

1. The Living World: Ecosystems

Starter Quiz · 课前小测

AP Environmental Science

Name: _____ Score: _____

1. An **ecosystem** is...

- ☐ all the living things in an area plus their non-living surroundings
- ☐ only the animals in an area
- ☐ a single species
- ☐ a type of rock

2. A **biome** is...

- ☐ a large region defined by its climate and characteristic life
- ☐ a single ecosystem
- ☐ one species
- ☐ a type of soil

3. Aquatic biomes are mainly divided by their **salinity**, which means...

- ☐ how much salt is dissolved in the water
- ☐ how deep the water is
- ☐ how warm the water is
- ☐ how fast the water flows

4. Which process **removes** carbon dioxide from the air?

- ☐ photosynthesis
- ☐ respiration
- ☐ combustion
- ☐ decomposition

5. Why can most living things not use the nitrogen gas in the air directly?

- ☐ the N₂ molecule is very stable and hard to break apart
- ☐ there is too little of it
- ☐ it is too cold
- ☐ it is poisonous

6. Non-living parts of an ecosystem, like sunlight and water, are the _____ factors.

7. The cold, treeless biome with frozen ground for much of the year is the _____.

8. The brackish place where a river meets the sea is called an _____.

9. Carbon locked away for millions of years in coal, oil, and gas is stored as _____ fuels.

10. Plants use fixed nitrogen to build _____, and animals get it by eating plants.

AP Environmental Science

1. **all the living things in an area plus their non-living surroundings**

An **ecosystem** is a community of living things interacting with each other and their non-living environment.

2. **a large region defined by its climate and characteristic life**

A **biome** is a large area with a distinctive climate and the plants and animals adapted to it.

3. **how much salt is dissolved in the water**

Salinity is the amount of dissolved salt; it separates freshwater from marine biomes.

4. **photosynthesis**

Photosynthesis takes CO₂ out of the air and stores the carbon in plants.

5. **the N₂ molecule is very stable and hard to break apart**

N₂ has a very strong triple bond, so it must first be **fixed** into usable forms.

6. **abiotic**

Abiotic factors are the non-living conditions and resources an ecosystem depends on.

7. **tundra**

The **tundra** is cold and treeless, with permanently frozen ground (permafrost) below the surface.

8. **estuary**

An **estuary** is where fresh and salt water mix; it is very rich in life.

9. **fossil**

Coal, oil and gas are **fossil fuels** — ancient carbon that combustion releases as CO₂.

10. **proteins**

Nitrogen is essential for **proteins** and DNA; animals get theirs by eating plants.