

19. Organisms and their environment

Starter Quiz · 课前小测

IGCSE Biology

Name: _____ Score: _____

1. The original source of energy for almost all ecosystems is the:

- ☐ Sun
- ☐ soil
- ☐ wind
- ☐ water

2. In a food chain, the arrows show the direction of:

- ☐ energy flow (from food to eater)
- ☐ energy flow (from eater to food)
- ☐ water movement
- ☐ oxygen flow

3. A trophic level is:

- ☐ a feeding stage in a food chain
- ☐ a type of producer
- ☐ a decomposer
- ☐ a habitat

4. Which process removes carbon dioxide from the air?

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

5. Why can't plants use nitrogen gas from the air directly?

- ☐ it is unreactive
- ☐ it is poisonous
- ☐ there is too little of it
- ☐ it is too heavy

6. Roughly what percentage of energy is passed to the next trophic level?

7. Which are limiting factors on a population? (Select all that apply.)

- ☐ food supply
- ☐ space
- ☐ predators
- ☐ sunlight on the Moon

Tick every correct option.

8. How is energy lost between trophic levels? (Select all that apply.)

- ☐ heat from respiration
- ☐ movement
- ☐ undigested waste
- ☐ photosynthesis

Tick every correct option.

9. Energy flows through an ecosystem and is lost, rather than being recycled.

- ☐ True
- ☐ False

10. Decomposers break down dead matter and recycle nutrients.

- ☐ True
- ☐ False

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1. **Sun**

Producers capture the Sun's energy.

2. **energy flow (from food to eater)**

Arrows point from the eaten to the eater.

3. **a feeding stage in a food chain**

Each feeding stage is a trophic level.

4. **photosynthesis**

Photosynthesis fixes CO₂ into glucose.

5. **it is unreactive**

N₂ is unreactive; it must be turned into nitrates.

6. **10**

About 10% is passed on; the rest is lost.

7. **food supply; space; predators**

Food, space and predators limit growth.

8. **heat from respiration; movement; undigested waste**

Photosynthesis captures energy; the others lose it.

9. **True**

Energy must be resupplied by the Sun; only nutrients cycle.

10. **True**

Bacteria and fungi recycle nutrients back to the soil.