



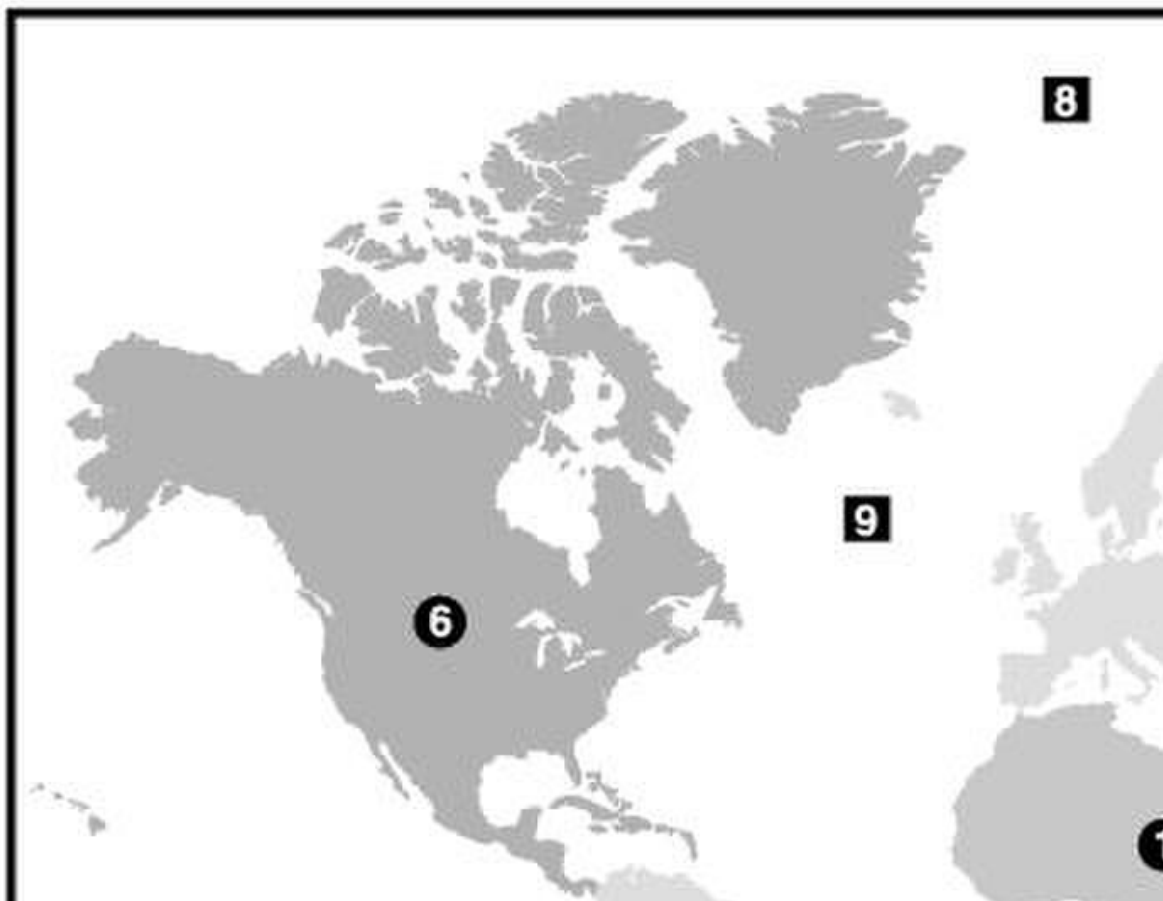
Q1(a). What are oceans and continents?

Answer: Oceans are vast bodies of saltwater that cover about 71% of the Earth's surface, while continents are large landmasses that form the Earth's land area. There are five major oceans and seven continents.

- **Oceans:** Pacific, Atlantic, Indian, Southern, and Arctic.
- **Continents:** Asia, Africa, North America, South America, Antarctica, Europe, and Australia.

These oceans and continents are distributed across the Earth's surface, with oceans surrounding and separating the continents.

Q1(b). Label oceans and continents.





Q1© Write down the list of continents from the smallest to the largest.

Answer:

From smallest to largest:

1. Australia
2. Europe
3. Antarctica
4. South America
5. North America
6. Africa
7. Asia (or Eurasia if combined with Europe)



Q2. In what ways do oceans and continents impact life on Earth? Consider both the positive and negative ways.

Answer: Oceans regulate Earth's climate, support marine life, and provide resources such as fish and salt. They also serve as major transportation routes for global trade. Continents provide habitats for humans, plants, and animals, and contain natural resources like minerals, forests, and freshwater. Together, oceans and continents shape ecosystems, weather patterns, and human activities like agriculture, trade, and urban development.

Alternate answer:

Oceans and continents impact life on Earth including human life in a number of ways.

- They play a vital role in shaping the climate, of the Earth. Oceans through currents transport heat from the equator to the poles regulating our climate.
- 98% of the heat from the Sun's rays is absorbed by the Oceans.
- They help send rain to the continents. They are a part of the water cycle that sustains agriculture, and life on earth and replenishes the useable freshwater resources.
- Our Oceans produce over half the world's oxygen we breathe and capture an estimated 40% of the CO₂ produced which is why they are called 'planet lungs'.

Negatives:

- Oceans give rise to violent events with extreme rainfall or strong winds such as cyclones which cause widespread damage to men and material.
- Tsunami, a natural disaster originates in the ocean. The sea waves travel thousands of km, submerge coastal areas, and cause loss of life and property.



Q3. Explain the imaginary line in the diagram below. How does it help us?



Answer: The circular lines on the map are called parallels of latitude, which run parallel to the equator. The lines radiating out from the poles are known as meridians of longitude. They help identify the exact location of places on Earth.

Q4. Oceans and continents are not distributed equally between the Northern and Southern Hemispheres.

Q4(a). What is the smallest ocean in the world?

Answer: Arctic Ocean.

Q4(b). Name the hemisphere that contains more water.

Answer: The surface of the Northern Hemisphere is 60.7% water, compared with 80.9% water in the case of the Southern Hemisphere. The northern hemisphere contains 67.3% of Earth's land.

Q4(c). Which two continents are not separated by a body of water?

Answer: Europe and Asia.

Q4(d). Which is the largest ocean in the world?

Answer: The Pacific Ocean is the largest ocean and is spread over one-third of the Earth.

Q4(e). Does the boundary separating the ocean waters really exist?

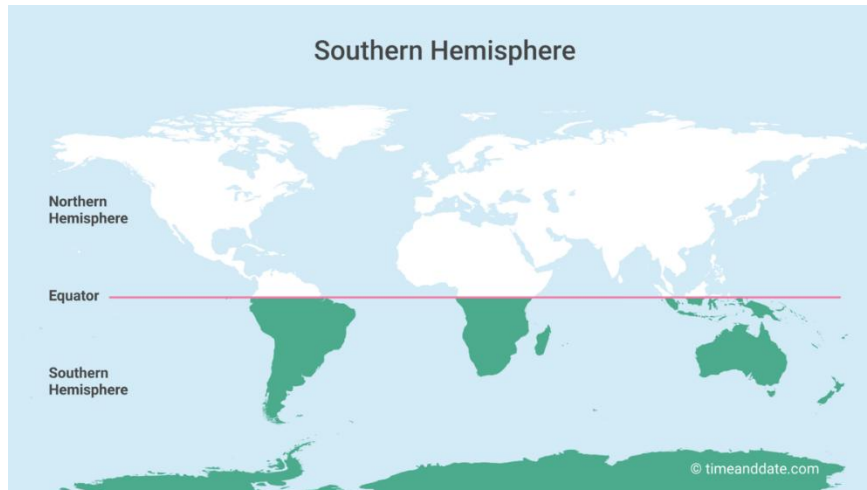
Answer: The planet has one global ocean, though oceanographers and the countries of the world have traditionally divided it into five distinct regions: the Pacific, Atlantic, Indian, and Arctic oceans.



Q4(f). Why oceans are called the “lungs of our planet”.

Answer: They serve as the Earth's respiratory system, producing oxygen for life and absorbing carbon dioxide and waste. The oceans provide storage and absorb the world's carbon dioxide,

Q5. Look at the diagram below and answer the following questions:



Q5(a). Is the Northern Hemisphere equal to the Southern Hemisphere?

Answer: The northern hemisphere contains more landmass and less oceans than the southern hemisphere. The Northern hemisphere holds 61% of land whereas the Southern hemisphere holds 81% of water.

Q5(b). What is the smallest continent?

Answer: Australia is the smallest continent.

Q5(c). What continents and oceans are in both the northern and Southern Hemispheres?

Answer: The northern hemisphere contains more landmass and less oceans than the southern hemisphere. North America and Europe lie entirely in the northern hemisphere, i.e., to the north of the Equator. Africa, Asia, and South America lie partially in both hemispheres.

Q5(d). What divides the Northern and Southern Hemispheres?

Answer: Equator (0° latitude)

Q5(e). What is the biggest continent?



Answer: Asia is the largest continent and also has the longest coastline in the world. It covers about one-third of the total land area of the earth.

Q6. Locate the five oceans and, in the table below, mark the hemisphere or hemispheres they belong to.

	Northern Hemisphere	Southern Hemisphere
Pacific Ocean		
Atlantic Ocean		
Indian Ocean		
Southern Ocean		
Arctic Ocean		

Answer:

Ocean Name	Northern Hemisphere	Southern Hemisphere
Pacific Ocean	Yes	Yes
Atlantic Ocean	Yes	Yes
Indian Ocean	No	Yes
Southern Ocean	No	Yes
Arctic Ocean	Yes	No



Q7. Explain two phenomena associated with oceans and disasters.

Answer:

Tsunamis are giant waves caused by earthquakes or volcanic eruptions under the sea.

A cyclone is defined as a powerful storm containing strong winds and rains

Q8. Is Europe and Asia the same or different continents? Support your answer with a logical answer.

Answer: There is no geological or water boundary between Europe and Asia—they are combined as Eurasia. Africa, Australia, and Antarctica are, for the most part, separate and distinct continents due to distinct landmasses. Europe and Asia can be treated as different continents based on cultural, political, and historical differences.

Q9. Read the context below and answer the following questions:

Answer: Some smaller pieces of land are left out; surrounded by water on all sides, they are called islands. (Continents are also surrounded by water, but because they are so large, they are not considered islands.)

(a) Approximate number of islands in India

Answer: 1300

(b) Largest island in the world

Answer: Greenland

© Two major islands of India.

Answer: Andaman and Nicobar Islands in the Bay of Bengal and Lakshadweep Islands in the Arabian Sea.

(d) Name the India's first scientific base station in Antarctica

Answer: 'Dakshin Gangotri'

(e) World Ocean Day is celebrated on _____. (June 8)

