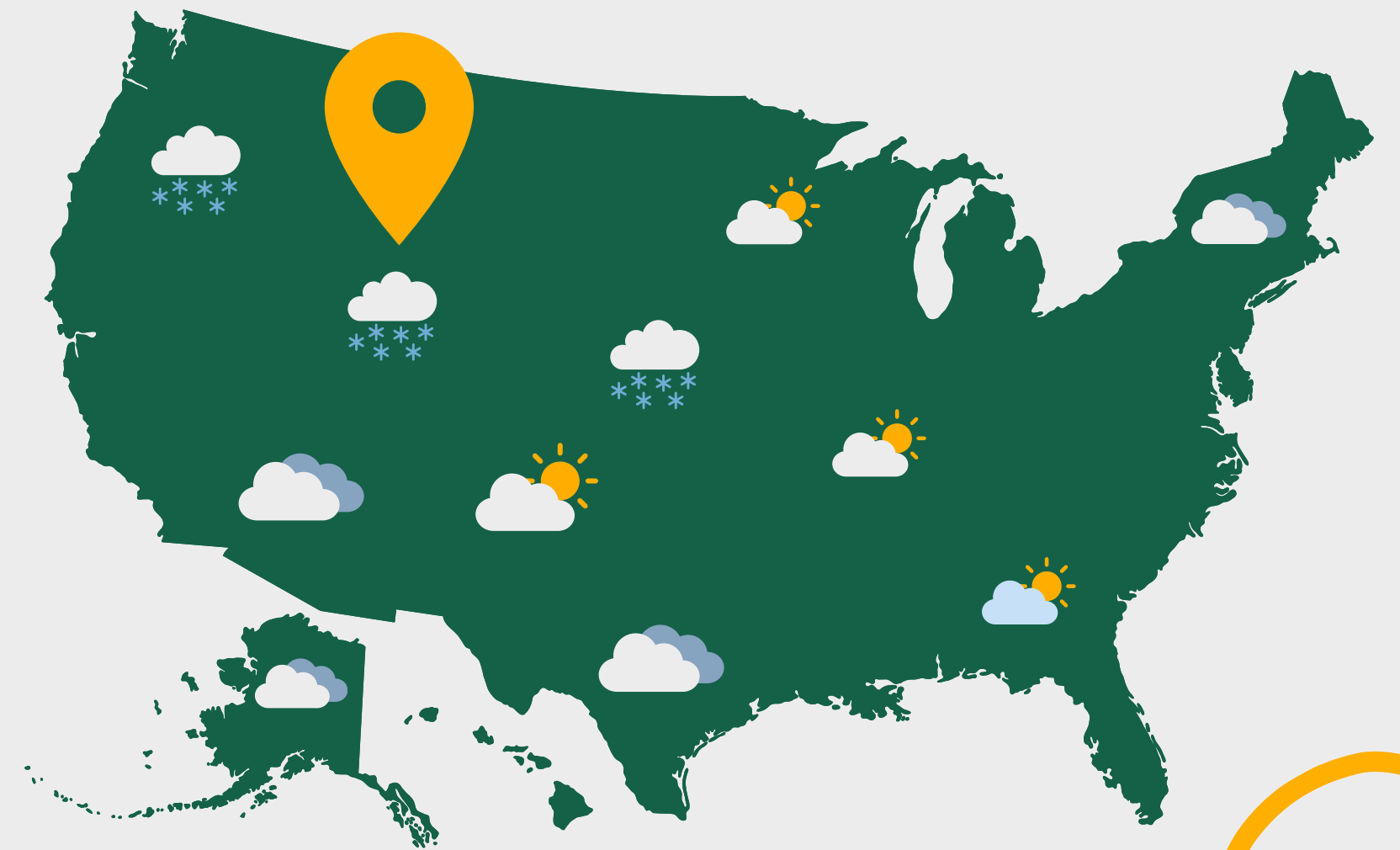


## ANSWER KEY

# Dress for the Weather

Jam lives in Wyoming and wants to go out on a Saturday morning to play.

What should she wear based on the weather forecast shown? The pinned location is Wyoming.





# Learning Outcomes

By the end of the lesson, you'll be able to:



1



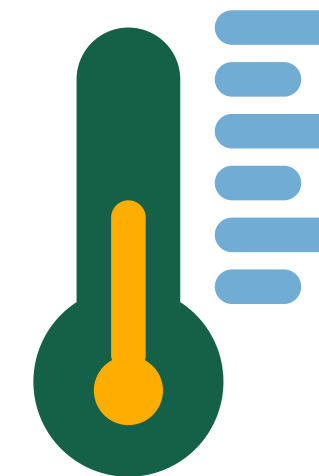
describe the  
role of Earth's  
atmosphere in  
the weather

2

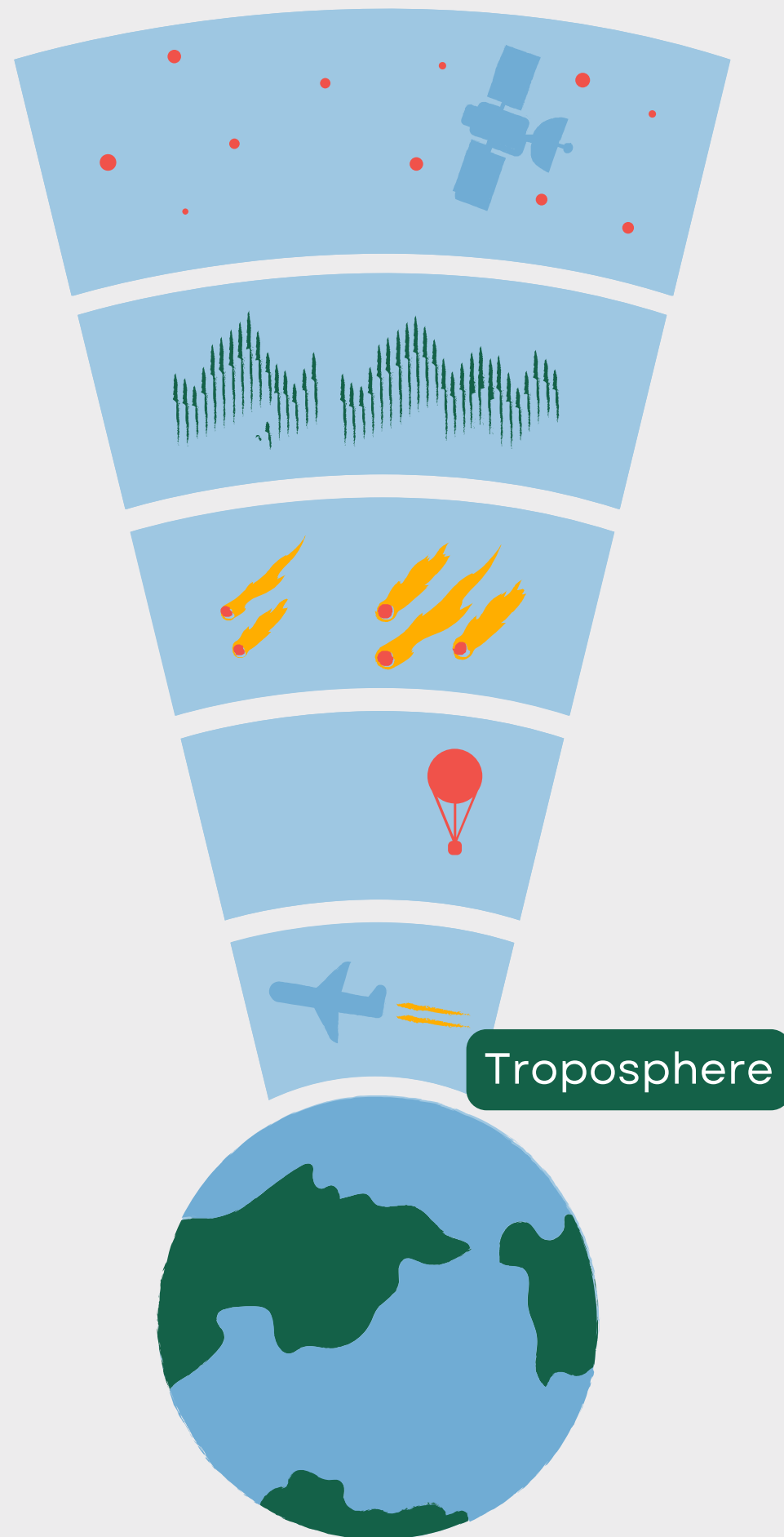


name main  
factors  
affecting  
weather

3



explain the link  
between air  
pressure and  
precipitation



# Earth's Atmosphere

1

It is the gaseous layer that blankets Earth.

2

Almost all weather occurs in its lowest layer, the troposphere. It contains about 99% of the atmosphere's water vapor.

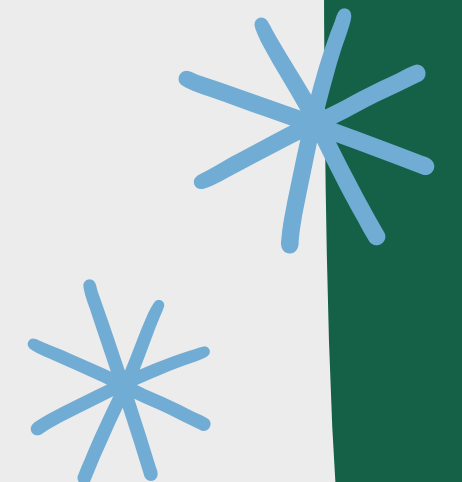
# What is weather?



It is the condition of  
Earth's atmosphere at  
a given time and place.



It is what you  
see outside on  
any particular day.





# Main Factors Affecting Weather



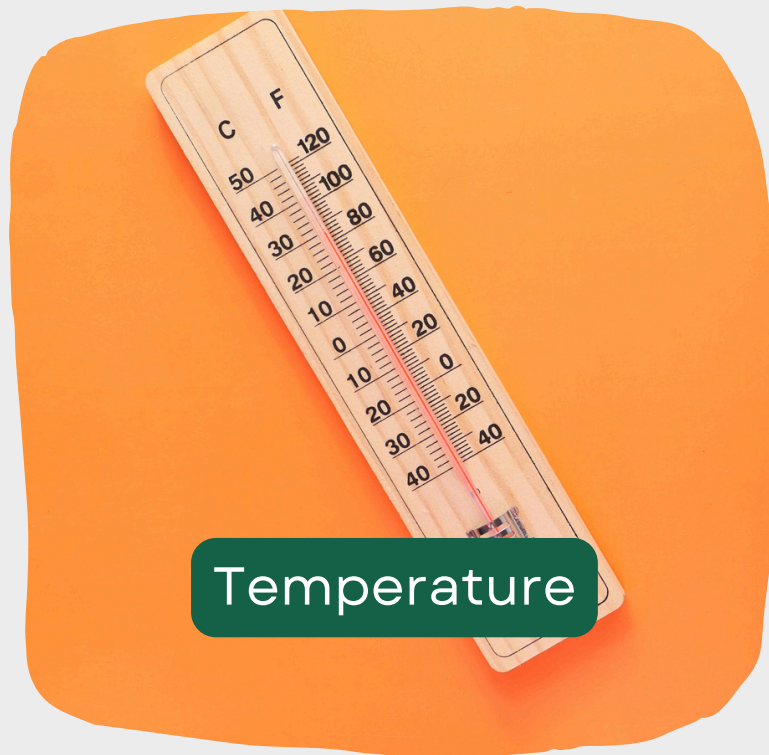
Moisture in the air  
(humidity)



Cloudiness



Wind speed and  
direction



Temperature



Air pressure



Precipitation



# Predicting Weather

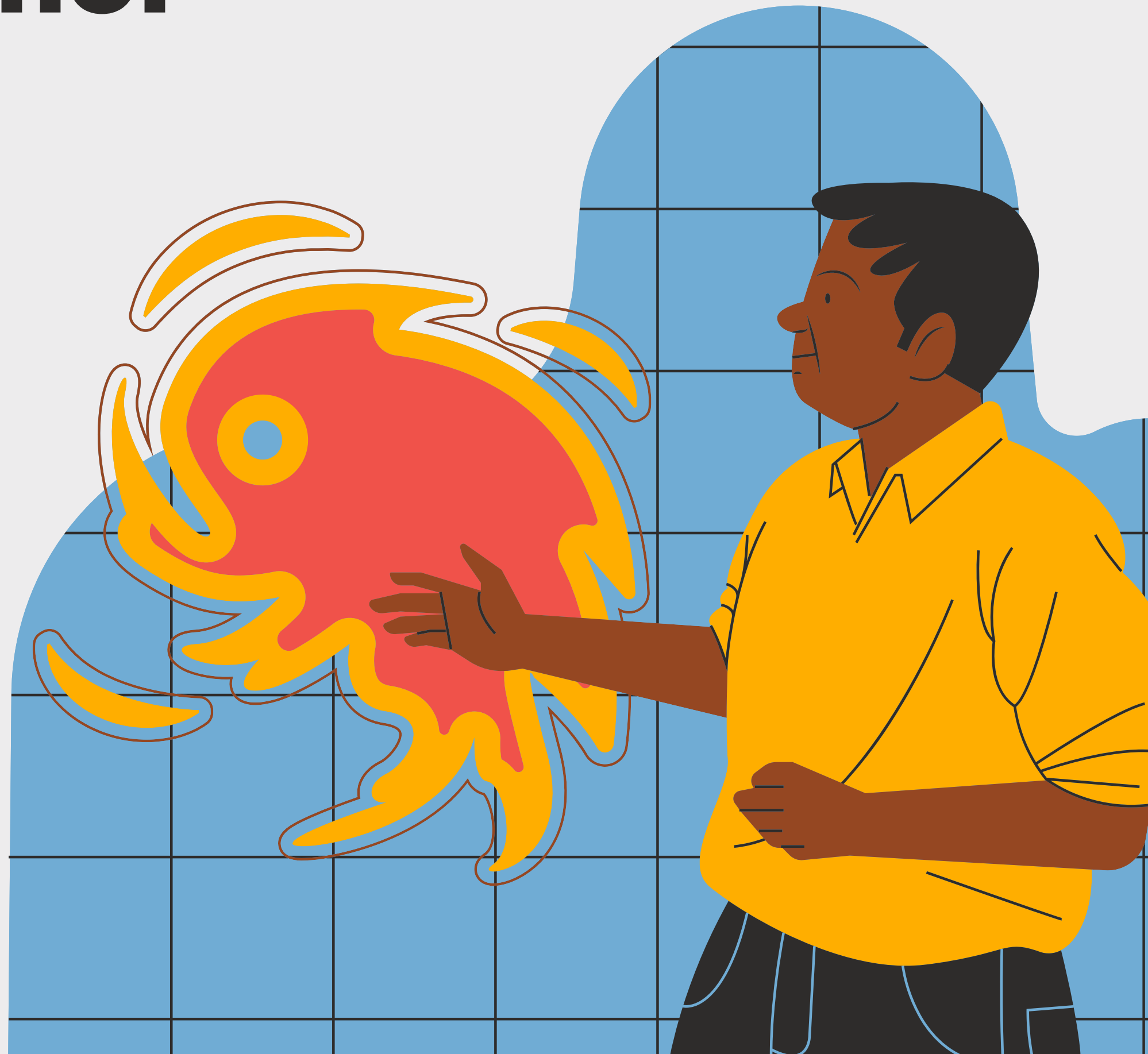
## Meteorologist

They study Earth's atmosphere to predict and understand the weather.

## Weather Forecast

It is an estimate of future weather conditions.




It depends on several factors: wind direction, temperature, air pressure, etc.



# Predicting Weather

What's the weather on Tuesday in Oregon?

What should you bring if you plan to go out on Wednesday?

3-DAY WEATHER FORECAST (OREGON)		
Mon	Tue	Wed
 partly cloudy 68°F	 cloudy and windy 61°F	 rainy and windy 53°F

# Brain Teaser

Do you think the air pressure has anything to do with how much rain falls? Why do you think so?

Share your thoughts with the class  
using the sticky notes.

Add your answer here.

Name

Add another answer  
here.

Name

Add your answer here.

Name

Add another answer  
here.

Name



# Precipitation



It occurs when liquid or frozen water forms in the clouds and falls back to Earth. It includes rain, snow, hail, and sleet.



# Air Pressure

It refers to the weight of the air molecules pressing down on us.



Air pressure depends on the temperature and how tightly packed air molecules are.

# How are air pressure and precipitation connected?



Low-pressure system is often associated with more precipitation.



High-pressure system is generally associated with calm, fair weather.

# Look out the window now!

How's the weather outside?

Did the weather forecast today mention a low-pressure system? How about a high-pressure one?



# A Recap

1



All weather occurs in Earth's atmosphere.

2



Weather is the condition of the atmosphere at a given time and location.

3



Precipitation, air pressure, temperature, cloudiness, and wind conditions affect weather.

4



Air pressure and the amount of precipitation are related.



# Looking Back

Recall what happened when Hurricane Ian hit Florida in September 2022.

Where did it  
cause the most  
damage?

How was the  
weather before  
the hurricane  
came?



# Resource Page

Use these elements and illustrations in your Canva Presentation. To find even more elements about the weather, use these collection codes in the elements search bar:

**canvaeducationscienceobjectsinthesky**

**canvaeducationscienceweather**

**canvaeducationweather**

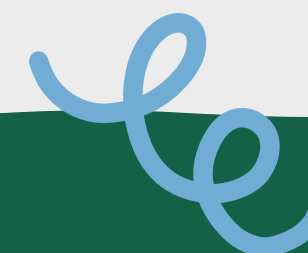
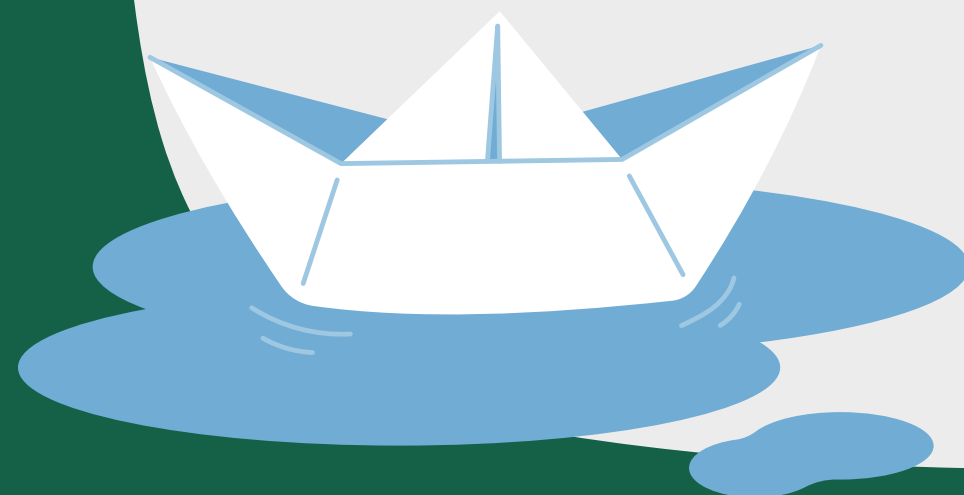
Happy designing! Don't forget to delete this page before presenting.





**Try this background for online class.**

\*Please delete this section before downloading.





# Press these keys while on Present mode!

- |                         |  |
|-------------------------|--|
| <b>B</b> for blur       | <b>C</b> for confetti                      |
| <b>D</b> for a drumroll | <b>M</b> for mic drop                      |
| <b>O</b> for bubbles    | <b>O</b> for quiet                         |
| <b>U</b> for unveil     | <b>0-9</b> Any number from 0-9 for a timer |

