

Topic : Australia and the Environment : Man and Nature

AXE 1: Man and Nature

KEY QUESTION: How do Australians interact with their environment, and what does this reveal about their relationship with nature in the context of climate change?

LESSON 3

Modern threats

I- Fear for the Great Barrier Reef

Activity 1 : The Great Barrier Reef (intro)

1. Locate it on this world map



2. Fill in the chart : <https://www.youtube.com/watch?v=DygyYL4dyIU>

Size :	
Habitat for ...	
Number of visitors/ weekly / monthly / annually (choose the right word)
How to see the GBR	
Problem ? and origin ?	
Solutions ?	
Find what adjectives or expressions were used to describe the GBR	

Activity 2 : Reading activity

2 A natural wonder

Home to over 2,000 types of coral, fish, bird, reptile and mammal, you can see why The Great Barrier Reef is named one of the seven natural wonders of the world.

It isn't actually one reef, but a collection of almost 3,000 smaller reefs which themselves are underwater ecosystems created over thousands of years by hundreds of different species of coral polyps. The living barrier reef as we know it today is estimated to be around 8,000 years old.

For thousands of years, the Great Barrier Reef has been extremely resilient to the many environmental and natural factors that have affected it. However, the effect humans have had on the reef (from over-fishing and careless divers, to pollution and global warming) has put it at risk.

As a UNESCO World Heritage site since 1981, the reef is seen as imperative to the area, environmentally, culturally, and economically.

Adapted from www.kuoni.co.uk



- 1/ Spot the different figures in the text (both in letters and numbers). Say what they correspond to.
- 2/ What is the main factor that puts the reef at risk?
- 3/ Try to guess why the reef is of paramount importance “environmentally, culturally and economically”.
- 4/ Sum up to the class what you have learnt so far.

Activity 3 : VIDEO: “Fear for Australia's Great Barrier Reef after mass bleaching” | AFP MAY 2024

Help!
How to pronounce **algae**

🔊 UK /'æɪ.lgi:/

🔊 US /'æɪ.dʒi:/

After watching this video, answer the following questions:

1. What are reefs around the world increasingly threatened by?

.....
.....

2. What do those figures or dates refer to?

2016=

50%=

3/4=

What is coral bleaching and when does it occur?

.....
.....
.....
.....

Activity 4 : VIDEO: "Millions for the Reef"

<https://www.youtube.com/watch?v=ZTVgBQZs3sA&list=TLGGziRffExqcPswOTAyMjAyNg&t=3s>

Before you listen

1. Look at the picture ① : this starfish is a predator for the coral. Guess its name is : *necklace starfish – crown-of-thorns starfish - sunflower*

2. Look at the picture ② and guess what has caused of the brown water :
oil slick – algae – sediment runoff

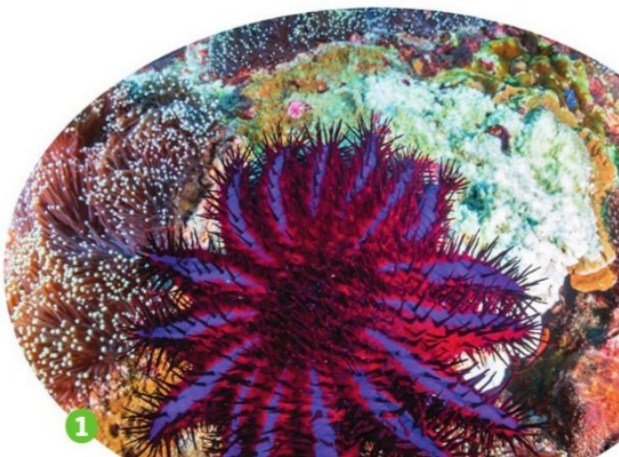
3. Talk about the consequences of this pollution for the fauna and flora.

.....
.....
.....
.....

4. What is the common point between picture ① and ②

①

②



.....
.....
.....
.....
.....
.....
.....

Now listen <https://www.youtube.com/watch?v=ZTVgBQZs3sA&list=TLGGziRffExqcPswOTAyMjAyNg&t=3s>

5. Listen and list the different threats to the reef.

.....
.....

6. Who does the speaker want to work with ? Why ?

.....
.....
.....
.....

7. Is there only one cause for the destruction of the reef ?

.....
.....
.....
.....

React :

8. Do you think money is the only solution to save the reef ? What else is necessary ?

.....
.....
.....
.....
.....
.....

Let's sum up :

Using all the documents answer the following questions :

To what extent does the Australian environment show the consequences of human activity on nature?

How do the documents show that human actions threaten the Australian environment?



Australia pledges millions to save the Great Barrier Reef

The Australian government has promised more than 300 million euros to help save the Great Barrier Reef - in the largest single investment for reef...

euronews

II- Australia bushfires

To what extent are bushfires natural disasters or consequences of human activity?

Activity 1 : Speaking

HOW DOES CLIMATE CHANGE AFFECT BUSHFIRES?

A LONGER FIRE SEASON
Hotter conditions mean a longer fire season, leading to more dangerous bushfires and leaving less time for hazard reduction.

HOTTER TEMPERATURES
Australia is getting hotter, with more extreme hot days and longer, hotter heatwaves. These conditions are increasing the risk of bushfires in many areas.

DRIER VEGETATION & 'FUEL'
Hotter conditions and periods of low rainfall dry out soil and vegetation, increasing fire risk.

MORE LIGHTNING
A warmer climate increases the chance of lightning, which is a key factor in starting fires.

CLIMATECOUNCIL.ORG.AU | crowd-funded science information

1. Present the document (type, source...) and identify the topic.
2. Explain how climate change increases bushfire risks.
3. Find 3 factors linked to climate change.
4. Does the infographic suggest bushfires are only natural disasters?

Activity 2 : 🎧 « Bushfires in Australia : what ignited the deadly crisis ?

Before listening Pre-teach vocabulary:

- drought :
- fuel :
- heatwave :
- spread :
- ignition :

1. Present the document : type – source – date - speakers – topic

2. Watch the first part of the video (0:00 to 0:42)

- Focus on facts and figures : Where ? Size ? People ? Buildings ? Animals ?
Places ?

3. Watch the second part of the video (0:42 to 1:26)

- What are the causes of the wildfire crisis ?

- Is it likely to happen again ? Why or why not ?

4. Work in pairs and prepare a 2 mn oral presentation summarizing the video.

USEFUL VOCABULARY

- flames = **inferno** = conflagration = blaze
- **raging**/to rage = to burn
- **deadly** = fatal = lethal
- **bushfire** = **wildfire**
- drought
- un**precedented** = **without** precedent
- heat wave
- **gusty** winds = **powerful** bursts of wind that **arrive** **suddenly**
- **sparking** **thunderstorms**/to spark = to **ignite** = to catch **fire**

FOCUS ON GRAMMAR

Comparative and superlative

Observe the underlined grammatical structures. What is each structure called?
What is its purpose?

“Australia is on fire and it’s bigger than you think [...] three times more land than the 2018 California fires and Brazil’s 2019 Amazon fire combined.”

“This summer has been one of the hottest and driest in the country’s history.”

Activity 3 : ✧ »The science of bushfires explained – ABC News »
<https://www.youtube.com/watch?v=l38UkQmUISs&t=11s>

1. What conditions are needed for a bushfire?
2. Why can fires become uncontrollable?

After watching

3. Explain why are bushfires becoming more dangerous today.

Expression of Cause and consequence

because of – due to – so – therefore – as a result – since

Ex: Bushfires are more frequent **because of climate change**.

Vegetation is dry, **so fires spread faster**.

Match the causes (A) with the consequences (B).

A – Causes

1. Temperatures are rising.
2. There is a severe drought.
3. Vegetation is very dry.
4. Coral reefs are exposed to warm water.
5. Human activities increase CO₂ emissions.
6. The wind is very strong.

B – Consequences

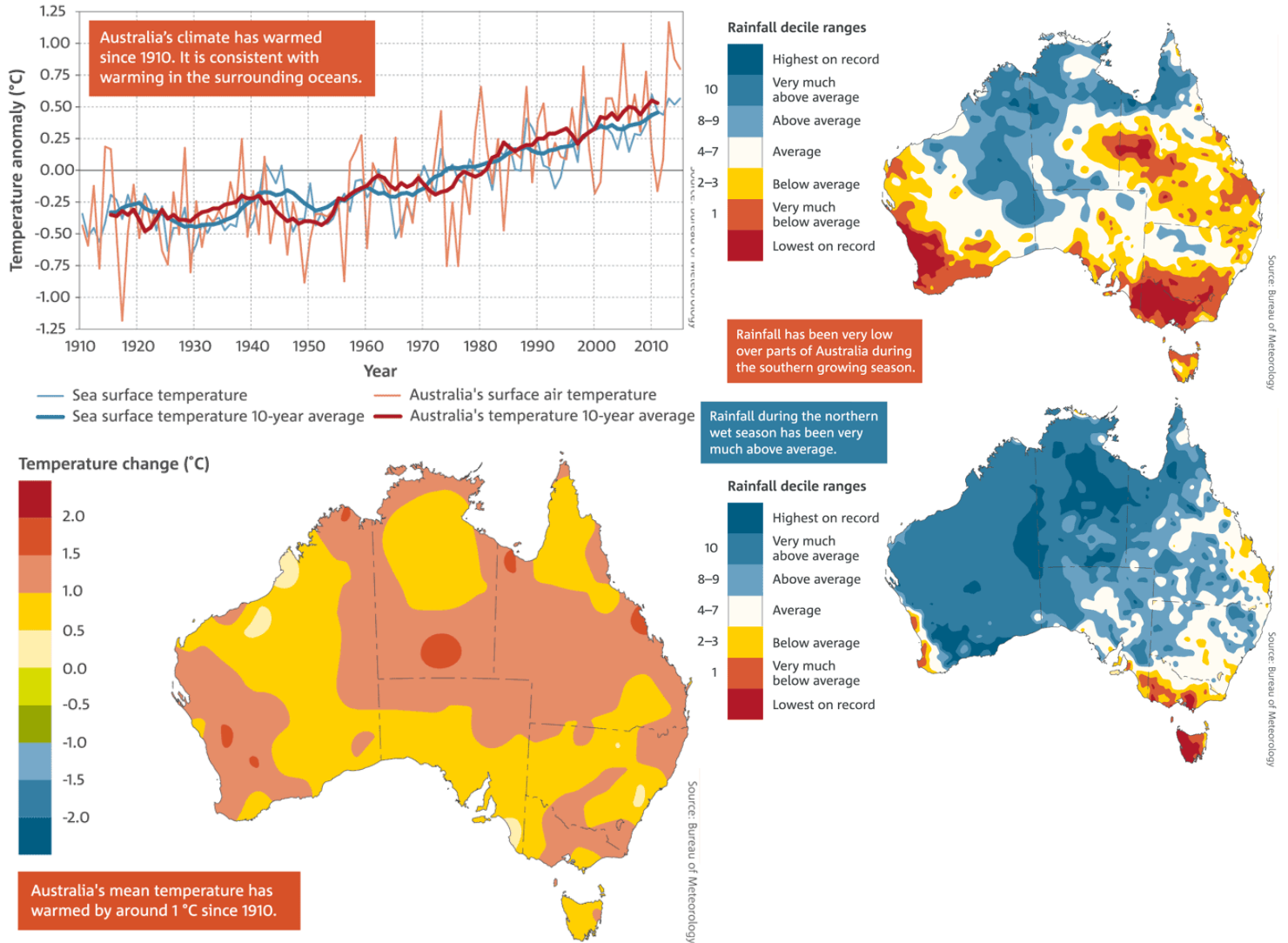
- a) Bushfires spread quickly.
- b) Coral bleaching occurs.
- c) Fire risks increase.
- d) Ecosystems are damaged.
- e) The climate changes.
- f) Water becomes scarce.

III- Feet in the Water

<https://www.youtube.com/watch?v=bX3Gf5Q8o9I>

A- Sea level

Activity 1 : Speaking



1. Present the documents.
2. How does the document show that climate change is affecting Australia?

Activity 2 : « Rising Sea Levels Set To Drown 1.5 Million Australians By 2050 : Stunning Govt Report»

<https://www.youtube.com/watch?v=0vYs1mD7Fgc>

A) Global understanding (compréhension globale)

1. What is the main idea of the video?

➤ _____

2. Who will be most affected by rising sea levels according to the video?

> _____

B) Detail questions (repérage d'informations)

3. Note down the number of Australians expected to be at risk from rising sea levels and by what year ?

4. Why is sea level rise a problem for Australian coastal communities?

5. What is causing sea levels to rise?

C) Vocabulary in context

Choose the correct word to complete the sentences:

6. Rising sea levels _____ coastal areas with flooding.

a) protect b) threaten c) ignore

7. The video warns that many people _____ lose their homes.

a) will b) might not c) will not

D) Interpretation and implication (implicite)

8. Why is it likely that sea levels will continue to rise in the future?

9. How could rising sea levels change everyday life for people living in coastal Australia?

E) Opinion

10. What do you think should be done to protect coastal communities in Australia?

Activity 3 :

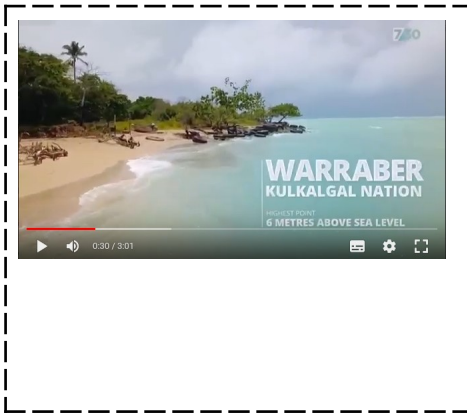
1) Before watching Document 8, try to pronounce those phonetic transcriptions:

Document 3: *Climate Emergency: Australia on the frontline of climate change,*
ABC News, 20 April 2021

a. /ɪn'dɪdʒənəs/ =

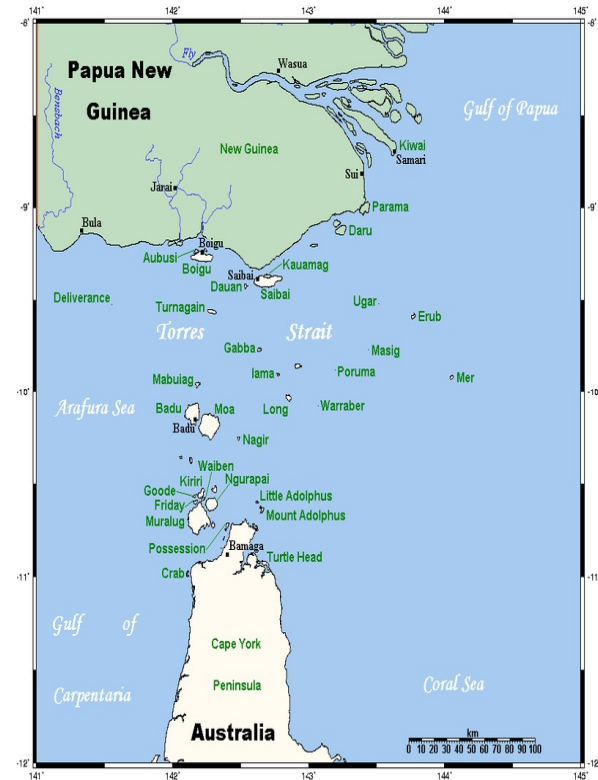
b. /'weðə(r)/ =

c. /wɒʃ ə'weɪ/ =



- d. /æb'nɔ:(r)məl/ =
- e. /ə'kɜ:(r)/ =
- f. /bəʊldli/=
- g. /'vʌlnərəbəl/ =
- h. /'dekeɪd/=
- i. /,ʌnɪn'hæbɪtəbəl/ =
- j. /,tɔrɪs ,streɪt 'aɪləndə(r)/ =

- 2) What are the 2 things that cause the erosion of those islands?
- 3) Why is “... meters above sea level” written on screen twice?
- 4) What are the predicted impacts of climate change on this region?
- 5) Can we prevent the impacts from happening?
- 6) How are the Torres Strait Islanders reacting?
- 7) Why are they an eloquent example of the climate crisis?
- 8) What is implied by the last sentence: “Planning for that really needs to begin now.”



B- Floods

Document : Australia: After the bushfires came the floods

unep.org, 17 March 2022

In the past three weeks, tens of thousands of Australians **have had** to evacuate their homes after devastating floods hit the eastern part of the country: a “once-in-a-thousand-year event.”

Some regions experienced their worst flooding in decades, as torrential rain submerged residential areas, cut power lines and caused reservoirs to swell past the bursting point, resulting in tens of millions of dollars in damage.

But experts say climate change is fuelling an increase in extreme weather across Australia, threatening to make bushfires, floods and droughts more common.

A report **published** last month by the United Nations Environment Programme (UNEP) predicts that wildfires will become more frequent and intense, with a global increase of extreme fires by 50 per cent by the end of the century. The increase in wildfires renders land barren, which leads to increased run-off and, therefore, floods and, later, drought.

It’s a trend that is happening around the world, says Alvin Chandra, an expert in climate change adaptation with UNEP. We **spoke** with Chandra about the flooding in Australia.[...]

Alvin Chandra: Scientists are united in the view that extreme flooding is becoming more prevalent in Australia, which can be attributed to warmer oceans that increase the amount of moisture moving from the sea to the atmosphere. This will most likely increase the intensity of extreme rainfall, extreme bushfires and extreme heatwaves.

The recent floods in Australia are some of the worst the country **has experienced** and **have caused** widespread devastation. To give just one example, Brisbane **has experienced** 80 per cent of its annual rainfall in just three days. These are the same communities where we **saw** massive bushfires in 2019 and 2020 which resulted in the loss of shrubs and trees, setting the scene for extreme flooding.

- 1) What is the natural disaster mentioned in Document 9? Give some details.
- 2) Find in the text the words corresponding to the following French ones (they are in the order of the text):

- a) gonfler/enfler:
- b) alimenter/nourrir:
- c) stérile/aride:
- d) trop-plein:
- e) très fréquent:
- f) arbuste:

3) Create 6 sentences using those words.

4) What is the link between climate change and floods?

5) In your opinion, why are cities especially flood-prone?