## **KS2 Science Quiz Adaptation**



Adaptation is the adjustment of animals and plants given their environment. Have you ever wondered why a giraffe has such a long neck, or why sharks have so many rows of teeth (and always have new teeth ready to replace any that fall out)? Why a cactus is spiky and a sloth rarely moves? The amazing characteristics shown by different animal and plant species are explained by adaptation.



See how much you know about how plants and animals are suited to their habitats by trying this adaptation quiz.

1. What does adaptation mean?
[] Animals and plants like their habitats
[] Animals and plants decide to change their habitats
[] Animal and plant species develop characteristics over time which help them survive their habitats
[] Animals and plants learn to thrive in their habitats
2. What adaptation do sharks and penguins share?
[] They both have fins for swimming
[] They both have streamlined bodies for swimming
[] They both have feathers for warmth
[] They both have gills for breathing under water
3. Zebras live in large herds in a grassland habitat. How does a striped coat help them survive this habitat?
[] The white stripes help a zebra's fur trap the sun's warmth
[] The stripes make the zebras easy to spot for predators
[] The stripes help the zebras to cool down at night
[] The stripes are useful as camouflage

4. Many mammals living in the Arctic have fur
[] which becomes white in the late spring
[] which grows thicker in the summer months
[] which completely falls out in the summer
[] which changes colour in the winter
5. Woodlands can be very dark. What do woodland plants often have so they can survive with less light?
[] Large flat leaves
[] Thin spiky leaves
[ ] Pale green leaves
[ ] No leaves
6. Which of these features protects seaweed from being damaged by powerful waves?
[] Seaweed's green colour
[ ] Seaweed's toughness and flexibility
[] Seaweed's slimy texture
[ ] Seaweed's nutritional value
7. Which adaptations in camels do NOT protect them from their sandy habitat?
[] A double row of long eyelashes
[ ] Bushy eyebrows
[] A long neck
[ ] Nostrils which can close
8. Cacti have adapted to live in some of the driest habitats on earth. Which of the following characteristics helps the cactus survive with little rainfall?
[ ] A shallow, widespread root system
[ ] Green bark
[ ] Colourful flowers
[] Large leaves

9. Fawns (baby deer) have spotted coats. This adaptation is suited to which habitat?
[] The seashore
[ ] Mountains
[] Desert
[] Woodland
10. Many woodland birds have adapted short wings. What advantage does this give them?
[] Short wings help birds fly quietly
[] Short wings help birds fly between trees
[] Short wings help birds find more food
[] Short wings keep birds cooler in the summer

## **Answers**

capture it



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1. What does adaptation mean?
[] Animals and plants like their habitats
[] Animals and plants decide to change their habitats
[x] Animal and plant species develop characteristics over time which help them survive their habitate
[] Animals and plants learn to thrive in their habitats
Individual animals and plants which have characteristics allowing them to cope with their habitats are more likely to survive and breed than other individuals. Over time, the species changes. This process is called natural selection
2. What adaptation do sharks and penguins share?
[ ] They both have fins for swimming
[x] They both have streamlined bodies for swimming
[ ] They both have feathers for warmth
[ ] They both have gills for breathing under water
3. Zebras live in large herds in a grassland habitat. How does a striped coat help them survive this habitat?
[] The white stripes help a zebra's fur trap the sun's warmth
[] The stripes make the zebras easy to spot for predators
[] The stripes help the zebras to cool down at night
[x] The stripes are useful as camouflage
Zebras' coats are camouflaged to blend in with the rest of the herd. Scientists think that the zebra's stripes confuse predators, who have difficulty focussing on an individual zebra long enough to

4. Many mammals living in the Arctic have fur
[] which becomes white in the late spring
[] which grows thicker in the summer months
[] which completely falls out in the summer
[x] which changes colour in the winter
The fur of many Arctic mammals becomes white in the winter, helping them to blend in with the snowy landscape
5. Woodlands can be very dark. What do woodland plants often have so they can survive with less light?
[x] Large flat leaves
[] Thin spiky leaves
[ ] Pale green leaves
[] No leaves
Having large flat leaves helps plants to absorb as much sunlight as possible
6. Which of these features protects seaweed from being damaged by powerful waves?
[] Seaweed's green colour
[x] Seaweed's toughness and flexibility
[] Seaweed's slimy texture
[] Seaweed's nutritional value
Seaweed has adapted to survive the difficult conditions found near rocky seashores
7. Which adaptations in camels do NOT protect them from their sandy habitat?
[] A double row of long eyelashes
[] Bushy eyebrows
[x] A long neck
[] Nostrils which can close

8. Cacti have adapted to live in some of the driest habitats on earth. Which of the following characteristics helps the cactus survive with little rainfall?
[x] A shallow, widespread root system
[] Green bark
[] Colourful flowers
[] Large leaves
Cacti have shallow, widespread roots in order to take up as much rainfall as possible. In addition, some cacti can even grow roots very quickly when it is raining. These roots then die off when the ground dries out again
9. Fawns (baby deer) have spotted coats. This adaptation is suited to which habitat?
[ ] The seashore
[] Mountains
[] Desert
[x] Woodland
Their spotted coats help fawns to blend in with the dappled shade found in woodlands - fawns have also adapted to have no scent, making it much harder for predators to find them!
10. Many woodland birds have adapted short wings. What advantage does this give them?
[] Short wings help birds fly quietly
[x] Short wings help birds fly between trees
[] Short wings help birds find more food
[] Short wings keep birds cooler in the summer