
词汇: *climate change* 气候变化

Our planet is **heating up** due to something called the **greenhouse effect**. This is one of the reasons why Earth is seeing more **extreme weather** events, such as **heatwaves**, forest fires and floods each year. But what exactly is the greenhouse effect, and what can we do to reduce it?

Let's first think about a **greenhouse** – you may have one in your garden! It's a glass structure that protects plants against low **temperatures** by **trapping** heat inside. But, while this helps your plants grow, Earth is trapping heat in the same way, and it's causing **global warming**. When **fossil fuels**, such as coal, oil and gas, are burnt for power, **carbon dioxide** is released as a **waste product**. It enters the **atmosphere** and acts like a blanket around the planet, which means heat **radiation** can't escape and the temperature increases.

The impact of **gases** on the Earth's **climate** was first investigated in the 1820s. Eunice Foote, a scientist and women's rights activist, tested the effects of **sunlight** on different gases that she put into glass cylinders. Her results showed that carbon dioxide traps heat more than other gases. The idea of the greenhouse effect was born.

So, what can we do to reduce the greenhouse effect? The UN recommends using more **energy-efficient** electrical appliances at home and switching to **LED lightbulbs**. Also, by washing your clothes at 30° instead of a higher temperature, around 40% less electricity is used over a year, according to the Energy Saving Trust. A change in diet is also something to consider. The charity A Well-Fed World, claim that **plant-based** foods, as opposed to meat and dairy, need less land and water to be produced. So, switching saves energy and lowers **emissions**, which contribute to climate change.

We only have one planet, so let's try and take care of it as much as we can.

词汇表

heat up	变暖
greenhouse effect	温室效应
extreme weather	极端天气
heatwave	热浪, 酷暑期
greenhouse	温室, 暖房
temperature	气温
trap	吸收, 保存
global warming	全球变暖
fossil fuel	矿石燃料
carbon dioxide	二氧化碳
waste product	废物
atmosphere	大气层
radiation	辐射
gas	气体
climate	气候
sunlight	阳光
energy-efficient	节能的, 高能效的
LED lightbulb	发光二极管灯泡
plant-based	仅有蔬菜的, 全素的
emission	排放

测验与练习

1. 阅读课文并回答问题。

1. What is a greenhouse?
2. What does carbon dioxide do when it enters the atmosphere?
3. Who first investigated the impact of gases on the climate?
4. True or False? *Washing your clothes at 40° saves around 30% less electricity over a year.*
5. How can eating plant-based foods help the environment?

2. 选择意思恰当的单词或词组来完成下列句子。

1. Don't make the coffee yet. We need to wait for the water to _____.

heat up	trap	burn	investigate
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2. We're planning to move to a country with a warmer _____ next year.

sunlight	radiation	emission	climate
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3. According to the weather forecast, there's going to be another _____ next week!

temperature	heatwave	atmosphere	fossil fuel
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4. Do you have a _____ in your garden?

greenhouse effect	global warming	gas	greenhouse
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5. I'm not sure whether to have the meat or _____ burger.

glass	plant-based	LED	energy-efficient
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答案

1. 阅读课文并回答问题。

1. What is a greenhouse?

It's a glass structure that protects plants against low temperatures by trapping heat inside.

2. What does carbon dioxide do when it enters the atmosphere?

It acts like a blanket around the planet, which means heat radiation can't escape and the temperature increases.

3. Who first investigated the impact of gases on the climate?

Eunice Foote, a scientist and women's rights activist.

4. True or False? *Washing your clothes at 40° uses around 30% less electricity over a year.*

False. By washing your clothes at 30° instead of a higher temperature, around 40% less electricity is used over a year.

5. How can eating plant-based foods help the environment?

Plant-based foods, as opposed to meat and dairy, need less land and water to be produced. So, switching saves energy and lowers emissions.

2. 选择意思恰当的单词或词组来完成下列句子。

1. Don't make the coffee yet. We need to wait for the water to **heat up**.

2. We're planning to move to a country with a warmer **climate** next year.

3. According to the weather forecast, there's going to be another **heatwave** next week!

4. Do you have a **greenhouse** in your garden?

5. I'm not sure whether to eat the meat or **plant-based** burger.