**Biotic Factors and Competition**

Multiple Choice

1. Define the term biotic factor.
2. A non-living component of an organism's environment.
3. An organism that interacts with other organisms and its environment.
4. Something that has no measurable effect on an ecosystem.
5. Define the term predation.
6. An interaction between plant species where one plant grows faster than the other.
7. An interaction between animal species where one animal kills and eats the other.
8. An interaction between organisms which compete for the right to mate.
9. Define the term predation.
10. An interaction between plant species where one plant grows faster than the other.
11. An interaction between organisms which compete for the right to mate.
12. An interaction between animal species where one animal kills and eats the other.
13. Define the term predator.
14. An animal that only eats plants.
15. An animal that eats dead animals but doesn't kill them.
16. An animal that kills and eats other animals.
17. An animal that only eats bricks.
18. Define the term prey species.
19. An animal that kills and eats other animals.
20. An animal that is killed and eaten by a predator.
21. An animal with a religious background.
22. An animal that is killed and eaten by bacteria.
23. Two organisms fight over the same food source. Neither organism kills the other.

Identify the biotic interaction this describes.

1. Competition
2. Herbivory
3. Evolution
4. Predation
5. Define the term interspecific competition.
6. Competition between high schools.
7. Competition within an organism.
8. Competition within a population.
9. Competition between different species.
10. Define the term intraspecific competition.
11. Competition between different kingdoms.
12. Competition within a population.
13. Competition between different species.
14. Competition within a single organism.
15. Lions (*Panthera leo*) are predators that hunt and kill their own prey. Hyenas (Hyaena brunnea) are scavengers that eat dead meat. Sometimes lions and hyenas compete for the same meat.

**Identify which type of competition this is an example of.**

1. Interspecific
2. Intraspecific
3. Sponges and corals are both important reef-building organisms. They compete to grow the fastest and gather the most nutrients from the water.

**Identify which type of competition this is an example of.**

1. Interspecific
2. Intraspecific
3. The perentie (*Varanus giganteus*) is the largest lizard species in Australia. It has been known to clash with other species of monitor lizards over territory, food and water.

**Identify which type of competition this is an example of.**

1. Interspecific
2. Intraspecific
3. Male superb lyrebirds (*Menura novaehollandiae*) compete with each other for mating rights. The males with the best singing voices and most impressive tail feathers are most likely to attract a female.

**Identify which type of competition this is an example of.**

1. Interspecific
2. Intraspecific
3. Male pharaoh cuttlefish (*Sepia pharaonis*) compete with each other for mating rights. They flash bright colours and stripy patterns at each other, using their advanced colour-changing skin.

**Identify which type of competition this is an example of.**

1. Interspecific
2. Intraspecific
3. Male peacocks (*Pavo cristatus*) compete with each other for mating rights. The males with the largest and brightest tail feathers have the best chance of attracting a female.

**Identify which type of competition this is an example of.**

1. Interspecific
2. Intraspecific

Fill in the blanks

1. Use the following words to fill in the gaps.

**breathing, abiotic, drinking, biotic**

A \_\_\_\_\_\_\_\_\_\_\_\_\_\_ factor is a living thing that interacts with other parts of its ecosystem. You are an example of a biotic factor! You interact with air by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ it and with water by \_\_\_\_\_\_\_\_\_\_\_\_\_ it. Air and water are \_\_\_\_\_\_\_\_\_\_\_\_\_\_ factors.

1. Use the following words to fill in the gaps.

**prey, predator, plant, animal, energy**

Predation is an important interaction between \_\_\_\_\_\_\_\_\_\_\_\_\_\_ species. One species, called the \_\_\_\_\_\_\_\_\_\_\_\_\_, survives by hunting, killing and eating a \_\_\_\_\_\_\_\_\_\_\_\_\_ species. This is how sharks get \_\_\_\_\_\_\_\_\_\_\_\_\_ from seals and smaller fish.

Short answer

1. **Discuss what exactly predation is and how it involves biotic factors.**

**Provide an example in your answer.**

1. We have looked at two types of competition in ecosystems - interspecific and intraspecific.

**In your own words, distinguish between these types of competition. You may use relevant examples to support your answer.**

1. **Predation and competition are both examples of interactions between living things. In your own words, compare these interaction types. Be sure to include an example of each one.**