

The Seven Natural Wonders of the World

Rio De Janeiro Harbour

W/C: 15th June 2020

The Harbour of Rio de Janeiro is one of the 'Seven Natural Wonders of the World,' It is located in the country of Brazil, South America. It is world famous for being the world's largest bay, having mountains that come down almost to the water's edge and for an enormous statue that looks down on the city and harbour from one the mountain peaks.



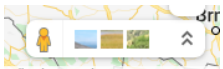
Subject: **Geography**

Outcome: Locate and draw Brazil on a map and use symbols to explain its features.

Activity 1) Take the fun quiz to see exactly how much you already know about Brazil. Then, self-assess - the answers are on the last page of this pack!

Use Google Maps to explore the country of Brazil: <https://www.google.co.uk/>

Use the 'Street View' and satellite tools to see it from different proportions and perspectives.



Finally, complete the map of Brazil, making sure to include:

- ⇒ A title
- ⇒ A key to explain colours and symbol
- ⇒ Labels for cities and neighbouring countries

Subject: **Geography**

Outcome: Research, describe and understand the key aspects of the physical geography of The Harbor of Rio de Janeiro.

Activity 2) Read the information provided in this pack for activity 2.

Visit earth.google.com and take a look around Rio de Janeiro Harbour.

Research and answer the following questions, using the websites below:

1. Why are there 7 natural wonders?
2. What constitutes a 'natural wonder'?
3. How long is the Guanabara Bay?
4. As a result of which natural process was the bay created?
5. Which famous mountain overlooks the bay?
6. Which famous, man-made monument also overlooks the bay?
7. What is currently threatening this 'natural wonder'? Explain how?

<https://sevenwonders.org/harbor-of-rio-de-janeiro/>

<http://www.unmuseum.org/7wonders/rio.htm>

<http://justfunfacts.com/interesting-facts-about-the-harbor-of-rio-de-janeiro/>

Subject: **Science**

Outcome: Conduct an experiment to observe the effects of erosion on a landscape.

Activity 3) As you now know, the Harbour of Rio de Janeiro was formed through the natural process of erosion.

Follow the instructions in this pack or watch these videos below in order to conduct your own experiment on erosion.

https://www.youtube.com/watch?v=TXzZH3S3_14

<https://www.youtube.com/watch?v=ZNJe6hrdL3M>

Work like a scientist! Identify the dependent, independent and control variables.

Work like a scientist! Suggest a question to answer in a future scientific inquiry linked to erosion.

Subject: **Art**

Outcome: Draw - a new - 8th wonder of the natural world.

Activity 4) If there was an 8th wonder of the 'natural world' then what would it look like? How would it have been formed? What habitats and wildlife would exist? What would make it unique and special? Look at the examples in this pack for inspiration.

Use a pencil to sketch your ideas and choose a challenge to apply the sketching skills you have learned in lessons:



Show shadows by thinking about the direction of sunlight



Depict movement



Show perspective (giving a 3D feeling to a 2D image)

We would love to see your sketches so get sharing with us on our Year 5 Twitter page !

Activity 1) Locate Brazil

Time for a Quiz

1) What continent is Brazil in?



2) What is the capital of Brazil?



3) What do the different parts of the Brazilian flag mean?

A. The yellow represents the sun; the green farmland; the blue the coastline; and the stars are the major cities of Brazil.

B. The green represents the forests of the country and the yellow its mineral wealth. The blue represents the sky and each star is a different state.

C. Green, yellow and blue were the first Presidents favourite colours. Each star represents a different member of his extended family.



Activity 1) Locate Brazil

Time for a Quiz

4)

How do you say 'Hello' in Portuguese?

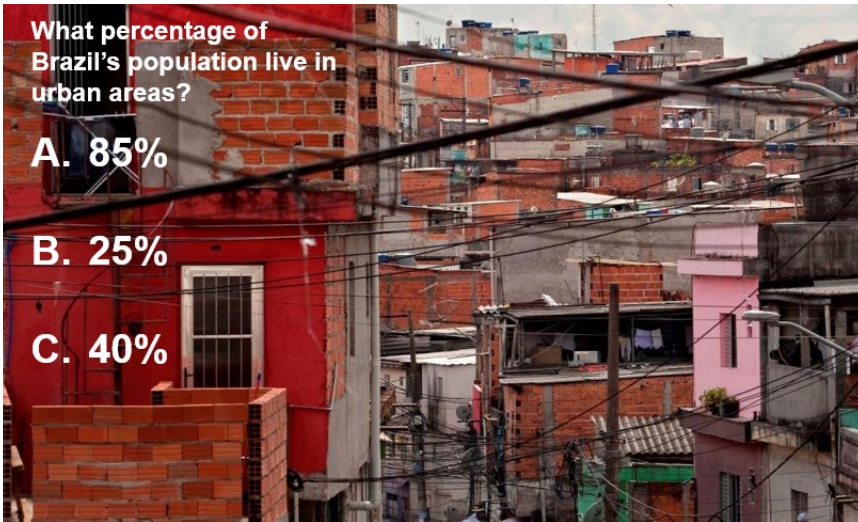
- A. Bonjour
- B. Tchou
- C. Olá



5)

What percentage of Brazil's population live in urban areas?

- A. 85%
- B. 25%
- C. 40%



6)

What is the most popular sport in Brazil?

- A. Football
- B. Capoeira (martial arts)
- C. Footvolley (a beach sport)



Activity 1) Locate Brazil

Complete this map of Brazil, making sure to include:

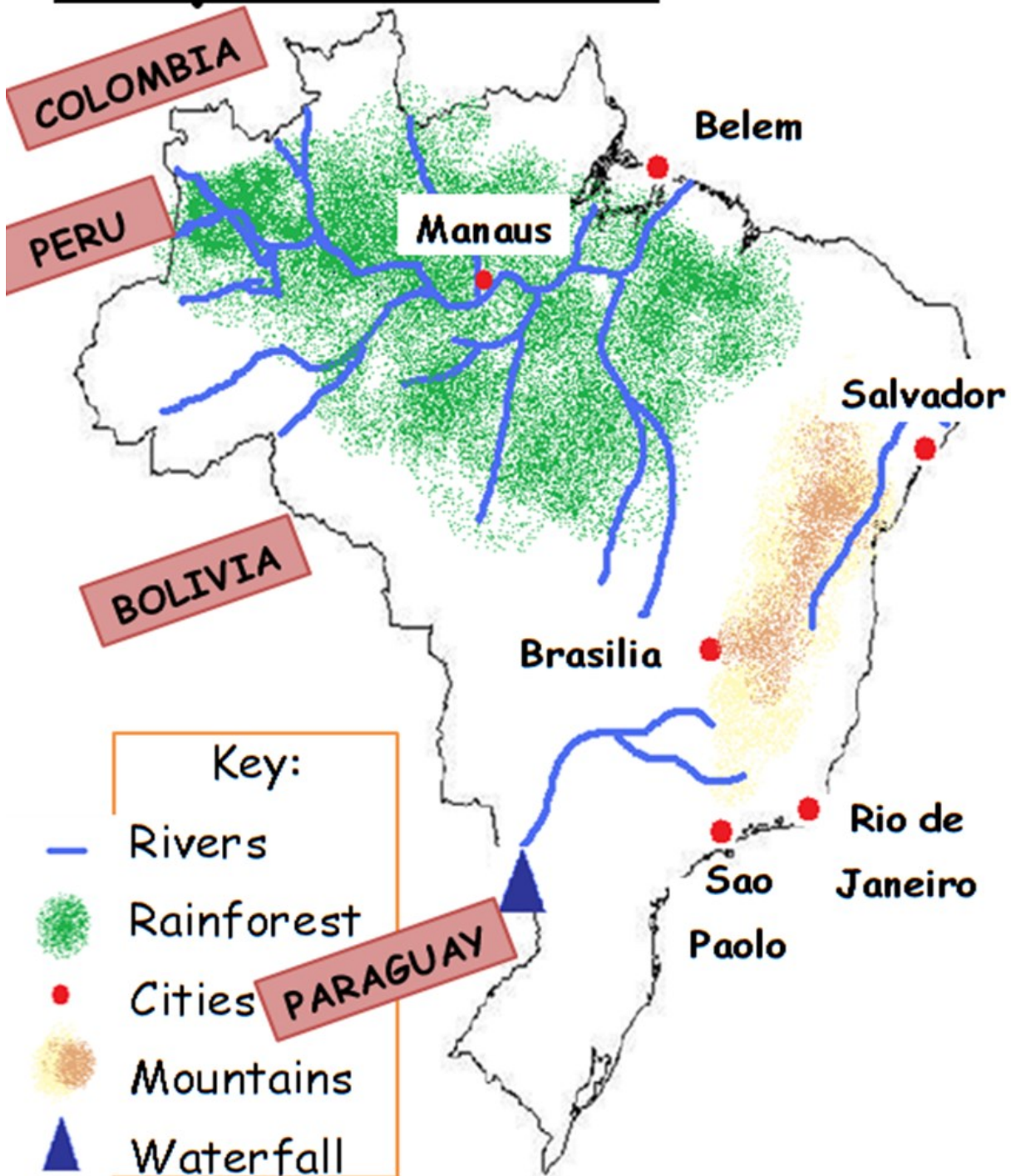
- ⇒ A title
- ⇒ A key to explain colours and symbol
- ⇒ Labels for cities and neighbouring countries



Activity 1) Locate Brazil

Map WAGOLL

Map of Brazil

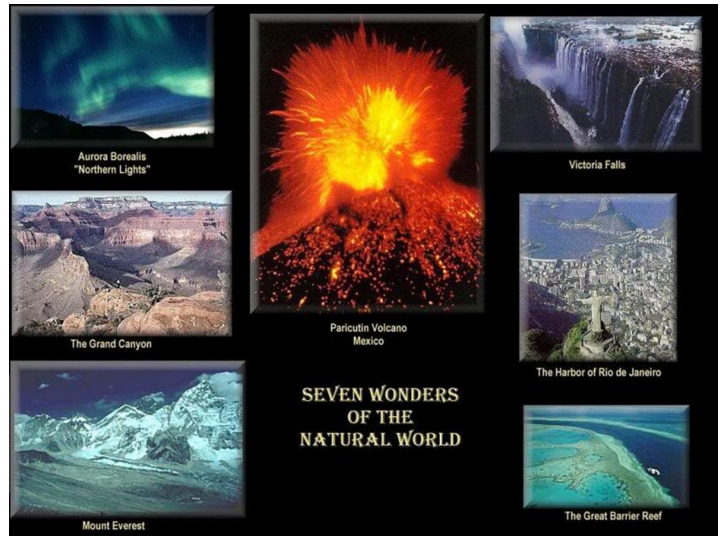


Activity 2) Research Physical Geography.

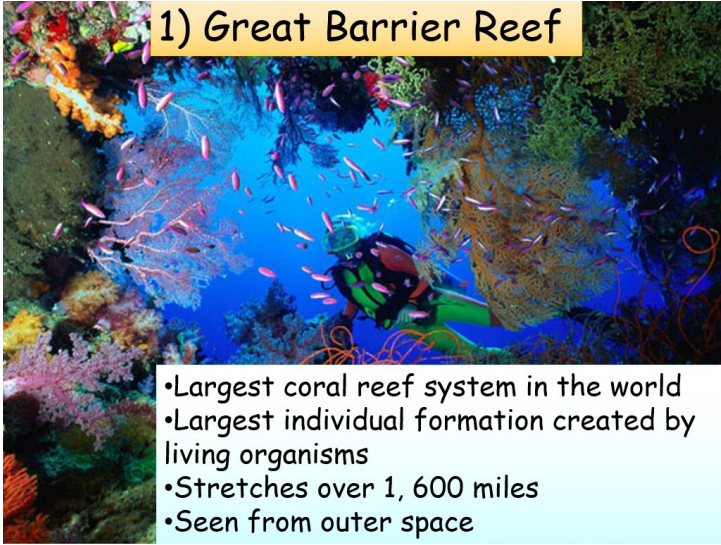
7 Natural Wonders of the World

Think about:

- 1) What might a natural wonder be?
- 2) What might conservation mean?
- 3) Why is conservation important?

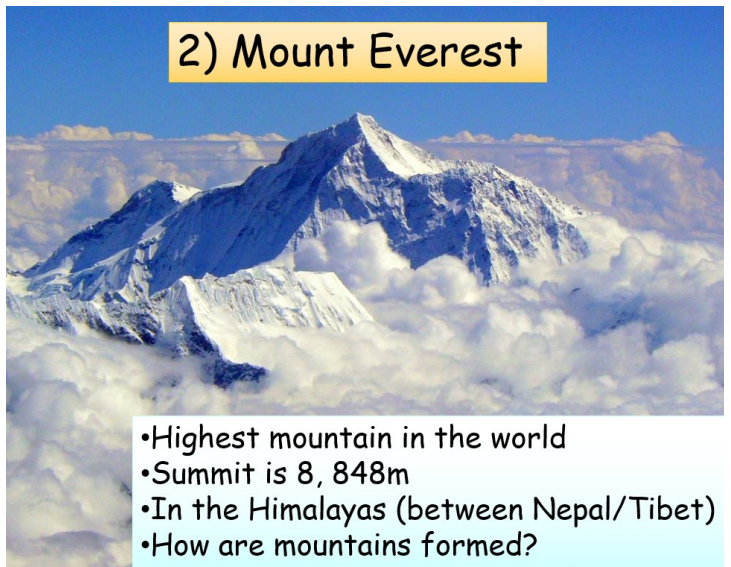


1) Great Barrier Reef



- Largest coral reef system in the world
- Largest individual formation created by living organisms
- Stretches over 1,600 miles
- Seen from outer space

2) Mount Everest



- Highest mountain in the world
- Summit is 8,848m
- In the Himalayas (between Nepal/Tibet)
- How are mountains formed?

3) Victoria Falls



- Largest waterfall (width 1.7km, 108m high)
- Also called *Mosi-oa-tunya*, meaning 'smoke that thunders'
- 2 national parks protect the falls, why?

4) Grand Canyon



- Massive gorge in Arizona
- 227 miles long, up to 18 miles wide and 1 mile deep
- Beautifully coloured
- How could you explore?

Activity 2) Locate Brazil

5) Aurora Borealis



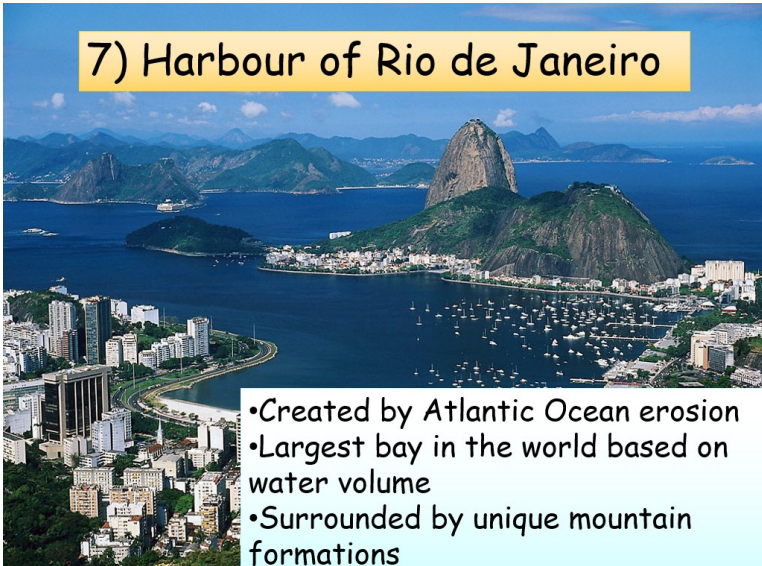
- Also known as Northern lights
- Collision of charged particles from the solar wind with the Earth's atmosphere
- Magnetic field makes the lights appear to dance
- What causes the colours?

6) Paricutin



- Cinder cone volcano-Mexico
- Birth witnessed by a human
- Last erupted in 1952

7) Harbour of Rio de Janeiro



- Created by Atlantic Ocean erosion
- Largest bay in the world based on water volume
- Surrounded by unique mountain formations

Activity 3) Scientific Inquiry on Erosion

The **Harbor of Rio de Janeiro** is located in Brazil and was created by erosion from the Atlantic Ocean and is also known as **Guanabara Bay**. Over time, the sea eroded the rocks and sand, developing the bay we recognize today.

The **erosion** occurred in such a way that if you look at the bay from different angles, it can look like a **river mouth**, or even a **lake**.

Slope Erosion and Prevention

Materials:

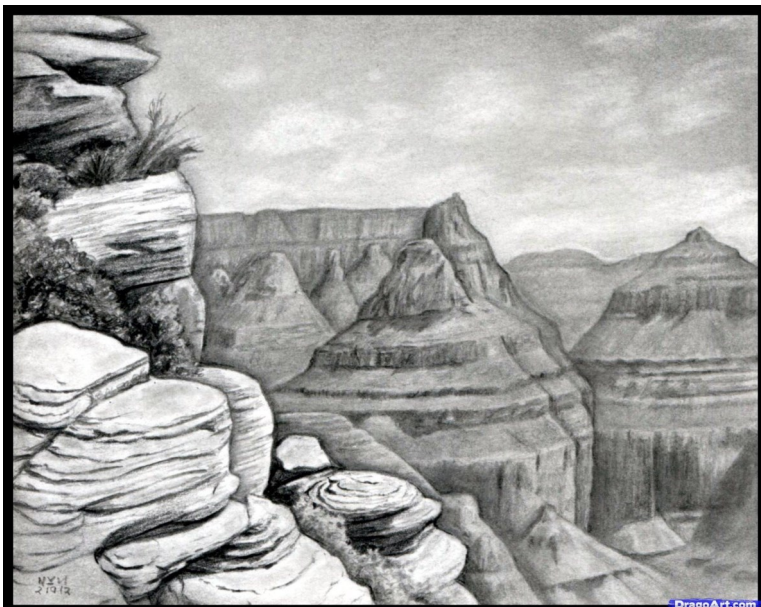
2 Baking trays	Soil	Water
Measuring jug	Watering can	Ruler
Gardening gloves	Small plants with roots (optional)	Sticks, bark, leaves, small rocks, mulch, books or bricks



Instructions:

- 1 Fill the trays with soil and press it down with your hands to flatten it a little.
- 2 Prop the trays up at one end by placing a stack of books or bricks underneath them. Make one tray with a gentle slope. Make the other tray with a steep slope.
- 3 Measure out the amount of water (rain) you would like to fall on one soil slope and add it to the watering can.
- 4 Pour the water onto one of the slopes, taking notice of the height that you pour it from, and observe what happens.
- 5 Repeat steps 3 and 4 on the other soil slope. Remember to pour the water (rain) from the same height as the first slope.
- 6 Next, create a mound of soil on a flat area.
- 7 On one side of the mound, cover it with sticks, bark, leaves, small rocks or mulch. If you have small plants, place them in this side of the mound too. Leave the other half of the mound with bare soil.
- 8 Measure out some water into the watering can and pour it on to the mound. Observe what happens.
- 9 Empty the trays and repeat steps 1-3 but this time place sticks, bark, leaves, small rocks or mulch over the soil.
- 10 Measure out the same amount of water (rain) you poured on the soil slopes before and add it to the watering can.
- 11 Pour the water onto the slopes from the same height as before and observe what happens.

Activity 4) Sketch an 8th Natural Wonder



Activity 1: Answers

Time for a Quiz

1) South America

It is home to the world's highest waterfall, Angel Falls in Venezuela; the largest river (by volume), the Amazon River; the longest mountain range, the Andes; the driest place on earth, the Atacama Desert; the largest rainforest, the Amazon Rainforest and the highest capital city, La Paz, Bolivia.

Brazil is the largest country in South America, covering around half of the continent's land area and population. It is also the longest country in the World. Ecuador and Chile are the only South American countries that do not share a border with Brazil.

Brazil is the only Portuguese speaking country in the Americas (and the largest Portuguese speaking country in the world.)

2) Brasília.

The capital city is located among the Brazilian Highlands in the country's Central-West region. The city was founded in 1960 to serve as the new national capital. Brasília had an estimated population of 2,789,761 in 2013, making it the 4th most populous city in Brazil.

3) B

Brazil officially adopted this design for its national flag on November 19, 1889.

The green square and yellow rhombus, representing the forests and mineral wealth of Brazil, were preserved from the original flag. The colours also represent the reigning House of Braganza and the House of the Consort of the first emperor, Habsburg. The blue circle replaced the arms of the Empire of Brazil and contains 27 white five-pointed stars. Their positions reflect the sky over Rio de Janeiro on November 15, 1889 and each star represents a specific State, plus one for the Federal District.

4) c. Olá.

Bonjour is 'hello' in French while tchau means 'bye' in Portuguese (adapted from the Italian word ciao).

5) A. 85% of Brazil's population live in urban areas.

Of that percentage, a large number of people from the big cities live in favelas - 1.1 million of Brazil's poor. One in five Rio de Janeiro residents lives in a favela.

6) A. Football.

Football is the most popular sport in Brazil. The Brazilian national soccer team has won the FIFA World Cup a record 5 times: in 1958, 1962, 1970, 1994, and 2002. It is the only team to succeed in qualifying for every FIFA World Cup competition ever held.