

The Grand Canyon

The Grand Canyon, located in the state of Arizona, USA, is one of the most famous natural wonders of the world. It is not the deepest or the longest canyon on Earth, but its overwhelming size and its intricate and colorful landscape are what make it so spectacular.

The canyon was carved over millions of years by the powerful Colorado River. The rock layers at the bottom of the canyon are nearly two billion years old, offering a unique window into Earth's geological history. Visitors can hike down trails to the bottom, ride mules, or simply enjoy the breathtaking views from the rim. The colors of the rocks change dramatically with the shifting sunlight throughout the day, creating a mesmerizing display of nature's art.

Comprehension Check: Answer the questions.

1. Where is the Grand Canyon located?
2. What natural force created the Grand Canyon?
3. What are two activities visitors can do at the Grand Canyon?
4. Why is the Grand Canyon important for scientists?

Great Barrier Reef

The Great Barrier Reef is the world's largest coral reef system, composed of over 2,900 individual reefs and 900 islands. It is located in the Coral Sea, off the coast of Queensland, Australia. So vast is it that it can be seen from outer space.

This incredible ecosystem is home to thousands of species, including colorful fish, mollusks, starfish, turtles, dolphins, and sharks. The reef itself is built by billions of tiny organisms known as coral polyps. Unfortunately, the reef is under threat from climate change, which causes ocean warming and leads to "coral bleaching"—a phenomenon where corals expel the algae living in their tissues and turn completely white, often leading to death.

Comprehension Check: Answer the questions.

5. Where is the Great Barrier Reef located?
6. Why can the reef be seen from space?
7. What are "coral polyps"?
8. What is the main threat to the reef, and what is "coral bleaching"?

Aurora Borealis (The Northern Lights)

The Aurora Borealis, or Northern Lights, is a natural light display predominantly seen in high-latitude regions around the Arctic. In the Southern Hemisphere, a similar display is known as the Aurora Australis.

This dazzling spectacle is caused by collisions between electrically charged particles from the sun that enter the Earth's atmosphere. These particles are drawn towards the poles by the Earth's magnetic field. The lights appear as curtains, rays, spirals, or dynamic flickers covering the entire sky. They are most often green, but can also be pink, red, yellow, blue, and violet. The best time to see them is on a clear, dark night, far away from the lights of cities.

Comprehension Check: Answer the questions.

9. Where can you typically see the Aurora Borealis?
10. What scientific phenomenon causes the lights?
11. What are some of the shapes and colors the lights can take?
12. What are the ideal conditions for viewing the Northern Lights?

Comprehension Match: About the three Natural Marvels

Instructions: Read each question or statement below. Decide which natural marvel it is describing: The Grand Canyon (GC), The Great Barrier Reef (GBR), or The Northern Lights (NL). Write the correct abbreviation on the line.

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|---|--|--------------------------|
| <input type="checkbox"/> This wonder is a large underwater ecosystem built by tiny living organisms. | It is currently threatened by a process called "bleaching." | <input type="checkbox"/> |
| <input type="checkbox"/> It was formed over millions of years by the force of a powerful river. | This marvel is famous for its dramatic and colorful landscape that changes with the light. | <input type="checkbox"/> |
| <input type="checkbox"/> It is a light show in the sky caused by particles from the sun. | It can be seen from outer space because of its immense size. | <input type="checkbox"/> |
| <input type="checkbox"/> This site is a deep canyon with rock layers that are billions of years old. | This wonder is created by a physical process involving the Earth's magnetic field. | <input type="checkbox"/> |
| <input type="checkbox"/> The best time to see this phenomenon is on a clear, dark night away from cities. | Visitors can explore this place by hiking, riding mules, or viewing from a high rim. | <input type="checkbox"/> |
| <input type="checkbox"/> It is the largest structure in the world made by living creatures. | It is home to thousands of species like fish, turtles, and sharks. | <input type="checkbox"/> |