**Adaptations**

Multiple Choice

1. Name the correct term for the following definition:

"A feature possessed by an organism that helps it to survive."

1. Temperature
2. Nationality
3. Predator
4. Adaptation
5. Name the three types of adaptations.

Select ALL correct options

1. Beautiful
2. Behavioural
3. Physiological
4. Structural
5. Biological
6. Neurological
7. Present the correct statement.

Structural adaptations...

1. Are innate behaviours of an organism
2. Are only known in animal species
3. Are physical features of an organism
4. Are chemical functions of an organism
5. Present the correct statement.

Physiological adaptations...

1. are only active during two months of the year.
2. allow organisms to carry out special functions.
3. are physical characteristics of organisms.
4. are the ways in which an organism behaves.
5. Present the correct statement.

Behavioural adaptations...

1. are behaviours that help organisms survive.
2. are physical characteristics of organisms.
3. are habits that develop late in the life cycle.
4. do not help organisms to survive.
5. Identify which of these options is an example of a structural adaptation.
6. Geese fly across country when the seasons change.
7. Bears and hedgehogs hibernate during winter months.
8. Young humans do skateboard tricks to impress friends.
9. Brown anoles have a colourful flap of skin on their necks.
10. Identify which of these options is an example of a physiological adaptation.
11. A Stegosaurus has bony plates on its back filled with blood vessels.
12. A shark swims in a zigzag through the water as it hunts.
13. A snake produces venom to protect itself and capture prey.
14. A ferret has a flexible spine, which makes it very agile.
15. A ferret has a flexible spine, which makes it very agile.
16. Mating
17. Fishing
18. Hunting
19. Hibernation
20. Living things are adapted to their environment.

Cats (Felis catus) puff up their fur and bare their teeth when they are frightened.

Identify whether this is an example of a structural, physiological, or behavioural adaptation.

1. Structural
2. Behavioural
3. Physiological
4. Living things are adapted to their environment.

Some trees have seeds called samaras that glide away from the parent tree.

Identify whether this is an example of a structural, physiological, or behavioural adaptation.

1. Physiological
2. Behavioural
3. Structural
4. Living things are adapted to their environment.

Beavers (Castor fiber) have large teeth to help bite through wood.

Identify whether this is an example of a structural, physiological, or behavioural adaptation.

1. Physiological
2. Behavioural
3. Structural
4. Living things are adapted to their environment.

Some male birds use songs and 'dances' to attract mates.

Identify whether this is an example of a structural, physiological, or behavioural adaptation.

1. Behavioural
2. Physiological
3. Structural
4. Living things are adapted to their environment.

Flowers use signals to attract pollinators. Some, like the corpse flower (Amorphophallus titanum), smell like rotting flesh to attract flies.

Identify whether this is an example of a structural, physiological, or behavioural adaptation.

1. Structural
2. Physiological
3. Behavioural
4. The koala (Phascolarctos cinereus) controls its body temperature via internal chemical reactions.

Identify what kind of animal is it.

1. Ectothermic
2. Endothermic
3. The monitor lizard (Varanus varius) controls its body temperature via the external environment.

Identify what kind of animal is it.

1. Endothermic
2. Ectothermic
3. An ectothermic animal relies on its environment to warm up in the morning.

Apply the adaptation it would find the most useful.

1. Mammaries
2. Dark skin
3. Three ears
4. Long claws
5. An endothermic animal produces its own body heat through chemical reactions. To keep the reactions going, it needs to eat much more food than an ectothermic animal of the same weight.

Apply the adaptation it would find the most useful for an endotherm.

1. Efficient digestion
2. Retractable teeth
3. A jawless mouth
4. Detachable toes

Which is the correct answer?

1. **Circle the correct answer.**

Mammals and birds are **ectothermic/endothermic** because they can internally generate heat.

1. **Circle the correct answer.**

Reptiles, fish and amphibians are **endothermic/ectothermic** because their body temperature varies with the environment.

Short Answer

1. Adaptations are special features or characteristics that improve an organism's chance of survival in its environment.

**Summarise the three types of adaptations and give an example for each one.**

1. **Discuss why endothermic organisms need to eat more food compared to ectothermic organisms.**