

CLIMATE CHANGE Need to Know

Extreme Weather

by Jane Parks Gardner



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Wild Weather

Hurricanes rip through **coastal** cities.

Meanwhile, heat waves and **droughts** dry out other parts of the world.

Wildfires burn up old forests. And blizzards knock out power, leaving whole communities in freezing darkness.

Weather is getting more extreme. Why?

A big reason is **climate change**.

Weather is what is happening in a moment. It may be rainy or sunny. The climate is the usual weather in a place. It is what can be expected based on patterns from the past.



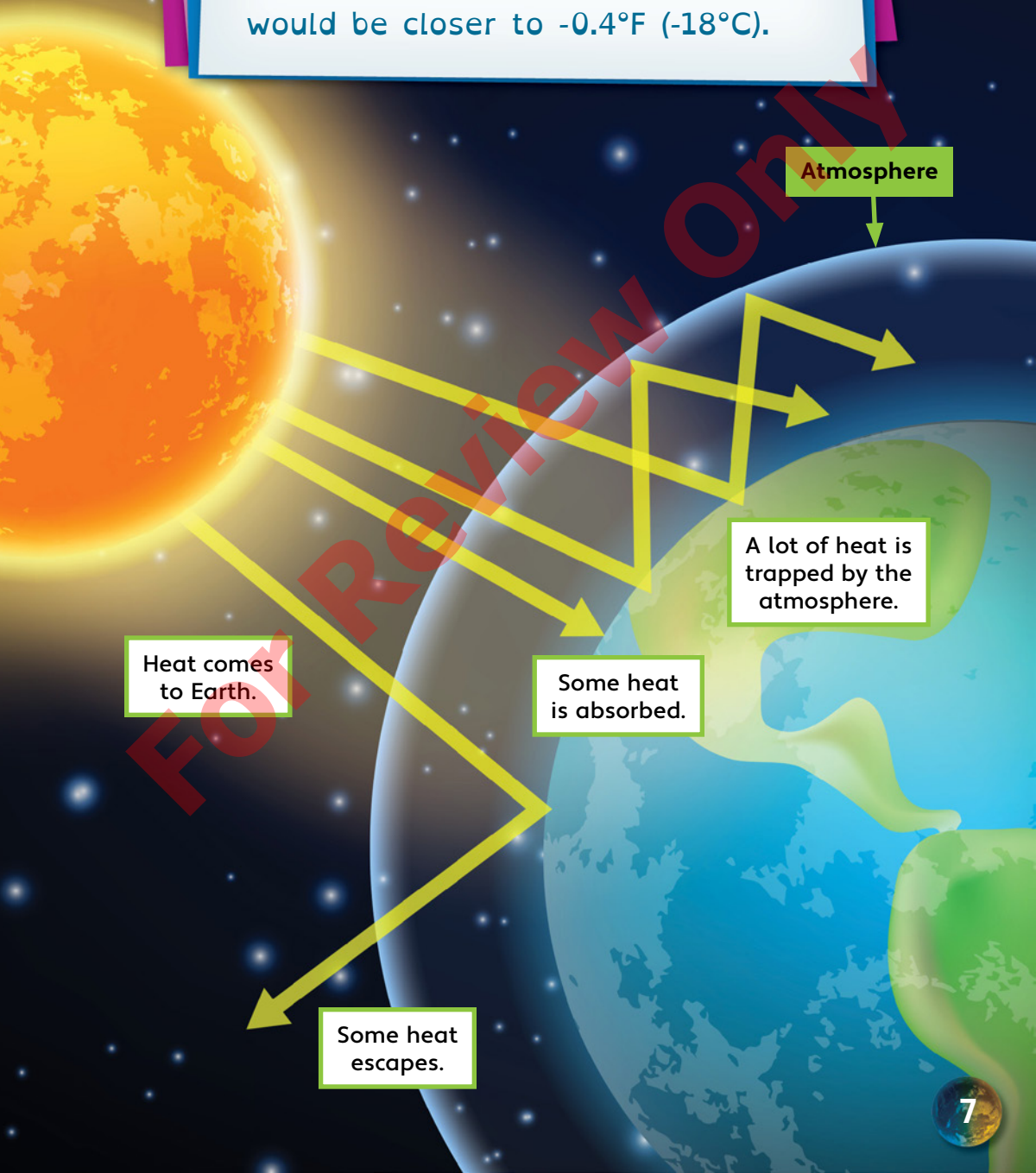


Planet Greenhouse

Earth is the only planet that is the right temperature for life. This is in part because of something called the **greenhouse effect**.

How does it work? Sunlight makes its way to Earth. Dark-colored things on Earth **absorb** the sunlight. This makes heat. **Greenhouse gases** around Earth **trap** much of the heat in.

The greenhouse effect makes Earth's average temperature about 59 degrees Fahrenheit (15 degrees Celsius). Without it, our planet would be closer to -0.4°F (-18°C).



Some greenhouse gases are made in nature. However, humans also add a lot of them to the air. These gases are let out when we burn **fossil fuels** to power our cars, homes, and factories. The added greenhouse gases trap even more heat. This has led to more extreme climate change.

Humans and other animals breathe out carbon dioxide. Methane is let off when waste breaks down. These natural sources of greenhouse gases alone would keep Earth warm enough for life.



Transportation adds more greenhouse gases to the air than any other activity.

