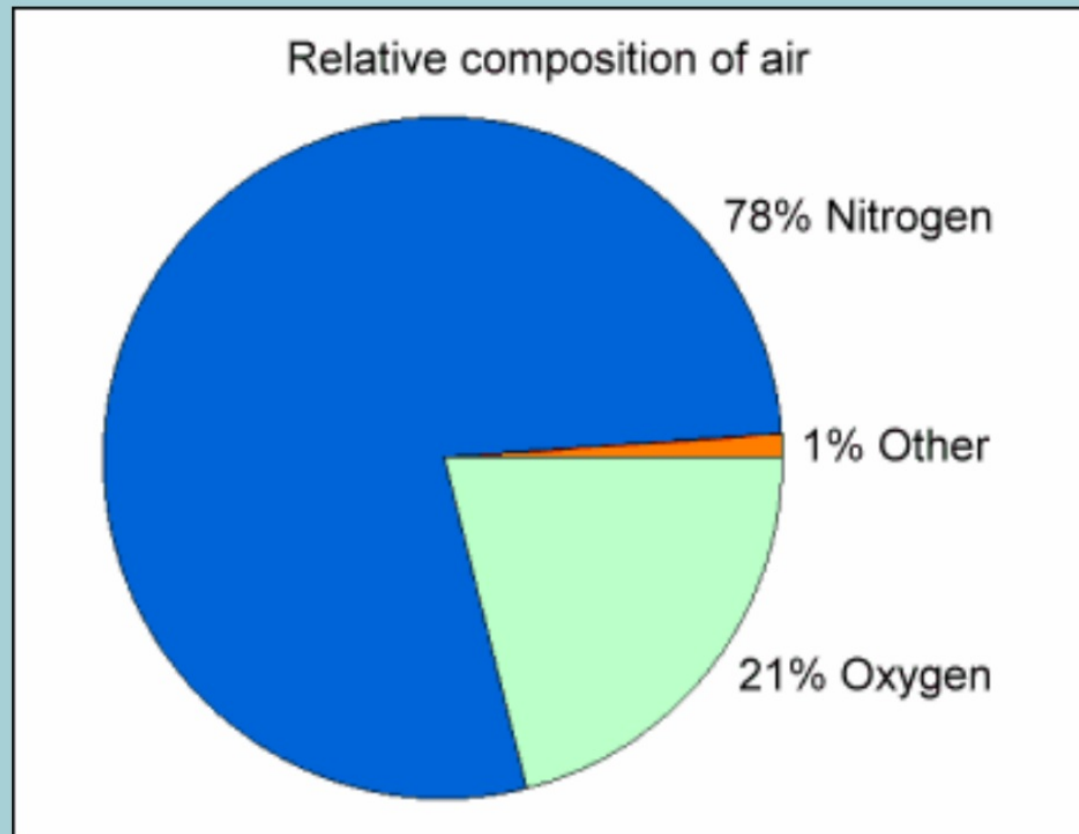


It's Got Us Covered



Air:

- **Made up of matter**
- **Takes up space and has weight**
- **A mixture of gases**



How is oxygen added to the air?

Carbon dioxide from the air is used by plants to make food.

Water vapor makes clouds, and therefore rain, possible.

Oxygen is given off to the air when plants make food.

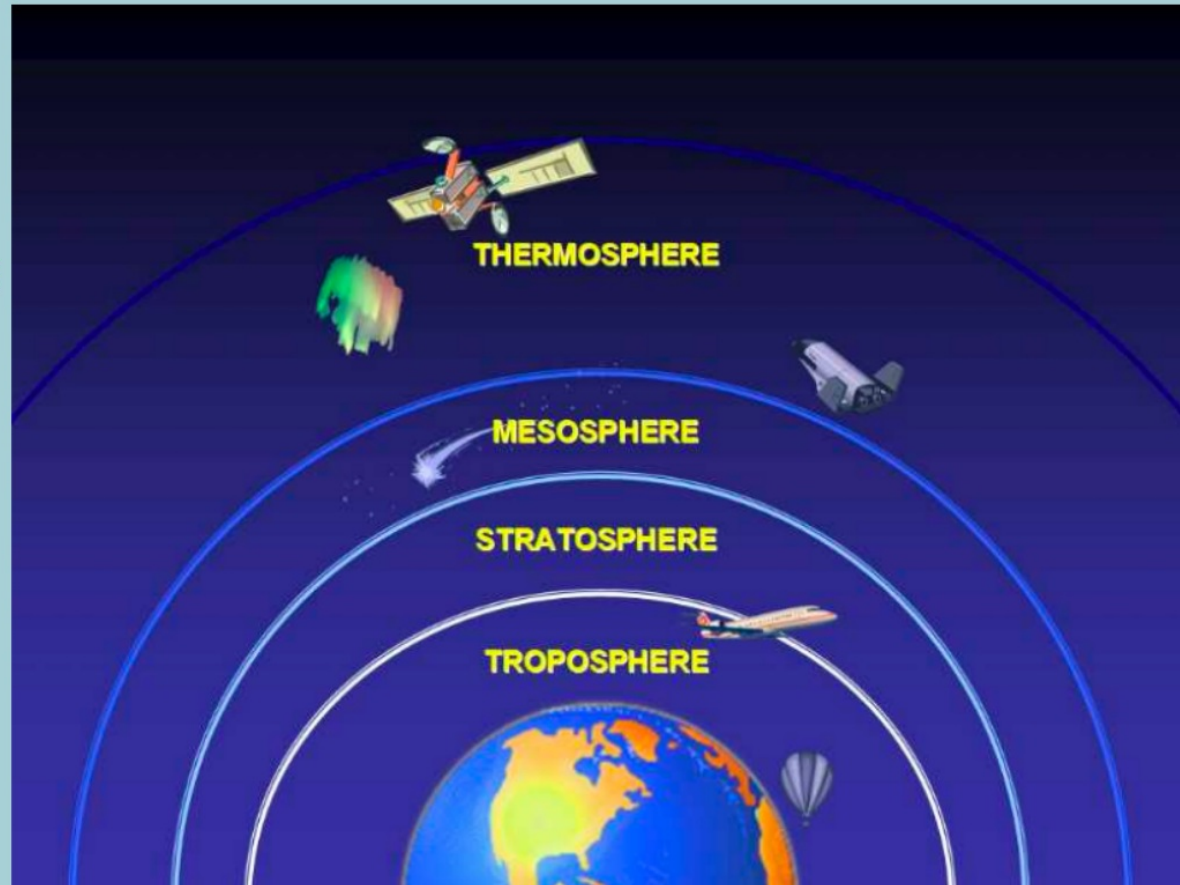
Oxygen from the air is used by animals to release energy from food.

Nitrogen from the air is used by bacteria on plant roots. The bacteria change nitrogen into materials that plants use to grow.

Water and nitrogen-containing materials in the soil are used by plants to make food and to grow.

Atmosphere

- **A blanket of air around Earth.**
- **Made of gases, liquids, and solids**
- **From ground to 450 miles above the Earth**
- **Four main layers**



Thermosphere

- **Furthest layer from Earth's surface**
- **The Space Shuttle orbits the Earth here**



Troposphere

- **Ground to about 10 miles above the ground**
- **Most of the gases in the atmosphere are here**
- **Only layer that supports life**
- **Where weather happens**



Highest things in the Troposphere

- **Mount Everest (29,028 feet)**
- **Jet Airliner (30,000 feet)**
- **Burj Khalifa (2,717 feet)**





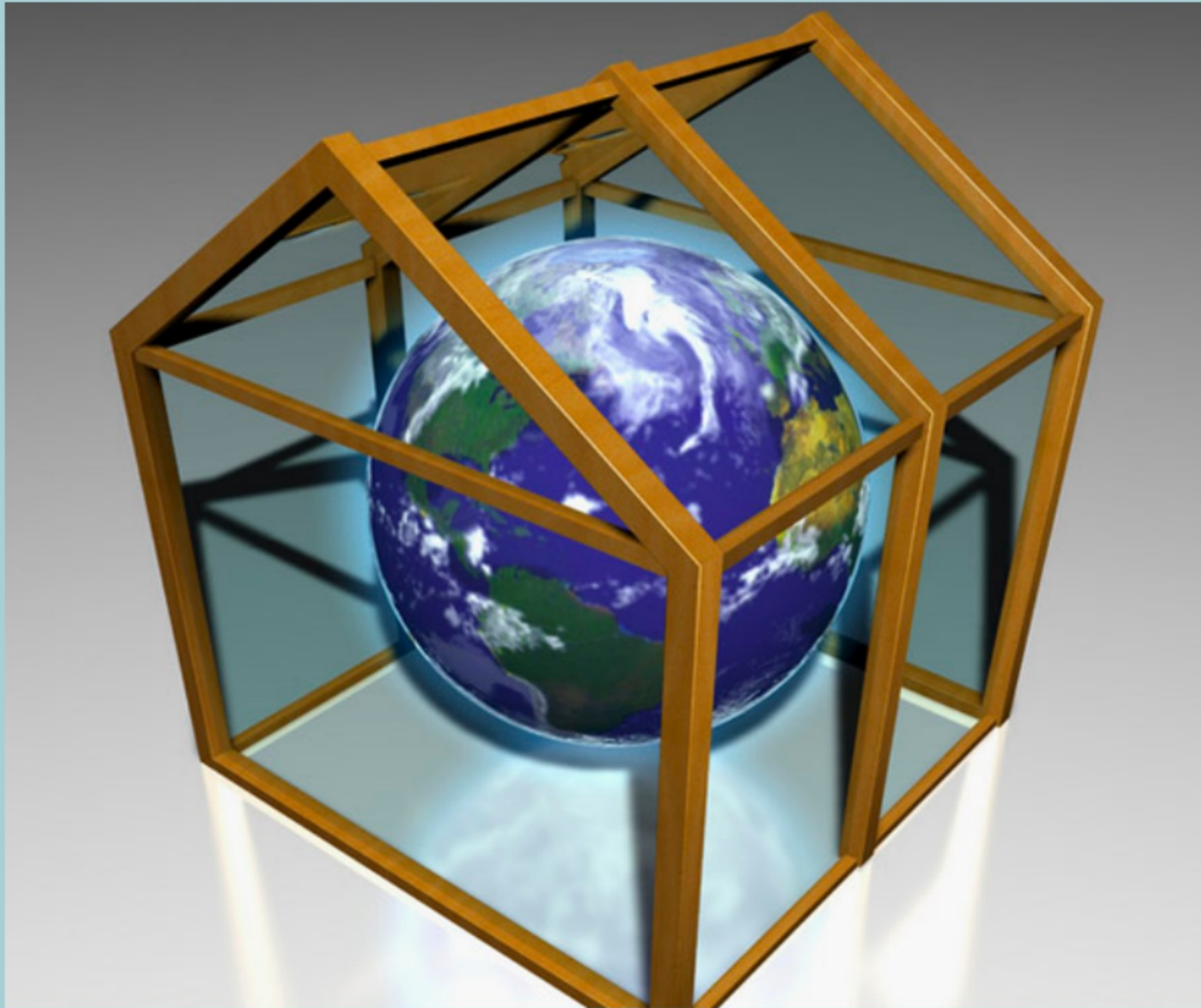
Weather

- **What's happening in the atmosphere at a certain place and time.**



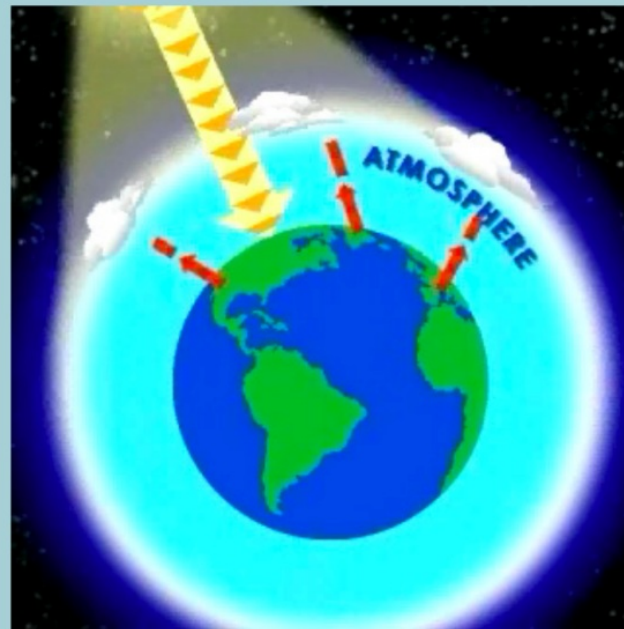
Not Too **WARM**, Not Too **COLD**: the greenhouse effect



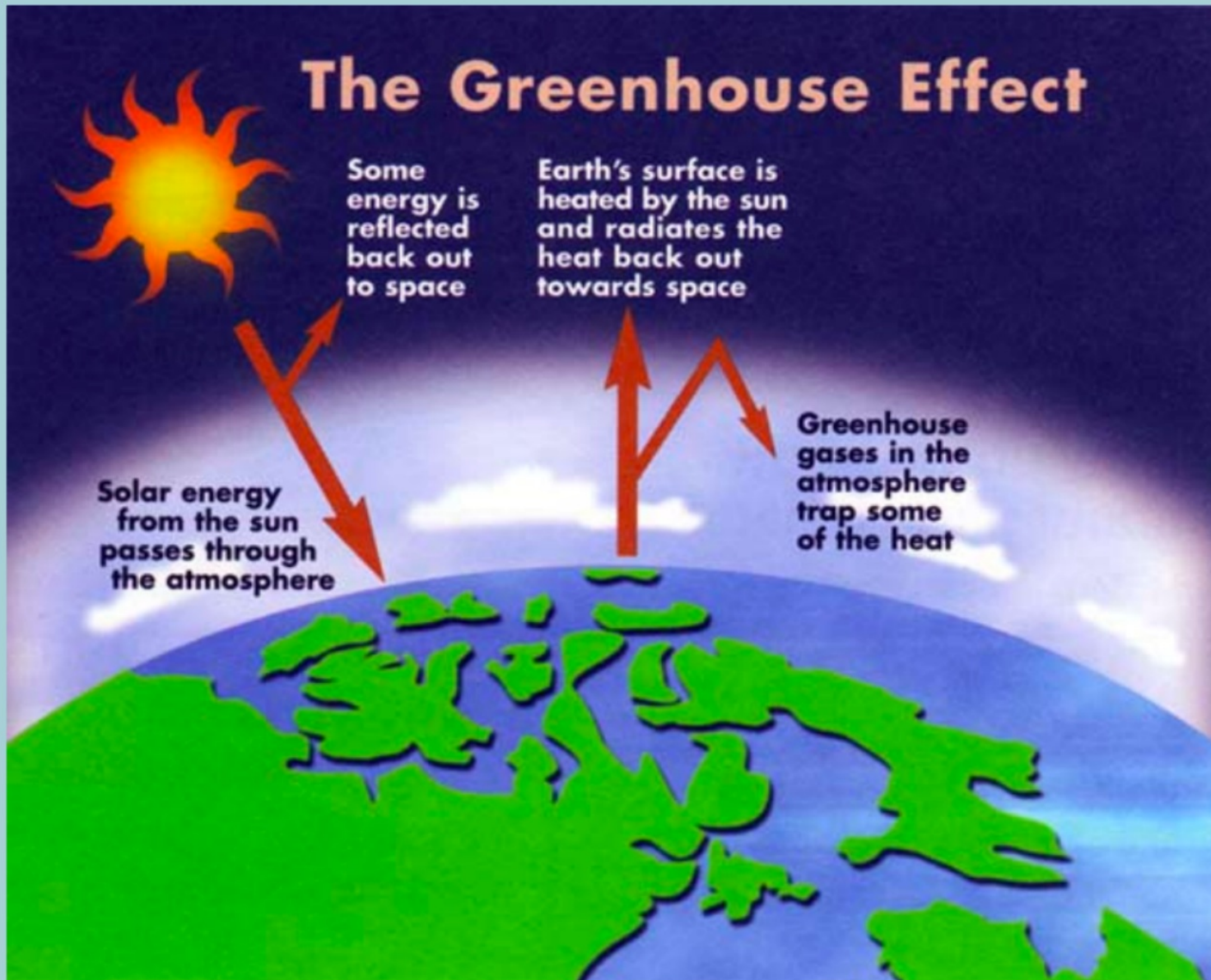


Greenhouse Effect

- The process in which heat from Earth is trapped by the atmosphere.
- We need the Greenhouse Effect to keep the Earth warm



The Greenhouse Effect



- The amount of Carbon Dioxide in the atmosphere is increasing, primarily from pollution and population
- Some scientists think this is making the Earth warmer

