

# Atmosphere & Weather *Learning Guide*



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# TABLE OF CONTENTS

Lesson 1 - Our Atmosphere .....	2
Lesson 2 - Layers of The Atmosphere .....	4
Pause & Review - Layers of The Atmosphere.....	7
Lesson 3 - Weather .....	8
Pause & Review - The Water Cycle .....	11
Lesson 4 - Clouds and Precipitation.....	12
Pause & Review - Cloud Types .....	15
Lesson 5 - Weather Patterns.....	16
Pause & Review - Weather Patterns .....	17
Lesson 6 - Severe Weather.....	19
Pause & Review - Severe Weather .....	21
Lesson 7 - Predicting Weather .....	22
Pause & Review - Predicting Weather .....	23
Lab Investigation - Predicting Weather .....	24
Key Vocabulary Terms.....	28
Vocabulary Review .....	30
Assessment Review .....	32
Assessment.....	34
Assessment Key.....	36
NGSS Correlations .....	37



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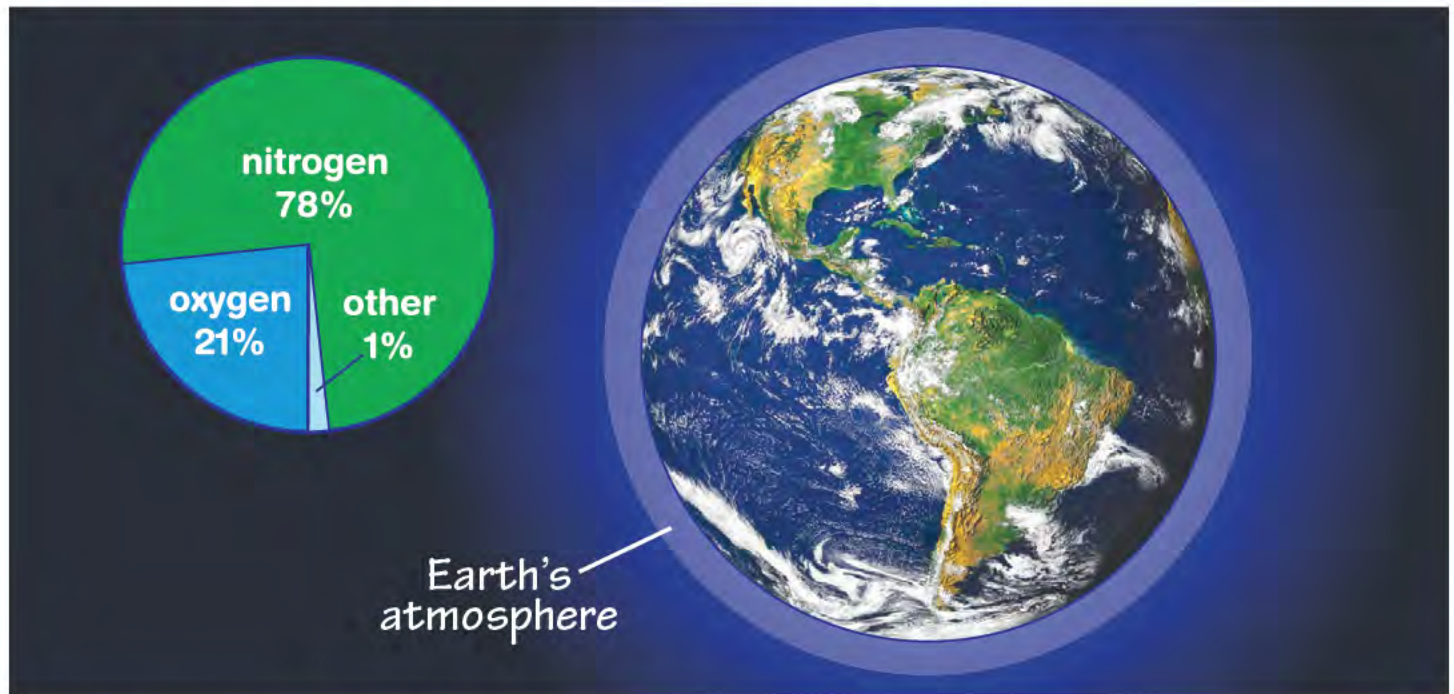
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# OUR ATMOSPHERE

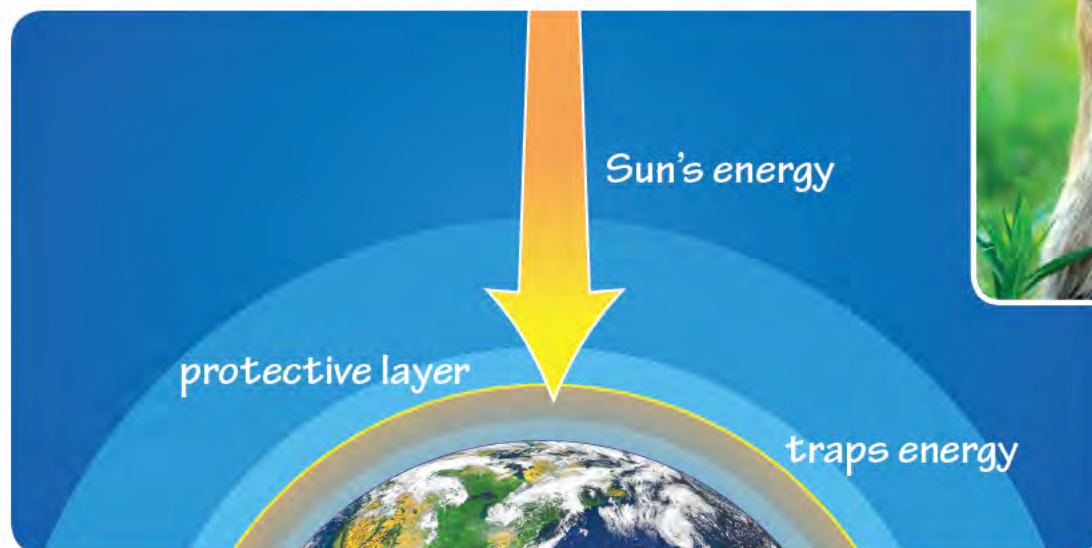
## Composition of the Atmosphere

The layer of gases that surrounds our planet is called the **atmosphere**. The atmosphere is composed of 78% **nitrogen**, 21% **oxygen** and 1% other gases. Water vapor and tiny particles of dust, smoke and other chemicals are also found in the atmosphere.



## Importance of the Atmosphere

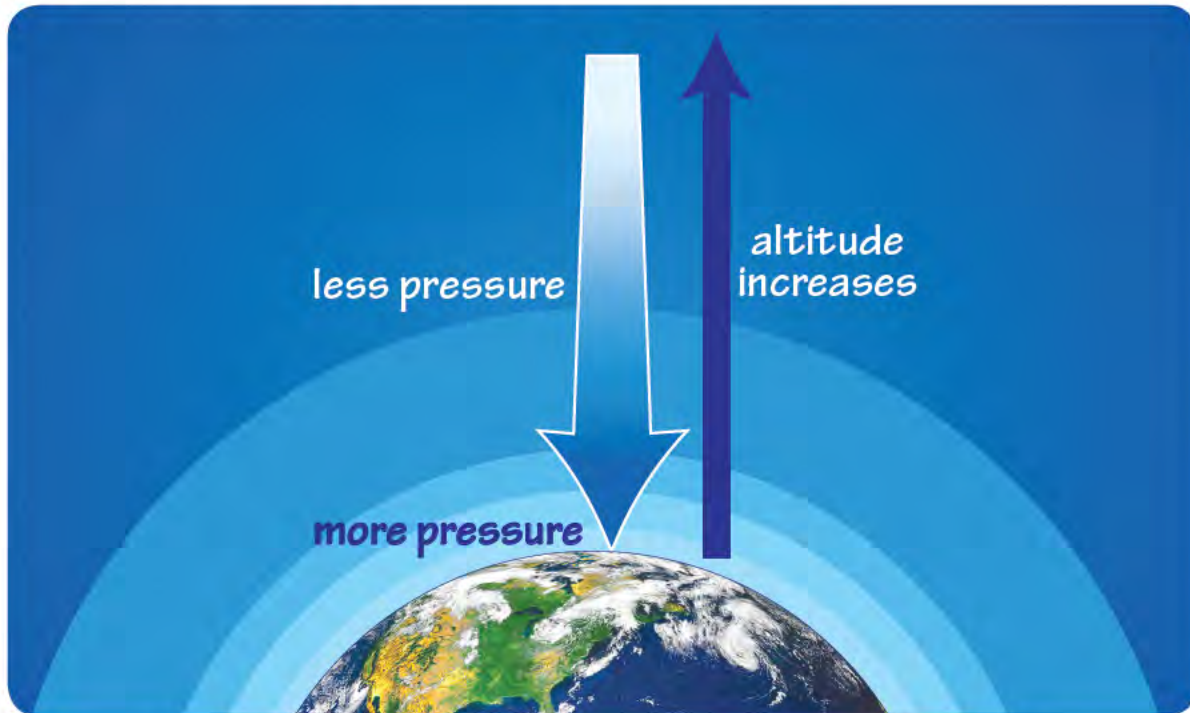
The Earth is unique because it has an atmosphere that can support life. Oxygen and gases in the air are necessary for survival. The atmosphere also **traps the Sun's energy** to maintain moderate temperatures and forms a protective layer from the Sun's radiation.





## Atmospheric Pressure

The force that atmospheric gases exert on a surface is called **air pressure**, or **atmospheric pressure**. This pressure is highest near sea level because gravity pulls the air molecules close to the Earth's surface. Pressure **decreases** as altitude **increases**.



## Air Pollution

Humans add **pollutants** into the atmosphere every day. Natural sources of air pollution include volcanic ash, pollen and wildfire smoke. Air pollutants can travel great distances and impact environments around the globe.

