

AP Environmental Science

Name: _____ Score: _____

1. **Biodiversity** is...

- ☐ the amount of rain
- ☐ the variety of life at all levels
- ☐ the number of people
- ☐ a single species

2. **Ecosystem services** are...

- ☐ the benefits people get from nature
- ☐ a kind of law
- ☐ a type of pollution
- ☐ jobs at a zoo

3. Island biogeography says the number of species on an island is a balance between...

- ☐ day and night
- ☐ summer and winter
- ☐ new species arriving and species going extinct
- ☐ rain and sunshine

4. **Ecological tolerance** is...

- ☐ the number of species
- ☐ the range of conditions a species can survive in
- ☐ the age of an ecosystem
- ☐ how patient an animal is

5. A natural **disruption** is...

- ☐ a human factory
- ☐ the normal daily cycle
- ☐ a natural event that disturbs an ecosystem
- ☐ a new species being born

6. Birds flying south for winter is a _____ adaptation.

7. The first tough species to colonise bare ground are the _____ species.

8. The variety of genes within a single species is called _____ diversity.

9. Nature controlling floods, water quality, or climate is a _____ service.

10. An island far from the mainland usually receives more new species than a closer one.

☐ True ☐ False

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1. **the variety of life at all levels**

Biodiversity is the variety of life – genes, species, and ecosystems.

2. **the benefits people get from nature**

Ecosystem services are the many free benefits – food, clean water, climate control – that nature provides.

3. **new species arriving and species going extinct**

Species number balances **immigration** (arrivals) against **extinction** (losses) on the island.

4. **the range of conditions a species can survive in**

Ecological tolerance is the range of conditions (like temperature) a species can survive.

5. **a natural event that disturbs an ecosystem**

A natural **disruption** – fire, storm, flood, disease – disturbs an ecosystem's balance.

6. **behavioural**

Migration is a **behavioural** adaptation – an action that helps survival.

7. **pioneer**

Pioneer species like lichens and mosses arrive first and begin building soil.

8. **genetic**

Genetic diversity is the variety of alleles within a species – the raw material for adapting.

9. **regulating**

Regulating services are ways nature controls conditions – flood control, pollination, climate.

10. **False**

False. Closer islands are easier to reach, so more species immigrate to them. Distant islands receive fewer colonists.