

CLIMATE CHALLENGES



1

Warm up

These words relate to the issue of global warming. Match the words and meanings.

- | | |
|----------------------------|--|
| 1. <u>at</u> mosphere | a. a gas that is produced when we burn things (CO ₂) |
| 2. <u>car</u> bon dioxide | b. a thick layer of ice at the north and south poles |
| 3. <u>cli</u> mate | c. change from a solid to a liquid form |
| 4. <u>fos</u> sil fuels | d. go up or get higher |
| 5. ice <u>cap</u> | e. how high the top of the ocean is where it meets the land |
| 6. <u>inc</u> rease / rise | f. sources of energy that were formed underground millions of years ago, like oil and coal |
| 7. <u>me</u> lt | g. the gases that surround a planet |
| 8. sea <u>lev</u> el | h. the weather conditions that we usually find in a place |

Now answer these questions:

1. Which of these things can you see in the picture below?
2. Why do you think global warming is a serious issue?



2**Listening**

Listen to a podcast, "Climate change for beginners", and decide if these sentences are true or false.



1. Global warming and climate change are completely different things.
2. We need to use fossil fuels so we can eat and drink.
3. Cutting down trees makes carbon dioxide levels increase.
4. Carbon dioxide levels have no effect on sea levels.
5. Temperatures will possibly rise as much as 7 degrees by the year 2100.
6. We should stop using fossil fuels and plant more trees.

Listen again and choose the best form to complete the sentences.

1. When we cut down trees and burn oil and coal, carbon dioxide levels in the atmosphere **rise / will rise**.
2. And when there are high levels of carbon dioxide in the atmosphere, temperatures **increase / will increase**.
3. When temperatures increase, there **are / will be** more storms and extreme weather events.
4. And as the earth gets hotter, the ice caps at the poles **melt / will melt** and sea levels **rise / will rise**.
5. If we continue to cut down forests and burn oil and coal, temperatures **rise / will rise** by 3 to 5 degrees before the end of this century.
6. Scientists predict that if the world's temperature increases by more than 1.5 degrees, many people **die / will die** in extreme weather events and lots of big cities **are / will be** underwater.
7. If we stop burning oil and coal, these problems **don't get / won't get** worse.
8. And if we plant more trees, they **take up / will take up** some of the extra carbon dioxide in the atmosphere.

Which verb forms are you choosing between in this exercise?

3

Language point

Read these sentences and the information and answer the questions.

- 1) When we cut down trees and burn oil and coal, carbon dioxide levels in the atmosphere rise.
- 2) And when there are high levels of carbon dioxide in the atmosphere, temperatures increase.
- 3) When temperatures increase, there are more storms and extreme weather events.
- 4) And as the earth gets hotter, the ice caps at the poles melt and sea levels rise.

Sentences 1-4 are called **zero conditional** sentences, which explain **causes** and **effects**, or **reasons** and **results**. These sentences have two **clauses**. A **clause** is a piece of a sentence which includes a **subject** and a **verb**. Circle the subjects and underline the verbs in both clauses of the sentences.

1. Which words introduce the cause/reason?
2. Which verb tense is used for the cause/reason?
3. Which verb tense is used for the effect/result?
4. Are these sentences describing scientific facts or making predictions about the future?

Now do the same with these. Read these sentences and the information and answer the questions.

- 5) If we continue to cut down trees and burn oil and coal, temperatures will rise by 3 to 5 degrees before the end of this century.
- 6) If the world's temperature increases by more than 1.5 degrees, many people will die in extreme weather events and lots of big cities will be underwater.
- 7) If we stop burning oil and coal, these problems won't get worse.
- 8) If we plant more trees, they will take up some of the extra carbon dioxide in the atmosphere.

Sentences 5-8 also have two clauses that explain causes and effects, but these are called **first conditional** sentences. Circle the subjects and underline the verbs.

1. Which word introduces the cause/reason?
2. Which verb tense is used for the cause/reason?
3. Which verb tense is used for the effect/result?
4. Are these sentences describing scientific facts or making predictions about the future?

We can change the order of the clauses in conditional sentences.

- When the temperature increases, there are more storms and extreme weather events.
- There are more storms and extreme weather events when the temperature increases.
- If we stop burning oil and coal, these problems won't get worse.
- These problems won't get worse if we stop burning oil and coal.

1. When the cause/reason comes first in the sentence, what punctuation separates the cause/reason from the effect/result?
2. Is this punctuation the same when we give the effect/reason first?

4

Practice

Complete these sentences with the correct form of a verb from the box. Some verbs have similar meanings, so you can choose when to use them: *increase/rise, become/get*.

be	become/get x 3	burn	continue	go x 2
melt	plant	rise/increase x 5	not stop	

1. When we _____¹ fossil fuels, CO2 levels _____².
2. The earth _____³ hotter as CO2 levels in the atmosphere _____⁴ up.
3. If we _____⁵ to burn oil and gas, temperatures _____⁶ to dangerous levels.
4. When ice caps _____⁷, sea levels _____⁸ to dangerous levels.
5. If temperatures _____⁹ by more than 1.5 degrees, London, Miami and Bangkok _____¹⁰ underwater.
6. As temperatures _____¹¹, storms _____¹² stronger.
7. Global warming _____¹³ worse if we _____¹⁴ using fossil fuels.
8. If we _____¹⁵ lots of trees, CO2 levels in the atmosphere _____¹⁶ down.

Which sentences are zero conditionals, and which are first conditionals?

5 Speaking Alone

Before Speak first, complete the sentences in your box with a true or logical idea.

Student A

- As we burn fossil fuels,
- If I become fluent in English,
- If I stop using my car,
- If sea levels increase,
- When we plant more trees,

Take turns to read your sentences. Listen and write the sentence in the correct place, depending on the grammar.

Tip: read each sentence twice. First read the sentence at normal speed.

My sentences:

Blank writing area with horizontal lines for notes.

6 Extra practice/homework

Match these clauses to make conditional sentences.

- | | |
|---|--|
| 1. When people cut down trees in the forest, | a. if we want to stop global warming. |
| 2. As CO2 levels in the atmosphere increase, | b. it will be difficult to grow enough food for everyone to eat. |
| 3. Storms get stronger | c. many people will lose their homes. |
| 4. If temperatures go up, | d. temperatures rise. |
| 5. If we have more extreme weather, | e. the animals who live there lose their homes. |
| 6. We should remember that when we burn fossil fuels, | f. we put the earth in danger. |
| 7. If we find new types of fuels, | g. we will protect the planet. |
| 8. We will need to work together | h. when temperatures rise. |

Now answer these questions:

1. Which sentences are about scientific facts?
2. Which sentences are predictions?



7 Optional extension

When you learn new vocabulary, you should learn the meaning, the spelling and the pronunciation. A good way to review new words is to think about how they are pronounced.

For example, you should think about how many syllables a word has, and which syllable is stressed. **Stressed syllables are pronounced more strongly.**

- Example: *cli.mate* has two syllables and we stress the first one. This word has a syllable stress pattern of **Oo**.

Find words from the lesson to complete the table. You can use words from any part of the lesson, including the instructions.

syllable stress pattern	example	more words from the lesson
O	rise	1
oO	extreme	2
Oo	climate	3
oOo	dioxide	4
Ooo	atmosphere	5

If you finish the exercises and the home work, please check the answers below!

Transcripts

2. Listening

Presenter: Hi everyone, and welcome to another episode in our mini-podcast series, For Beginners. Today's topic is climate change for beginners. Here to explain is Dr Nathan Wilde from the Climate Challenge Foundation. Hi Nathan! Let's start with a really basic question. What do we mean by climate change?

Dr Wilde: Hi. Well, basically, we're talking about the earth getting warmer as a result of human activity. We can also use the term global warming.

Presenter: What kind of human activity?

Dr Wilde: We're talking about burning fossil fuels like oil and coal. We use these fuels for all sorts of activities, like producing food, making clean water available, heating and cooling our homes, transport and making things in factories.

Presenter: Well, what's the problem? We need to do those things.

Dr Wilde: That's true but when we cut down trees and burn oil and coal, carbon dioxide levels in the atmosphere rise. And when there are high levels of carbon dioxide in the atmosphere, temperatures increase.

Presenter: Why is that so bad? Nobody likes cold weather, right?

Dr Wilde: The increase in temperatures has some very serious results. When temperatures increase, there are more storms and extreme weather events. And as the earth gets hotter, the ice caps at the poles melt and sea levels rise.

Presenter: That doesn't sound good.

Dr Wilde: It really isn't. If we continue to cut down forests and burn oil and coal, temperatures will rise by 3 to 5 degrees before the end of this century. Scientists predict that if the world's temperature increases by more than 1.5 degrees, many people will die in extreme weather events and lots of big cities will be underwater.

Presenter: So, what's the solution?

Dr Wilde: It's simple. We have to stop using fossil fuels. If we stop burning oil and coal, these problems won't get worse. And if we plant more trees, they will take up some of the extra carbon dioxide in the atmosphere.

Presenter: OK, but lots of people will want to know what we can use to produce energy instead of fossil fuels. That's what we're going to discuss in our next podcast. Thanks, Nathan!

Key

1.

1. g 2. a 3. h 4. f 5. b 6. d 7. c 8. e

2. Listening

1. F - we can use both terms
2. T - fossil fuels are used for producing food and making clean water available.
3. T - this is one thing that has this effect
4. F - high carbon dioxide levels lead to higher temperatures, and these lead to ice caps melting and a rise in sea level.
5. F - a rise of 3-5 degrees is mentioned.
6. T - these are the solutions to the problems.

Complete the sentences:

- | | | | |
|--------------|----------------------|--------------|-----------------|
| 1. rise | 2. increase | 3. are | 4. melt; rise |
| 5. will rise | 6. will die; will be | 7. won't get | 8. will take up |

Which verb forms are you choosing between in this exercise?

Present simple and future with will

3. Language point

Zero conditional sentences:

Subjects: 1 we / carbon dioxide levels; 2 there / temperatures; 3 temperatures / there; 4 the earth / the ice caps, sea levels. Verbs: 1 cut down / rise; 2 are / increase; 3 increase / are; 4 gets / melt, rise.

- | | |
|-------------------|--|
| 1. When / As | 2. Present simple |
| 3. Present simple | 4. They are describing scientific facts. |

First conditional sentences:

Subjects: 5 we / temperatures; 2 the world's temperature / many people, lots of big cities; 3 we / these problems; 4 we / they (trees). Verbs: continue / will rise; 2 increases / will die, will be ; 3 stop / won't get; 4 plant / will take up.

- | | |
|---------------------|--|
| 1. If | 2. Present simple |
| 3. Future with will | 4. They are making predictions about the future. |

Clauses:

- | | |
|------------|---------------------------------|
| 1. A comma | 2. No, the comma is not needed. |
|------------|---------------------------------|

4. Practice

- | | | | |
|------------------|-----------------------|-------------------|------------------|
| 1. burn | 2. rise/increase | 3. becomes/gets | 4. go |
| 5. continue | 6. will rise/increase | 7. melt | 8. rise/increase |
| 9. rise/increase | 10. will be | 11. rise/increase | 12. become/get |

