

Hello Year 6,

We hope you've had a fantastic break!

Please see the following activities to work through while we are away from school.

Most of the work includes things we've already learned about in Year 6; if there's anything you're unsure of, just try your best and let us know when we return to school.

We can't wait to see how you get on!

Check out the final page for some additional chilly challenges!

See you soon.

Miss Roberts & Mrs Statham

THE GREAT BARRIER REEF

Non-chronological report

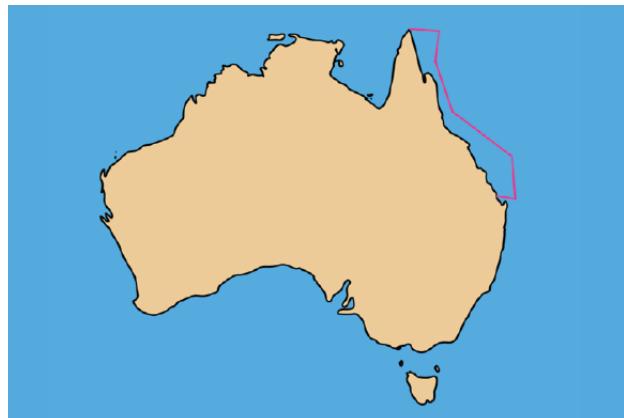
The Great Barrier Reef is the largest coral reef in the world, making it the only living thing that is clearly visible from outer space. It is one of the seven natural wonders of the world and it was classified as a UNESCO World Heritage Site in 1981.



The colours of the coral reef

Geography

The Great Barrier Reef is located off the east coast of Queensland in the Coral Sea. The reef is 2,300



Map of the Great Barrier Reef

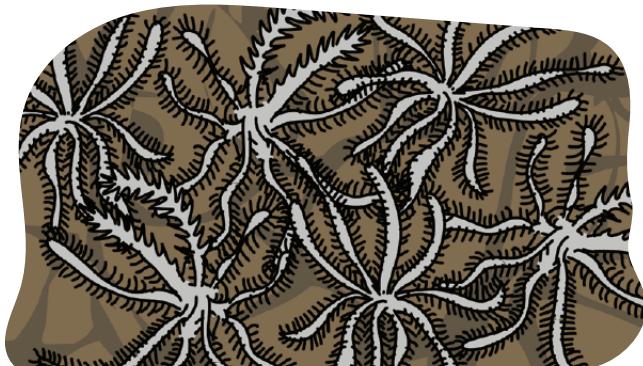
kilometres long, starting at Gladstone and stretching all the way to Cape York (the northernmost point of Australia). Astonishingly, the reef is larger than Italy! There are over 900 tropical islands in the Great Barrier Reef, which are known for their sandy white beaches. Due to its location, it is sacred to local Aboriginal and Torres Strait Islander groups and it forms a significant aspect of their culture and spirituality.

Ecology

The Great Barrier Reef contains over 3,000 individual reef systems and consists of over 600 species of coral. Coral is formed by tiny animals called polyps which are related to sea anemones and jellyfish. There are two types of coral, hard and soft, and these can come in all shapes, colours and sizes.



Left: soft coral



Right: hard coral



The Great Barrier Reef is home to a variety of sea life including some of the world's most vulnerable marine animals. There are more than 1,500 species of fish: the smallest fish is the stout infantfish, which is only 7 millimetres long, and the largest is the whale shark, which can grow up to 12 metres long! In addition, there are 134 species of sharks and rays living in the reef, as well as mammals. The dugong – a slow moving marine mammal related to the manatee – is classified as vulnerable and is one of 30 species of mammals found in the Great Barrier Reef. The reef is also home to 6 out of 7 species of threatened marine turtles, including the large green sea turtle.



large green sea turtle

Did you know?

The Great Barrier Reef also accommodates some of the deadliest animals in the ocean, including the box jellyfish, blue-ringed octopus and the stonefish.

Threats

Climate change is the greatest threat to the existence of the Great Barrier Reef. Water temperatures continue to rise because of increased carbon dioxide and other gases in the atmosphere; subsequently, the coral suffers heat stress which causes it to release an algae revealing white skeletons. Over time, the coral slowly loses its colour. According to reports, in the space of just five years, shallow water reefs have reduced by 50% as a result of coral bleaching.

Severe weather events also pose a threat to the reefs. Climate change is increasing the frequency and severity of cyclones which cause major damage to the reef; between 2004 and 2018 there were 10 cyclones that caused significant damage to the Great Barrier Reef.

Poorer water quality, as a result of pollution, also threatens coral. In particular, the risk of crown-of-thorns starfish outbreaks increases because of poor water quality and the overfishing of predators. Crown-of-thorns starfish are the world's second largest starfish (growing up to 1 metre) and they feed on nearly all corals, eating up to 90% of the living tissue during an outbreak.

Action

Individuals can take responsibility for improving and maintaining the health of the Great Barrier Reef. If the pollution levels and the rate of climate change were to drop, the reef could remain a safe habitat for the community of living things that call it home.

Questions 1 – 16 are about The Great Barrier Reef

1

Look at page 4 of your reading booklet.

What was the Great Barrier Reef classified as in 1981?

1 mark

2

Look at the first paragraph.

What evidence is given to suggest that The Great Barrier Reef is the largest coral reef in the world?

- It stretches from Gladstone to Cape York.
- It measures 2,900 kilometres.
- It is the only living thing that is clearly visible from outer space.
- It is home to 1,200 tropical islands.

1 mark

3

According to the text, how long is the Great Barrier Reef?

1 mark

4

What are the islands of the Great Barrier Reef known for?

1 mark

5

Look at the section headed: **Geography**.

Find and copy one word which shows the Great Barrier Reef is cherished by the local Aboriginal and Torres Strait Islander groups.

1 mark

6

According to the text, how many species of coral does the Great Barrier Reef consist of?

1 mark

7

Look at the section headed: **Ecology**.

Find and copy one word which means there are many different animals in the waters of the Great Barrier Reef.

1 mark



8

'The Great Barrier Reef is home to a **variety** of sea life including...'

In this sentence, the word 'variety' is closest in meaning to...

Tick **one**.

collection

similarity

difference

modification



1 mark

9

Look at page 5 of your reading booklet.

'The Great Barrier Reef is home to a variety of sea life including some of the world's most vulnerable marine animals.'

Which of the 30 species of mammals found in the Great Barrier Reef has been classified as vulnerable?



1 mark



10

The text explains what happens to the coral reef when water temperatures rise. Order these facts from 1 – 5 in the order in which they happen. The first one has been done for you.

- White skeletons are revealed.
- 1 The coral suffers heat stress.
- Reefs are reduced in size.
- The coral releases an algae.
- The coral loses its colour.



1 mark

11

According to the text, how many **cyclones** caused damage to the reef between 2004-2018?



1 mark

12

Look at the section headed: **Threats**.

According to the text, give **two** effects of climate change that have resulted in damage to the Great Barrier Reef.

1. _____

2. _____

2 marks

13

According to the text, climate change is the greatest threat to the existence of the Great Barrier Reef. What other threats are there?

Give **two** and include the reason they are a threat.

1. _____

2. _____

2 marks

14

Look at the section headed: **Action**.

According to the text, what must happen to improve and maintain the health of the Great Barrier Reef?

1 mark



15

Which statement is the **best summary** of the 'threats' and 'action' sections?

Tick **one**.

- Many animals live in the Great Barrier Reef.
- There are several threats to the Great Barrier Reef, but this can improve with the reduction of climate change and pollution.
- The Great Barrier Reef will recover by itself.
- The Great Barrier Reef is changing and soon there will be no coral left.

1 mark

16

Using information from the text, tick one box in each row to show whether each statement is **true** or **false**.

True **False**

There are 1,500 species of animals living in the Great Barrier Reef.

The Great Barrier Reef is one of the seven natural wonders of the world.

The Great Barrier Reef is home to some of the deadliest animals in the ocean.

1 mark

Task 1

Round each number to the nearest 100 and 1000.

Nearest 100	Number	Nearest 1000
	3,592	
	9,981	
	1,025	
	49	
	23,025	
	67,841	
	634	

Task 2

Complete the missing numbers in the sentences.

a) $297,356 = \underline{\quad} + \underline{\quad} + 7000$

$+ \underline{\quad} + \underline{\quad} + 6$

b) $503,844 = \underline{\quad} + 0 + \underline{\quad} +$

$\underline{\quad} + \underline{\quad} + \underline{\quad}$

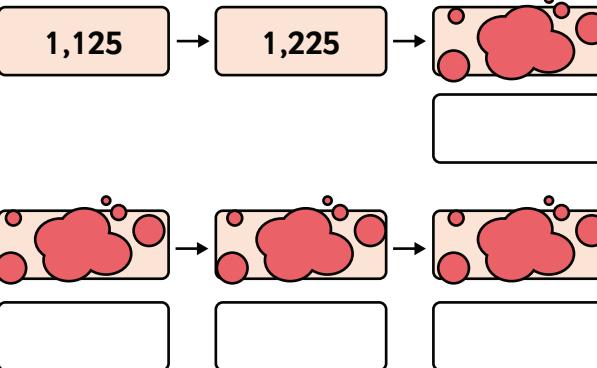
Week One



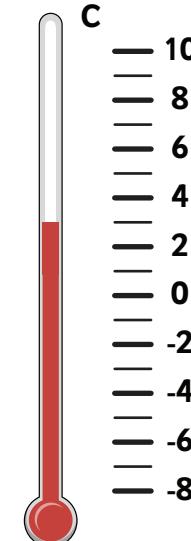
Task 3



Continue the sequence:



Use the thermometer to answer the questions.



1) What temperature is the thermometer showing?

2) If the temperature decreases by 7 degrees, what will the temperature be?

Task 4



What is the number represented in the place value chart?

Hundred thousands	Ten thousands	Thousands	Hundreds	Tens	Ones
○ ○ ○ ○	○ ○		○ ○ ○ ○ ○	○ ○ ○ ○ ○ ○	○ ○

Task 6

Answer the subtraction questions using a mental strategy.

$24 - 13 = \underline{\quad}$

$4,500 - 1,350 = \underline{\quad}$

$87 - 25 = \underline{\quad}$

$965 - 232 = \underline{\quad}$

$1,340 - 150 = \underline{\quad}$

$6,545 - 3,500 = \underline{\quad}$

Key stage 2

Mathematics

Paper 1: arithmetic

First name	
------------	--

Middle name	
-------------	--

Last name	
-----------	--

Date of birth	Day		Month		Year	
---------------	-----	--	-------	--	------	--

School name	
-------------	--

1

$46 + 785 =$

1. **What is the primary purpose of the `get` method in the `HttpURLConnection` class?**

1 mark

2

$$3 \times 105 =$$

A large, empty rectangular box with a thick black border, occupying most of the page. It is positioned in the upper half of the page, with a thin red horizontal line above it and a thin red horizontal line below it.

1 mark

3

$$\frac{5}{9} + \frac{2}{9} =$$

1 mark

4

$676 \times 0 =$

1 mark

5

$$6 \times 5 \times 5 =$$

1 mgrk

6

$108 \div 9 =$

1 mark

7

$104.27 + 32.8 =$

1 mark

8

$7^2 - 20 =$

1 mark

9

$8,107 - 198 =$

1 mark

10

$630 \div 7 =$



1 mark

11

$2400 \div 8 =$

1 mark

12

$$+ 300 = 1,287$$

ANSWER

1 mark

13

$11 - 2.9 =$

1 mark

14

$2,004,050 = 2,000,000 +$ $+ 50$

1 mark

15

$840 \div 12 =$

1 mark

16

$$9,231 - 176 =$$

1 mark

17

$$\frac{3}{5} + \frac{2}{15} =$$

1 mark

18

$$\frac{3}{5} \text{ of } 2000 =$$

1 mark

19

$15\% \text{ of } 3,400 =$

 1 mark**20**

$2.4 \div 1000 =$

 1 mark**21**

$$\begin{array}{r} & & 5 & 2 & 9 \\ \times & & 3 & 4 \end{array}$$

Show your method

 2 marks

22

3 2 5 4 4

Show
your
method 2 marks**23**

$$\frac{2}{3} + \frac{1}{4} =$$

 1 mark**24**

$$0.6 \times 54 =$$

 1 mark

25

$$1\frac{3}{5} + \frac{2}{7} =$$

1 mark

26

$$2.7 \times 40 =$$

1 mark

27

$$8 - 5.002 =$$

1 mark

28

$$1\frac{5}{12} - \frac{3}{4} =$$

 1 mark**29**

$$84\% \text{ of } 400 =$$

 1 mark**30**

$$\begin{array}{r} & 6 & 1 & 2 & 4 \\ x & \hline & 7 & 4 \end{array}$$

Show
your
method 2 marks

31

$$\frac{2}{5} \div 3 =$$

1 mark

32

$$8^2 - 28 \div 7 =$$

1 mark

33

$$1\frac{1}{2} \times 20 =$$

1 mark

34

$$3\frac{4}{5} - 1\frac{5}{8} =$$

1 mark

35

$$35\% \text{ of } 780 =$$

1 mark

36

8 9 6 5 8 6

Show your method

2 marks

Weekly SPaG Check

Week 1

Mark

Circle the pair of synonyms in the set of words below.

1.

ascend suggested purpose fellow rise

2.

The footballer _____ the ball into the goal.

Identify the type of noun in the sentence.

3.

concrete noun
abstract noun
collective noun

Underline the expanded noun phrase in the sentence below.

4.

My next door neighbour's cat is called Tiddles and he is very friendly.

Rewrite this sentence putting the adverbial at the end of the sentence.

5.

Next weekend, we are going to Wales to see our grandparents.

Rewrite the sentence in the active voice.

6.

The medal was awarded to the children by the mayor.

Complete the sentence with either a colon or semi-colon.

7.

I was hungry I hadn't eaten for at least four hours.



- Where is the coldest place on Earth? What is the coldest recorded temperature?
- Which animals are best adapted to cold weather? What makes them most suitable to cold environments?
 - What happens to aquatic animals during cold weather?
 - Observe some of the snow-covered places near your home. Where does the ice start to melt first? Why does this happen?
 - Design a new item of clothing/accessory to keep people warm during cold weather.