LEARNING OBJECTIVES	
Watch and listen	Watch and understand a video about people who follow storms
Reading skills	Use knowledge to predict content
Academic writing skills	Write a topic sentence to describe a graph and use data to support ideas
Writing task	Write sentences to describe a graph

WEATHER AND CLIMATE UNIT 6

UNLOCK YOUR KNOWLEDGE

1 Match the types of weather to the photographs (1–4).


1


2


3


4

snow (n) sun (n) rain (n) wind (n)

2 What is your favourite weather? Why?

3 What is your least favourite weather? Why?

WATCH AND LISTEN

PREPARING TO WATCH

UNDERSTANDING KEY VOCABULARY

1 Match the words (1–5) to their meanings (a–e).

1 a season	a damage something so badly that it cannot be used or does not exist
2 destroy	b an extremely strong wind that moves in a circle
3 predict	c say what you think will happen in the future
4 a tornado	d a period of the year when a particular thing happens
5 dangerous	e describes something that could harm you

2 Read the dictionary definitions of the words below. What do you think the word *stormchaser* means?

> **chase (v):** to run after something and try to catch it
> **storm (n):** very bad weather with a lot of rain, snow or wind

a someone who tells people a tornado is coming
b someone who follows tornadoes
c someone who paints storms

3 Watch the video and check your answers.

WHILE WATCHING

UNDERSTANDING MAIN IDEAS

4 Watch again. Circle the correct words to complete the sentences.

1 Tornadoes *only / mostly* happen in the USA.
2 *Some / All* large tornadoes are dangerous.
3 Tornadoes *never / sometimes* kill people.
4 Stormchasers follow tornadoes for *different / the same* reasons.
5 Stormchasers' work *is / is not* important.
6 Stormchasers can help us to *get energy from tornadoes / save lives in the future*.

5 Watch again. Circle the reasons that stormchasers do their job.

a They want to study tornadoes, and get more information.
b They want to test their cars.
c They want to take pictures and videos.
d They think tornadoes aren't dangerous.

UNDERSTANDING DETAIL

6 Are the statements below about Josh Wurman or Reed Timmer? Write J (Josh) or R (Reed) next to the statements.

1 He is a scientist. _____
2 He works with a large team of helpers. _____
3 He works with a few friends. _____
4 He uses advanced technology, like radar, to find tornadoes. _____
5 He uses the internet and an ordinary 4x4 car to follow tornadoes. _____
6 He has a special truck. _____
7 He makes videos and sells them to TV companies. _____

MAKING INFERENCES

7 Do you think Reed Timmer enjoys his job?

8 How do you know?

DISCUSSION

9 Work with a partner. Discuss the questions.

1 Tornadoes are an example of dangerous weather. What other kinds of dangerous weather do you know?
2 Does your country have dangerous weather? What kind?

READING 1

PREPARING TO READ

UNDERSTANDING KEY VOCABULARY

1 Write the words from the box in the gaps to complete the definitions (1–5).

cover damage cause huge almost

1 _____ means to cause harm or injury.
2 When we _____ something , we put something over the top of it.
3 _____ means very large.
4 _____ means nearly.
5 _____ means make something happen.

2 Match the weather words (1–5) to the definitions (a–e).

1 natural disaster
2 a flood
3 lightning
4 thunder
5 temperature

a how hot or cold something is
b an event caused by extreme weather such as rain, storms or heat that damages the environment or causes loss of life
c the loud noise in the sky that you hear during a storm
d the sudden, bright light in the sky during a storm
e a large amount of water that covers an area that is usually dry

WHILE READING

READING FOR MAIN IDEAS

UNLOCK ONLINE

3 Read the text opposite. Circle the statement that gives the most important idea in each paragraph.

1 Paragraph A
   a Extreme weather is unusual and can cause natural disasters.
   b Extreme weather can take place over an hour.
2 Paragraph B
   a Hurricanes are sometimes called cyclones.
   b Hurricanes are huge, dangerous storms.
3 Paragraph C
   a In a heat wave, temperatures are hotter than normal.
   b Some people in the UK like heat waves.
4 Paragraph D
   a In 1999, there were floods in Nepal.
   b Floods happen when there is too much rain.
5 Paragraph E
   a A sandstorm is a storm with a lot of wind and dust.
   b It is difficult to drive a car in a sandstorm.

A Extreme weather

Extreme weather is when the weather is very different from normal. Extreme weather can take place over an hour, a day or a long period of time. It can be dangerous and, in some cases, it can cause natural disasters.

B Hurricane

A hurricane is a type of storm. These storms are also called cyclones or typhoons. In North and Central America they are called hurricanes, in the North Pacific they are called typhoons, and in the Indian Ocean and South Pacific they are called cyclones. These storms are huge: they can be over 500 kilometres wide. They start at sea and move towards land. When they come to land, they bring thunder, lightning, strong winds and very heavy rain. They can be very dangerous and destroy buildings and even kill people.

C Heat waves and droughts

A heat wave is when there are high temperatures and it is much hotter than normal. In many areas, heat waves are not a problem. In the UK, temperatures only reach around 30 °C in a heat wave, and many people enjoy the hot weather. However, in some places, heat waves can cause droughts. In a drought, there is not enough water for farmers to grow food. In some cases, people die because they don't have enough water to drink. Droughts are common in many countries in Africa, but in the last ten years, droughts also happened in Afghanistan, China and Iran.

D Rain storm

Too much rain can cause floods. Floods can destroy buildings and kill people. They can also destroy plants and food, which can mean that there is not enough food for people to eat. In 1999, there were very bad floods in India, Nepal, and other parts of Asia. In Bangladesh, almost half the country was covered in water. Thousands of homes were damaged and hundreds of people died.

E Sandstorm

A sandstorm is a large storm of dust and sand with strong winds. They can be very dangerous. It is difficult to travel by car because people can't see anything. Even walking can be difficult. Sandstorms are common in the Middle East and China. One of the worst sandstorms was in Iraq in 2011 when a storm lasted a whole week, causing many people to have breathing problems.

READING FOR DETAIL

4 Choose the correct ending for each sentence (1–4).

1 Hurricanes move from
   a land to sea.
   b sea to land.
2 Heatwaves are
   a sometimes a problem.
   b always a problem.
3 Bangladesh had
   a a very big flood in 1999.
   b no floods in 1999.
4 The Middle East and China
   a are the only places with sandstorms.
   b have a lot of sandstorms.

READING BETWEEN THE LINES

RECOGNIZING TEXT TYPE

5 What type of text is this?

a an extract from a newspaper
b an extract from a textbook
c an extract from a novel

6 Who would be interested in reading this text?

a a biology student
b a history student
c a geography student

7 What kind of information is included in the text?

a facts
b opinions

DISCUSSION

8 Work with a partner. Discuss the questions below.

1 Do you prefer hot or cold weather?
2 What is the worst weather you have experienced?
3 Has the weather in your country changed in recent years?

READING 2

PREPARING TO READ

USING YOUR KNOWLEDGE

1 You are going to read about the Sahara desert. Before you read, try to answer the questions below.

1 Where is the Sahara desert?
   a South Africa
   b North Africa
   c Central Asia
2 What is the weather like there?
   a hot and dry
   b cold and wet
   c hot and wet

Using your knowledge to predict content

We understand something better if we can connect it with what we already know. Before you read something, think about what you know about the topic first. This gets you ready for reading and helps you understand.

2 Read the article on page 112 and check your answers.

3 Match the words in the box to the definitions (1–10).

UNDERSTANDING KEY VOCABULARY

protect a desert rainfall survive an expert
a shock signal last decide careful

1 someone who has a lot of skill in something or a lot of knowledge about something _____
2 when a person tries hard not to make a mistake _____
3 a large, often hot, dry area of land with very few plants _____
4 continue to live in a difficult or dangerous situation _____
5 a bad surprise _____
6 continue for a particular period of time _____
7 make a movement or sound to tell someone to do something _____
8 the amount of rain that falls over a period of time _____
9 choose something after thinking about the possibilities _____
10 keep someone or something safe from danger _____

4 Write the nouns from the box in the correct place in the table. Use a dictionary to check the meaning of any new words.

a tyre a snake a blanket a jumper trousers
a scorpion a mirror a hole

things	animals

Surviving the Sea of Sand

How to stay alive in the Sahara Desert

Brad Rogers

A Can you imagine a sea of sand three times bigger than India? This is the Sahara desert, the largest desert in the world. It covers 11 countries in North Africa and is over 9 million km^2. That's more than 25% of Africa.

B In the Sahara, temperatures are very different during the day and at night. It is much hotter during the day than at night. It is very hot during the day – the hottest time is between 2 pm and 4 pm, when temperatures rise to 33 °C. But it is very cold at night – the coldest time is at 4 am, when temperatures fall to -1 °C. The Sahara is very dry. The average rainfall in a year is only 70 mm. That's just one cup of rain in a whole year.

C Because of the extreme temperatures in the desert, it is a very difficult place to survive. Brad Johnson, our survival expert, has some tips:

D _____

Take warm clothes and a blanket. You will need a hat, long trousers and a wool jumper to keep you warm at night. During the day, cover your body, head and face. Clothes protect you from the sun and keep water in your body. You will also need a warm blanket at night. It can get cold very quickly. This drop in temperature can be a shock and make you feel even colder.

E _____

A car is easier to see than a person walking in the desert. You can also use the mirrors from your car to signal to planes and other cars. You can use your car tyres to make a fire. A fire is easy to see. It will help people to find you and keep you warm at night.

F _____

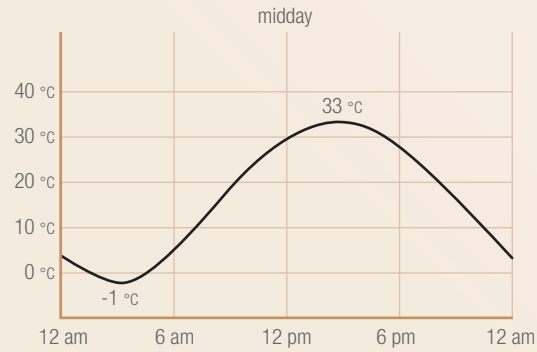
Try to drink some water at least once every hour. You need your water to last as long as possible. Drink only what you need. When you talk, you lose water from your body. Keep your mouth closed and do not talk.

G _____

If you eat, you will get thirsty and drink all of your water more quickly. You can eat a little, but only to stop you feeling very hungry. Eat very small amounts of food and eat very slowly. You can live three weeks with no food, but you can only live three days with no water.

H _____

It is very important to stay out of the sun during the day. Make a hole under your car and lie there. This will keep you cool and help you sleep. Find a warm place to sleep at night. A small place near a tree or a rock will be the warmest. But be careful before you decide where to sleep. Dangerous animals like snakes and scorpions also like to sleep in these places. Look carefully for animals before you lie down.



WHILE READING

5 Match the titles (1–5) to the paragraphs (D–H) in the article.

1 Stay out of the sun _____
2 Drink water _____
3 Stay cool during the day and warm at night _____
4 Don't eat too much _____
5 Stay with your car _____

READING FOR MAIN IDEAS

UNLOCK ONLINE

6 Look at the graph opposite and read paragraph B. Match the sentence halves.

1 The coldest time is	**a** between 2 pm and 4 pm.
2 The average amount of rain in a year	**b** is -1 °C.
3 The temperature is 33 °C	**c** is 70 mm.
4 The coldest temperature at night	**d** at 4 o'clock in the morning.

READING FOR DETAIL

7 Circle the advice that appears in the article.

a Take a hat.
b Don't wear a lot of clothes.
c Try not to drink your water too soon – keep it for later.
d Don't eat quickly.
e Sleep in your car during the day.
f Be careful not to lie down on snakes and scorpions.

READING BETWEEN THE LINES

8 Where might you find an article like this?

a the front page of a newspaper
b a travel magazine
c a geography textbook

RECOGNIZING TEXT TYPE

DISCUSSION

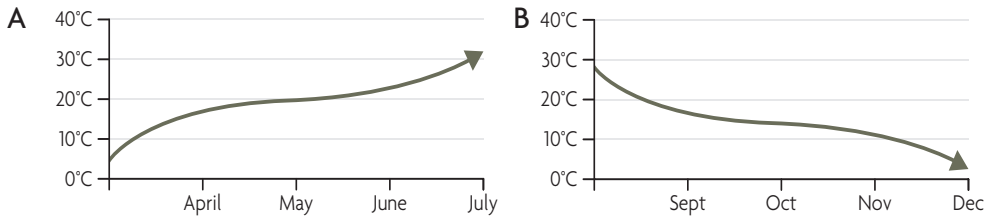
9 Look at the list below. Which things would you like most if you were alone in the desert? Choose the three most important things.

a a blanket	**d** a radio
b a mirror	**e** a map
c 25 litres of water	**f** a hat

10 Work with a partner. Compare your answers and explain your choices.

LANGUAGE DEVELOPMENT

COLLOCATIONS WITH *TEMPERATURE*



UNLOCK ONLINE

1 Look at the graphs. Circle the correct word to complete the sentences about the graphs.

1 In July, there are *high / low* temperatures.
2 In December, there are *high / low* temperatures.
3 The *maximum / minimum* temperature in July is 32 °C.
4 The *maximum / minimum* temperature in December is 1 °C.

DESCRIBING A GRAPH

We use certain words and phrases to talk about graphs. We use the verbs *rise, drop, fall* and *reach* and the nouns *increase* and *decrease* to describe changes on a graph.

2 Match the sentences to the correct graph (A or B).

1 The graph shows an **increase** in temperature. _____
2 The graph shows a **decrease** in temperature. _____

3 Match the sentences to the correct graph (A or B).

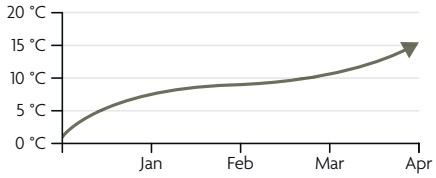
1 The temperature **rises** to 30 °C. _____
2 The temperature **drops** to 1 °C. _____
3 The temperature **falls** to 1 °C. _____
4 The temperature **reaches** 30 °C. _____

4 Write the bold words in Exercise 3 in the gaps to complete the statements.

1 We use _____ and _____ to talk about an increase in temperature.
2 We use _____ and _____ to talk about a decrease in temperature.

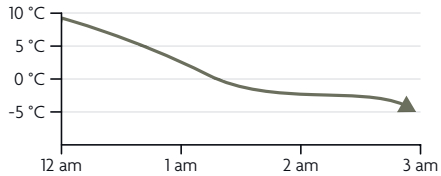
5 Look at the graphs below. Circle the correct word to complete the sentence.

1



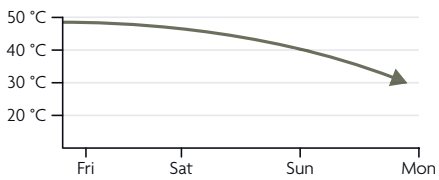
a The graph shows *an increase / a decrease* in temperature.
b In April, the temperature *reaches / falls to* 16 °C.

2



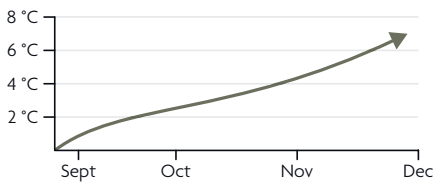
a The graph shows *an increase / a decrease* in temperature.
b At 3 o'clock, the temperature *drops / rises to* about -5 °C.

3



a The graph shows *an increase / a decrease* in temperature.
b On Monday, the temperature *reaches / falls to* 30 °C.

4



a The graph shows *an increase / a decrease* in temperature.
b In December, the temperature *rises / falls to* 7 °C.

CRITICAL THINKING

At the end of this unit, you will write sentences to describe a graph. Look at this unit's Writing task in the box below.

Describe a graph.

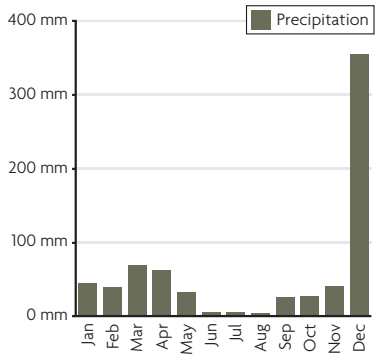
Analyze a graph

We use graphs to show numbers or *data*. When we look at a graph, we can see the most interesting information quickly and easily. When we write about graphs, we choose the most interesting information to write about. When we do this, we often look at the highest and lowest numbers.

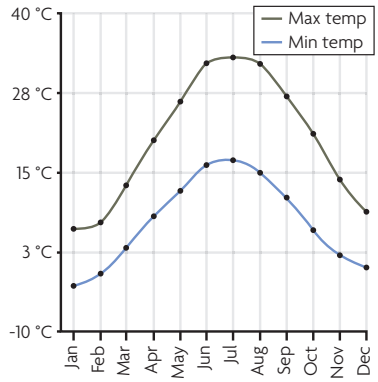
ANALYZE

1 Look at the two graphs. What country do they show information for?

A Rainfall in millimetres over a year in Samarkand, Uzbekistan



B Temperature in degrees centigrade over a year in Samarkand, Uzbekistan



2 Circle the correct words to complete the sentences (1–5).

1 Graph A shows *temperature in degrees centigrade / rainfall in millimetres / the number of hurricanes*.
2 Graph B shows *temperature in degrees centigrade / rainfall in millimetres / the number of hurricanes*.
3 The graphs show data for a period of *one day / one month / one year*.
4 Graph A is *a line graph / a bar graph*.
5 Graph B is *a line graph / a bar graph*.

3 Write an appropriate number for each month in the table below using the information from the graphs.

	J	F	M	A	M	J	J	A	S	O	N	D
temperature												
rainfall												

4 Look at the table in Exercise 3 and the graphs in Exercise 1. Circle the most important information in the table.

5 Look at the table and the graphs again and answer the questions below.

1 Which is the month with the highest temperature? _____
2 Which is the month with the lowest temperature? _____
3 Which is the month with the most rain? _____
4 Which is the month with the least rain? _____
5 Is there anything else in the graph that is interesting? _____

EVALUATE

6 Look at the table again and answer the questions below.

1 What extreme weather do you think this place might have?
2 What problems might this cause for the people who live there?

WRITING

GRAMMAR FOR WRITING

EXPLANATION

Comparative and superlative adjectives

We use *comparative adjective + than* to compare people, things, actions and events.

The Sahara desert is **hotter than** Cairo.

We use *the + superlative adjective* to say how something is number one in a group.

The Sahara desert is **the hottest** place in Egypt.

We use *as + adjective + as* to say that people or things are equal.

Cairo is **as hot as** Dubai

UNLOCK ONLINE

1 Look at the examples in the table below. Put the rules (a–e) in the correct place (1–5) in the table below.

a Some comparatives and superlatives are irregular.
b With an adjective that has one syllable, we add *-er* or *the -est*.
c With an adjective that has two or more syllables, we write *more* or *the most* before the adjective.
d With an adjective that has two syllables and ends in *-y*, we delete the *-y* and add *-ier* or *the -iest*.
e With an adjective that has one vowel and one consonant, we double the consonant and add *-er* or *the -est*.

adjective	comparative	superlative	rule
cold	colder than	the coldest	1 _____
big	bigger than	the biggest	2 _____
easy	easier than	the easiest	3 _____
extreme	more extreme than	the most extreme	4 _____
bad good low	worse than better than lower than	the worst the best the lowest	5 _____

2 Look at the fact files for Cuba and Iceland. In the sentences (1–7) below, use the word in brackets to make a comparative or superlative adjective and write it in the gap.

FACT FILE CUBA

- Maximum temperature: 32 °C
- Minimum temperature: 18 °C
- Average rainfall: 173 mm
- Average sunshine: 7.5 hours a day

FACT FILE ICELAND

- Maximum temperature: 14 °C
- Minimum temperature: -2 °C
- Average rainfall: 94 mm
- Average sunshine: 3.4 hours a day

1 Cuba has a _____ maximum temperature than Iceland. (high)
2 Iceland is _____ than Cuba. (cold)
3 Iceland has the _____ temperature. (low)
4 Cuba is _____ than Iceland. (wet)
5 Iceland is _____ than Cuba. (dry)
6 Cuba is the _____ country. (rainy)
7 Iceland is not as _____ as Cuba. (sunny)

ACADEMIC WRITING SKILLS

EXPLANATION

Introductory sentences for descriptive paragraphs about a graph

When we write about a graph, we use the phrase *the graph shows* to describe the topic of the graph.

The graph shows the temperature in degrees centigrade over a day in the Sahara desert.

Notice how we use the following order:

The graph shows + what is measured + time period + place.

1 Complete the introductory sentences about the graphs in the Critical thinking section (page 116).

1 Graph A shows the _____ in millimetres over one _____ in _____ .
2 Graph B shows the _____ in degrees centigrade over one _____ in _____ .

Using data to support main ideas

When we write about graphs, we use numbers, or *data*, to support our main ideas.

2 In the pairs of sentences below, underline the main idea. Circle the data.

1 The hottest time is between 2 pm and 4 pm. Temperatures rise to 33 °C.
2 The coldest time is at 4 am. Temperatures fall to -1 °C.

3 Match the sentence halves to complete the statements.

1 The main idea	**a** describes a feature or trend from the graph.
2 The data	**b** is a number from the graph to illustrate the trend.

4 Match the main ideas (1–4) to the data (a–d).

1 Princetown is as rainy as Chesterton.	**a** There are 8.7 hours of sunshine in July and 8 hours of sunshine in August.
2 The hottest month is March.	**b** Temperatures reach 37 °C.
3 July is sunnier than August.	**c** Both towns have an average rainfall of 110 mm.
4 The coldest month is December.	**d** Temperatures fall to -7 °C.

WRITING TASK

Describe a graph.

UNLOCK ONLINE

PLAN

1 Look at the graphs on page 116 again. Write a topic sentence about each graph.

A _____
B _____

2 Choose the two most interesting facts about temperature on each graph. Write a sentence about each fact. Use data to support the statements.

A 1 _____
2 _____
B 1 _____
2 _____

3 Choose the two most interesting facts about rainfall on each graph. Write a sentence about each fact. Use data to support the statements.

A 1 _____
2 _____
B 1 _____
2 _____

WRITE A FIRST DRAFT

EDIT

4 Write a first draft of your sentences.

5 Use the task checklist to review your sentences for content and structure.

TASK CHECKLIST	✔
Have you written an introductory sentence about the graph?	
Have you written five sentences to describe the graph?	
Have you written a topic sentence about the graph?	
Have you used data to support the main ideas?	

6 Make any necessary changes to your sentences.

7 Now use the language checklist to edit your sentences for language errors which are common to A2 learners.

LANGUAGE CHECKLIST	✔
Have you used the correct collocations with *temperature*?	
Have you used the correct vocabulary to describe the graph?	
Have you used comparative and superlative adjectives correctly?	

8 Make any necessary changes to your sentences.

OBJECTIVES REVIEW

9 Check your objectives.

I can ...

watch and understand a video about people who follow storms.

use knowledge to predict content.

write a topic sentence to describe a graph and use data to support ideas.

write sentences to describe a graph.

WORDLIST

UNIT VOCABULARY			
decrease (n)	shock (n)	decide (v)	careful (adj)
desert (n)	signal (v)	destroy (v)	dangerous (adj)
expert (n)	storm (n)	drop (v)	high (adj)
flood (n)	temperature (n)	fall (v)	huge (adj)
increase (n)	thunder (n)	last (v)	low (adj)
jumper (n)	tornado (n)	predict (v)	maximum (adj)
lightning (n)	tyre (n)	protect (v)	minimum (adj)
mirror (n)	cause (v)	rise (n)	
rainfall (n)	cover (v)	survive (v)	
season (n)	damage (v)	almost (adv)	