

Answers - Aquatic:

1. It is very big
2. Salt
3. Flock
4. They are filled with rubbish
5. It doesn't get what it needs - oxygen in this case

R: Where a river begins

R: They eat dead animals that sink to the bottom

S: They are fast-moving and constantly refreshed

S: Chemicals and other rubbish leak into the rivers which then carry it to the oceans

I: Nearly all of the UK wetland has gone over the last 100 years and 10% of the wildlife is endangered

Answers - Deserts And Tundra:

1. Gobi Desert
2. -4°C
3. 20%
4. 80-140 centimeters
5. The tundra

S: They both get very little precipitation

S: Deserts are generally warm or have warmer periods. Tundra are always cold. Tundra are measured by their temperature, deserts by their rainfall.

V: Roam freely

V: Drift away

S: They are cold-blooded and need the heat of the sun to get them moving

Answers - Forest:

1. Entirely
2. Lots of species of plants and animals live there
3. Water falling from the sky as either rain, snow or sleet
4. It has spoken about a lot
5. Striving

S: Forests are more densely covered in trees, whereas woodland has an even mix of trees and open land

R: One of bears, wild boars, many species of birds or Northern Chinese Leopards

S: Temperate forests have cold winters and warmer summers. Tropical forests are warm and humid all year.

R: Boreal

R: 13%

Answers - Grasslands:

1. False
2. False
3. True
4. True
5. True

V: Divided

I: The top five fastest mammals in the world all live in grasslands

V: Scarce

S: They travel to find food and water

S: Steppes are covered in shorter grasses whereas prairies are covered in longer grasses.

Answers - Urban:

1. Non-native plants
2. 4%
3. Concrete
4. Plant three trees
5. Lopburi, Thailand

V: Officially recognised

V: Adapting

S: Urban biomes are constantly changing because of human development

I: The monkeys overran the city during the COVID lockdowns

V: Harassing

Answers - Stage 6 - Adaptations of the fox:

1. Diurnal means active in daytime
2. Twilight animals are called crepuscular
3. Nocturnal means active at night
4. Adapted means it has changed over time to better suit its environment
5. Agile means it can move and change direction quickly and easily. They are nimble. Foxes can change direction quickly helping them evade predators and hunt prey.

P: If they died out the smaller creatures would take over and may eat all the vegetation. Then they too might die out. Or, without the fox, other predators may find there is more food available to them.

R: The European red fox

R: It means they have to hunt or find food more often and all through the year.

S: The fox's fur helps it camouflage in its various habitats, particularly for the arctic and fennec foxes. It also acts as a layer of insulation in the colder parts of the day or season.

P: Foxes are now more common in urban areas because humans have removed part of the foxes natural habitats, meaning they have to hunt elsewhere for food. With so much food waste available in human settlements, the foxes are drawn to these areas for an easy meal from waste bins.

Answers - Stage 6 - Darwin's Origins and Adaptions:

1. The Church had a very different idea as to how people came to be on Earth.
2. People did not want to be compared to apes. They also disliked the idea that all men came from the same origins.
3. They dismiss the ideas because they are "theories" and are difficult to prove. They are also new "modern" ideas and contradict long-established stories. They don't like to go against the Church.
4. They women say they could not be descended from apes, yet eat banana cake – bananas are a part of monkey's diets. The author is hinting at how close we are to apes. It makes the women seem ridiculous and small-minded.
5. The ideas did become accepted over time. Many scientists were interested in these ideas as the introduction says. The specimens Darwin collected, like the finches, helped prove the theory of adaption. Science and our knowledge of how our and other species worked changed rapidly at this time in history. By the 1950s most of Darwin's theories had been proved beyond doubt to be correct.

V: To condemn something means to strongly disapprove of something. In religion it is linked to being placed into hell after death to be punished for your sins.

R: Survival of the fittest means all species adapt over a long period of time to fit their environments. Species who were good at adapting would survive, whilst others who did not adapt as well would not.

V: Evolve means that something changes and/ or adapts over time to work better.

R: He was 62.

E: Darwin used the example of finches' beaks from the Galapagos island to show how they had adapted to fit their diets. He had specimens, notes and drawings.

E: Putting "claims" in bold stresses it is not proved or suggests it is not true.

V: "Branched off" relates to the development of different groups which split off from an original group. This is similar to the branches on a tree. Darwin uses the model of 'The Tree of Life' to explain these relationships.

Answers - Stage 6 - Desert Research:

1. Firstly, secondly, finally
2. Orange, yellow and red
3. No, the fruit tastes very bitter.
4. The toes have fringed scales to help them balance on the sand and prevent the lizard sinking into the dunes.

V: Crepuscular means comes out at twilight

V: A reticular pattern in grey and tan

E: Relentless means it does not stop, you cannot get away from it.

I: She is a lizard specialist (that is what the top line says). She describes the lizard using words such as “wonderful” and “stunning” and says that lizard is her favourite.

E: Mother Nature “designed” the lizard, giving it adaptations to survive in its environment. The researcher clearly thinks the adaptations are very clever as she uses this word twice to describe them.

I: The skin colouration helps the lizard to camouflage in its habitat. This means it can find shelter from predators and also sneak up on its own food source without being seen. It also helps hide the lizard when it hibernates in the sand.

Answers - Stage 6 - Polar Research Lab:

1. Roots store nutrients, they have a short flowering season, they grow along the ground, they are dormant during the winter.
2. Polar bears have thick insulating fur, store fat reserves, have furry paws to help grip the ice and white fur to help camouflage against the landscape.
3. It is hard to sleep because there is 24 hours of sunlight. It is never dark in summer.
4. He has seen seals, walrus and polar bears
5. Up to 600kg

V: To sleep or hibernate during winter

E: He means it is clever how their fur colour changes to match the landscape in different seasons, white in winter, brown in summer. This means the animals can blend into their habitat helping them avoid predators and find their own food because they are difficult to see.

I: It is not very biodiverse because it is a difficult place to survive in. It's very cold and not many producers can grow there, which affects the whole food chain. As a result only specially adapted species, like the mosses and polar bears, can live there.

S: Because the sun does not set at all in the summer, it will still be shining at midnight.

P: If the ice melts, all the plant and animals will struggle to survive. The plants will get flooded over and the animals will lose their food, affecting all the food chain.

Answers - Stage 6 - Weather Climate and Biomes:

1. Weather are the daily conditions, climate is the average conditions over a year.
2. Monsoon
3. Ecosystem
4. Adaption
5. A biome is an ecosystem (or biological community) that has grown and adapted to live in a particular climate.

R: 30°C

R: Marine, polar, tundra, forest, grassland, desert.

R: Climate graph

R: Temperature and rainfall shown for each month.

I: The species that adapt the best to climate conditions will survive in a given area.

I: If climate change is not slowed, much of the life on the polar regions will be threatened. Plants, the base producer of the food chains, will not survive and so food chains will collapse.