

**Boffins 4**

**100 m.** Which is it? Below is a list of animals and another list to show how each is adapted to its environment. Match the animal to the environment. Put a letter beside each number.

- |  |               |
|--|---------------|
| 1) Heavy body with lots of fat. Hollow hair, (which looks white), to trap sunlight like a greenhouse.                            | A) EARTHWORM  |
| 2) Long claws for gripping trees. Bushy tail to help balance.  | B) CHEETAH    |
| 3) Streamlined shape. Fins to help balance and movement.   | C) POLAR BEAR |
| 4) Eyes and nose can close underwater. Long whiskers to feel its way in muddy water. Webbed feet.                                | D) ELEPHANT   |
| 5) Strong legs to hold heavy body. Large ears to get rid of heat. Long nose so that it can reach the ground without bending.     | E) FROG       |
| 6) Long legs. Thin body to reduce weight and heat loss. Flexible spine to allow large strides. Spotted coat for camouflage.      | F) CACTUS     |
| 7) Large eyes to see well in low light. Soft feathers to cut down on noise in flight. Good hearing for hunting in dark.          | G) SQUIRREL   |
| 8) Eyes and nose high on head for swimming. Powerful legs and webbed feet. Sticky tongue for catching insects. Moist skin.       | H) SHARK      |
| 9) Pointed head for moving through soil. Soil-coloured camouflage. Stiff hairs on underside for moving through soil. Moist skin. | I) OTTER      |
| 10) Fleshy stem which stores water. Long root system. Thin leaves, like thorns, to stop water loss.                              | J) OWL        |
- (One point for each correct answer).
- Points: .....

**Javelin** Write DESERT (D), POLAR (P), RAINFOREST (RF), FRESH WATER (FW) or OCEAN (O) beside each animal below, to show where it is adapted to live.

- |                  |                      |                                      |
|------------------|----------------------|--------------------------------------|
| 1) Penguin       | 6) Great White Shark | (One point for each correct answer). |
| 2) Camel         | 7) Chimpanzee        |                                      |
| 3) Howler monkey | 8) Crocodile         | Points: .....                        |
| 4) Killer whale  | 9) Arctic Fox        |                                      |
| 5) Hippopotamus  | 10) Crocodile        |                                      |

**200 m.** Put these food chains into the right order. Remember that you must always begin with a producer.

- |  |                                     |
|--|-------------------------------------|
| 1) thrush, lettuce, snail, hawk              | (One point for each correct answer) |
| 2) green fly, rose, sparrow hawk, great tit  |                                     |
| 3) algae, otter, pond snail, fish            |                                     |
| 4) fox, rabbit, grass                        |                                     |
| 5) antelope, lion, grass                     |                                     |
| 6) fish, seal, plankton, polar bear          |                                     |
| 7) bat, plant nectar, moth                   |                                     |
| 8) crustacean, otter, fish, worm, vegetation |                                     |
| 9) worms, dead plants, badger                |                                     |
| 10) whelk, crab, seaweed, seal               |                                     |
- Points: .....

**Discus** Write one predator from list B against each prey animal in list A.

**List A (prey)**

Fly  
Mouse  
Eel  
Slug  
Roe Deer  
Hare  
Starfish  
Zebra  
Chicken  
Tadpole

**Your predator guess**

**List B (Predators)**

Lion  
Diving beetle  
Frog  
Person  
Owl  
Otter  
Blackbird  
Eagle  
Fox  
Gull

(One point for each correct answer) Points: .....

**Weight Lifting** Choose ONE of these questions and answer it carefully. Each one is worth a different number of points.

- 1) Write the name of the place where any animal or plant can live. (2 points)
- 2) Give one adaptation that a seal might have to help it live in the Arctic Ocean. (4 points)
- 3) Animals that eat only plant foods are called ..... (6 points)
- 4) The animal at the top of a food chain is called a ..... (8 points)
- 5) Write down three adaptations that a frog has to help it survive in its environment and catch its prey. (10 points)

Points: .....

**Steeple Chase** Fill in the words into the spaces to make these paragraphs make sense. Take care!

**Foodchains**

All food-chains must begin with g.... p..... They make energy by using s....., and a green chemical called c..... to make starch. They turn w..., minerals and c.... d..... from the atmosphere into carbohydrates.

The first group of animals in the chain are the p..... c..... They eat the plant material and are called h.....

The next group of animals prey on the primary consumers. They are called s..... c..... Some of them eat only other animals. They are called c..... Others eat plants and animals. They are called o..... At the top of the food-chain is a super-predator. It has no other predators.

It is important that each level in the food-chain stays healthy, so that the chain doesn't break down. The super-predator is just as important as the producer in keeping the whole chain working. Super-predators must be protected if the other animals and plants are to stay fit and healthy.

(One point per correct answer. There are ten answers, though some have more than one word)

Points: .....

**Total Points:.....**