SDG 13

Climate Action

SDG 13 氣候行動

A Bilingual Lesson for Grade 5
五年級雙語課程

Weather or Climate? 天氣還是氣候	**The Earth's Blanket** 地球的被子	**Wind and Sea** 風與海	**Our Actions** 行動方案

1.6°C
warmer: Taiwan today vs. 110 years ago
台灣現在比 110 年前熱了這麼多

13
Goal 13: Climate Action
目標 13：氣候行動

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planet that we all share
個我們共同的地球

Hello, I'm Dom!

大家好，我是 Dom！

I come from California, USA.
我從美國加州來。

I have been teaching students in Taiwan for a couple of years.
我在台灣教學生已經有幾年了。

Today: SDG 13 — Climate Action.
今天的主題：SDG 13 氣候行動。

💁

Today's question: what can one small school by the sea do for the whole planet?
今天的問題：一所海邊的小學校，能為整個地球做什麼？



🌏

California and Changhua both sit by the sea, and both are feeling a warmer climate.

加州和彰化都在海邊，兩個地方都感受到氣候正在變熱。

🙋 Stand Up If...

如果是你，就站起來！

1. **Stand up if you felt too hot in class this summer.**
   今年夏天在教室覺得太熱的，站起來。

2. **Stand up if you used a fan or AC last night.**
   昨晚有開電風扇或冷氣的，站起來。

3. **Stand up if you walked or biked somewhere this week.**
   這星期有走路或騎腳踏車出門的，站起來。

Everyone feels the weather. Today: something bigger — the climate.

每個人都感覺得到天氣。今天要談更大的事：氣候。

🗂️ Weather or Climate? 1/2

天氣，還是氣候？

WEATHER 天氣	CLIMATE 氣候
🌧️ **It is raining today** 今天在下雨	☀️ **Taiwan's summers are getting longer** 台灣的夏天越來越長
💨 **Tomorrow will be windy** 明天風會很大	🌍 **The Earth is warmer than 100 years ago** 地球比一百年前還熱

👆 Weather is today. Climate is many, many years. · 天氣是今天的事；氣候是很多、很多年的事。

🗂️ Weather or Climate? 1/2

天氣，還是氣候？

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💨 **Tomorrow will be windy** 明天風會很大 → **WEATHER 天氣**	🌍 **The Earth is warmer than 100 years ago** 地球比一百年前還熱 → **CLIMATE 氣候**

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🗂️ Weather or Climate? 2/2

天氣，還是氣候？

WEATHER 天氣	CLIMATE 氣候
🌀 **A typhoon is coming this weekend** 這個週末有颱風要來	🧣 **Winters are shorter than Grandpa's** 冬天比阿公小時候短
🥵 **It was hot at recess** 下課的時候很熱	🌾 **Fangyuan is warm most of the year** 芳苑一年到頭大多很溫暖

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🗂️ Weather or Climate? 2/2

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The Earth Wears a Blanket

地球蓋著一條被子

Gases in the air hold the sun's heat like a blanket — without it we would freeze. But burning oil, gas and coal makes the blanket thicker, and the Earth gets too warm.

空氣裡的氣體像被子一樣留住太陽的熱——沒有它我們會凍僵。但燒石油、天然氣和煤，讓被子越來越厚，地球就太熱了。

greenhouse gas
溫室氣體

carbon dioxide
二氧化碳

fuel
燃料

heat
熱



1.6°C

warmer: Taiwan today, compared with 110 years ago

台灣現在比 110 年前熱了 1.6°C

It sounds small. But think of your body: 37°C is fine — 38.6°C is a fever.

聽起來很少。但想想你的身體：37°C 很正常，38.6°C 就是發燒了。

What happens to rice, vegetables and oysters when the whole island has a fever?

整座島都發燒的時候，稻米、蔬菜和蚵仔會怎麼樣？

🎮 Game Time! 遊戲時間

Q1

How long does summer last in Taiwan today?

現在台灣的夏天有多長？

A About 2 months　大約 2 個月

B About 3 months　大約 3 個月

C 4 to 5 months　4 到 5 個月

👆 Tap any option to reveal・點任一選項公布答案

🎮 Game Time! 遊戲時間

Q1

How long does summer last in Taiwan today?

現在台灣的夏天有多長？

C **4 to 5 months** 4 到 5 個月

✅

120 to 150 days — and winter has shrunk to only about 20 to 40 days.

夏天長達 120 到 150 天，冬天則縮短到只剩大約 20 到 40 天。

The Sea Is Close to You

大海就在你們身邊



🐋

The whale on your stage lives in the sea. As the Earth warms, the sea gets warmer and slowly rises.

你們司令台上的鯨魚住在海裡。地球變熱，海水也跟著變暖、慢慢上升。

🎮 Game Time! 遊戲時間

Q2

In the sea off Changhua's coast stand many tall white machines. They turn wind into electricity. What are they?

彰化外海站著許多高高的白色機器，把風變成電。它們是什麼？

A **Wind turbines** 風力發電機

B **Giant fans for fish** 給魚吹的大電扇

C **Lighthouses** 燈塔

D **Water towers** 水塔

👆 Tap any option to reveal・點任一選項公布答案

🎮 Game Time! 遊戲時間

Q2

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A **Wind turbines** 風力發電機

✅

Wind turbines! Many of Taiwan's offshore wind turbines stand in the sea off Changhua. They make electricity with no smoke at all.

風力發電機！台灣很多離岸風機就在彰化外海，發電完全不冒煙。

Fangyuan's Forest in the Sea

芳苑的海上森林

On Fangyuan's coast grows a mangrove forest — trees that live in salt water. People planted the first ones in the 1980s. Now crabs, birds and fish live there, and the trees take in carbon dioxide and protect the coast from big waves.

芳苑的海岸長著一片紅樹林——住在鹹水裡的樹。1980 年代有人種下第一批，現在螃蟹、鳥和魚都住在那裡；這些樹會吸收二氧化碳，還保護海岸不被大浪沖壞。

mangrove	coast	protect	plant
紅樹林	海岸	保護	種植



Your School's Green Wall

你們學校的綠牆

🌿

These plants give shade, cool the wall and clean the air. Where else could our school grow green?

這些植物帶來陰涼、讓牆變涼、讓空氣更乾淨。學校還有哪裡可以變綠？

Heats or Helps? 1/2

讓地球更熱，還是幫上忙？

HELPS 幫上忙	HEATS UP 更熱
Lights on in an empty room 沒人的教室開著燈	**Walking to school** 走路上學
Planting a tree 種一棵樹	**Throwing away good food** 丟掉還能吃的食物

👆 Thumbs up for HELPS, thumbs down for HEATS UP! · 幫上忙比讚，更熱比倒讚！

Heats or Helps? 1/2

讓地球更熱，還是幫上忙？

HELPS
幫上忙

HEATS UP
更熱



Lights on in an empty room
沒人的教室開著燈
→ **HEATS UP** 更熱



Walking to school
走路上學
→ **HELPS** 幫上忙



Planting a tree
種一棵樹
→ **HELPS** 幫上忙



Throwing away good food
丟掉還能吃的食物
→ **HEATS UP** 更熱

👆 Thumbs up for HELPS, thumbs down for HEATS UP! · 幫上忙比讚，更熱比倒讚！

Heats or Helps? 2/2

讓地球更熱，還是幫上忙？

HELPS 幫上忙	HEATS UP 更熱
A car waiting with its engine on 車子停著卻不熄火	**Saving rainwater for the garden** 收集雨水澆花
Air conditioner on, windows open 開冷氣又開窗	**Using both sides of the paper** 紙的兩面都用

👆 Thumbs up for HELPS, thumbs down for HEATS UP! · 幫上忙比讚，更熱比倒讚！

Heats or Helps? 2/2

讓地球更熱，還是幫上忙？

HELPS
幫上忙

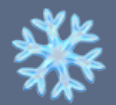
HEATS UP
更熱



A car waiting with its engine on
車子停著卻不熄火
→ **HEATS UP 更熱**



Saving rainwater for the garden
收集雨水澆花
→ **HELPS 幫上忙**



Air conditioner on, windows open
開冷氣又開窗
→ **HEATS UP 更熱**



Using both sides of the paper
紙的兩面都用
→ **HELPS 幫上忙**

👆 Thumbs up for HELPS, thumbs down for HEATS UP! · 幫上忙比讚，更熱比倒讚！

True or False? 1/2

真的還假的？手比 ⭕ 或 ❌

Climate change is only a problem for polar bears.

氣候變遷只是北極熊的問題。

Trees help cool the air.

樹可以讓空氣變涼。

👆 Tap each one to reveal・點每一題公布答案

True or False? 1/2

真的還假的？手比 ⭕ 或 ❌

Climate change is only a problem for polar bears.

氣候變遷只是北極熊的問題。

❌ **FALSE**

It changes rain, heat and harvests right here in Fangyuan.
它也改變芳苑這裡的雨水、氣溫和收成。

Trees help cool the air.

樹可以讓空氣變涼。

⭕ **TRUE**

Shade cools the ground, and leaves take in carbon dioxide.
樹蔭讓地面降溫，葉子還會吸收二氧化碳。

👆 Tap each one to reveal・點每一題公布答案

True or False? 2/2

真的還假的？手比 ⭕ 或 ❌

One small action is useless.

一個小小的行動沒有用。

Walking a short trip saves energy.

短短的路用走的，可以節省能源。

👆 Tap each one to reveal・點每一題公布答案

True or False? 2/2

真的還假的？手比 ⭕ 或 ❌

One small action is useless.

一個小小的行動沒有用。

❌ **FALSE**

Small actions become powerful when we work together.
當我們一起努力，小小的行動也會很有力量。

Walking a short trip saves energy.

短短的路用走的，可以節省能源。

⭕ **TRUE**

No fuel burned — and it keeps your body active.
不用燒燃料，還能活動身體。

👆 Tap each one to reveal・點每一題公布答案

🎮 Game Time! 遊戲時間

Q3

The classroom is full of sunshine, but every light is on. What should you do?

教室裡陽光很亮，燈卻全部開著。你應該怎麼做？

A Leave them on — 讓它們開著

B Turn them off and use the daylight — 把燈關掉，用自然光

C Close the curtains — 把窗簾拉上

D Turn on the fans, too — 把電風扇也打開

👆 Tap any option to reveal・點任一選項公布答案

🎮 Game Time! 遊戲時間

Q3

The classroom is full of sunshine, but every light is on. What should you do?

教室裡陽光很亮，燈卻全部開著。你應該怎麼做？

B **Turn them off and use the daylight**

把燈關掉，用自然光

✅

Turn off unused lights and use natural daylight whenever you can.

隨手關掉沒在用的燈，盡量利用自然光。

⏱ 30-Second Challenge

30 秒挑戰

In 30 seconds, shout out as many things that use electricity as you can — in English. I will count!

30 秒內，用英文喊出越多「會用電的東西」越好，我來數！

light 燈

fan 電風扇

air conditioner 冷氣

TV 電視

computer 電腦

fridge 冰箱

phone 手機

tablet 平板

Record to beat: 20

要打破的紀錄：20 個

👥 Turn and Tell Your Partner

轉過去，告訴你的同學

What is one thing our school could do to be cooler and greener?

我們學校可以做哪一件事，變得更涼快、更綠？

Our school could _____ to help the climate.

我們學校可以 _____ 來幫助氣候。

⏱️

One minute each. Then I will ask two of you.

每人一分鐘。然後我會請兩位分享。

Dom on Climate Action

Dom 談氣候行動



Watch and count: how many climate actions can you find?

邊看邊數：影片裡有幾個氣候行動？

3 Things You Can Do This Week

這週你可以做的 3 件事

1. **Turn off lights you are not using — use the daylight.**
   關掉沒在用的燈——多用自然光。

2. **Walk or ride your bike for short trips. Your school has a bike shed!**
   短短的路，用走的或騎腳踏車。學校就有腳踏車棚！

3. **Look after one plant — at home or at school.**
   照顧一株植物——在家或在學校都可以。

🗣️ Say It With Me

跟著我唸

Climate action.
氣候行動。

Weather is today. Climate is many years.
天氣是今天；氣候是很多年。

Turn off the lights.
把燈關掉。

Small actions, big change.
小行動，大改變。

One shared planet.
一個共同的地球。

🎮 Game Time! 遊戲時間 BONUS 加碼 Q4

In California, hotter and drier summers have made one danger much worse. Which one?

在加州，夏天越來越熱、越來越乾，讓一種災害嚴重很多。是哪一種？

A Snowstorms 暴風雪

B Wildfires 森林大火

C Volcanoes 火山

D Tsunamis 海嘯

👆 Tap any option to reveal・點任一選項公布答案

🎮 Game Time! 遊戲時間 BONUS 加碼 Q4

In California, hotter and drier summers have made one danger much worse. Which one?

在加州，夏天越來越熱、越來越乾，讓一種災害嚴重很多。是哪一種？

B **Wildfires** 森林大火

✅

Wildfires. Dry forests burn fast. The climate is a problem for Dom's home and for yours — so we solve it together.

森林大火。乾燥的森林燒得很快。氣候是 Dom 家鄉的問題，也是你們家鄉的問題——所以要一起解決。

💬 Leave a Message for Dom

留言給 Dom

Go to our School Tour page and find the Lushang Elementary column. No sign-up, no login — tell me one climate action you will take.

到我們網站的 School Tour 頁面，找到路上國小那一欄，免註冊、免登入，告訴我你會做的一個氣候行動。

myculturеconnect.org/dom-school-tour.html

I will _____ for the climate.

我會為了氣候 _____。

Small actions become powerful when we work together.

當我們一起努力，
小小的行動也會很有力量。

Thank you, Lushang Elementary!
謝謝路上國小！