

Answers - Stage 6 - Conservation In The Rainforest:

1. Human activity
2. Deforestation is where forest is cut down and cleared and the trees burnt to release nutrients back into the soil.
3. Macaws are endangered because human activity is destroying their habitat and food source.
4. It is difficult to breed macaws in captivity because few eggs hatch (1 in 10), young birds do not survive and it is difficult to replicate their natural diet.
5. Conservation projects help by raising and protecting the birds in a selected, protected area and encouraging local farmers to help keep areas of farmland as natural habitat, protected from cattle and trappers, so birds can be re-released back into the wild.

V: Conservation means to protect and preserve something.

I: The change in land use has destroyed animals habitats and disrupted the food webs, making it difficult for a variety of species to survive.

S: The main threat is human activity: either through deforestation for monoculture agriculture; the development of roads and hydro-electric schemes; and trapping and hunting of species.

E: If something is a “catastrophic loss” it implies it is a huge loss, an end of something. The author clearly feels what is happening to the rainforest is causing irreparable damage with huge effects and is unhappy about it.

P: More areas could be protected – the government could outlaw the deforestation process; farmers could be given subsidies and grants to keep areas of natural habitat and grow a variety of crops; trapping and hunting could be made illegal; human activity could be moved elsewhere; more conservation projects could be started; people could be better educated about the effects of human activity; more animals and plants could be protected by law.

Answers - Stage 6 - Conservation News:

1. See table:

| Season | State of ice shelf | Polar bear activities |
|--------|--------------------------------|--|
| Winter | Solid | Mothers stay in a den, cubs are born in December. Male polar bears look for food alone. |
| Spring | Melting | Mating season on a 3 yr cycle. Cubs come out of den March/ April. Mother looks for food to feed herself and cubs. |
| Summer | Disappears | Searches for food, may wander or swim for many miles. |
| Autumn | Re-freezing and growing | Mothers build a den. Builds up a fat reserve ready for the time when food is scarce. |

- Climate change is raising the earth's temperature, warming the seas and melting the ice shelf on which the polar bear lives.
- It has made their mating season shorter and also shortened the time they have to build up winter reserves. Sometimes polar bears get stuck on sections of ice and starve or die in collisions with shipping.
- Need to dramatically slow down climate change and put in place better conservation and protection measures for arctic animals, especially ones that can only survive in this environment. Stop development and exploitation in Polar Regions.

R: USA, Canada, Russia, Norway, Denmark.

R: On the ice shelf.

I: Fat reserves keep the bears insulated whilst swimming and the bears use these to keep their bodies going when food is scarce.

R: 3 years.

V: Annihilation means the wiping out of polar bears. The reporter states human activity is responsible for this.

E: The first photo shows a mother and her cubs and they look cuddly and non-threatening, the second shows a lost polar bear and her cub facing starvation and death, which makes the reader feel sad. These and their captions are emotive. They make the reader feel sorry for the bears and want to help save them

Answers - Stage 6 - Hunting The Prey:

1. They are moving cautiously, keeping watch for danger.
2. Iridescent describes both the sheen on the butterflies' wings that changes colour in the light and the colour and movement of a waterfall. Both are big, shimmering blue sights. Helps the reader picture the colour and movement.
3. It moves with poise and elegance. It is graceful and its feathers are like a ballerina's tutu that have fluffed out in flight. It is delicate and beautiful in how it moves.
4. Gentle hum effect created by quiet forest sounds – flapping of butterflies, “Monkeys chatter incessantly somewhere overhead, as cicadas buzz and click around us”. They are underneath the canopy, so the sounds are a bit muted and do not sound threatening. The noise is constant.
5. Hoping to see the macaws – they are the “prey” she is looking for to capture (photograph)

AND

Because Macaws are hunted and this has caused them to be vulnerable, so she has to search to find them in the conservation project. At the start, you are not sure what she is hunting and why and it helps build suspense.

V: The noise is constant (incessant) and sounds like they are talking to each other (chatter). Just chat, no threatening howls or loud calls.

R: “The treasured hyacinth macaw swoops elegantly” and the comparison with a ballerina alighting gracefully as it lands.

I: The rainforest in Brazil has been cut down. The birds are now rare to find as their habitat has been destroyed and they have been hunted. There are now not many nesting in the wild, only in conservation projects.

P: Photos may be used in scientific research; for the project to save the Macaws to help raise awareness or sponsorship; or be seen by local farmers who they want to persuade to help save the forest habitat. Could be seen on a website like WWF or in a persuasive leaflet.

S: The explorer knows the forest can be a dangerous place, so moves with caution and care “gingerly” “warily” and she finds the heat hard to bear “oppressive” like “an oven”. However, she is also amazed at the wildlife and finds lots of things to enjoy, the light from the sun's rays “somewhat beautiful”, the butterflies, the little frogs in the plants and finally the “treasured” macaws. She is full of “curiosity” about what she sees and eager to record her experience. Her final paragraph sums up her love of the forest in its natural state and her wish for it to be preserved and protected.

Answers - Stage 6 - National Parks:

1. Ecological significance means you can study natural processes, systems and behaviour and record how it has changed over many years and the effect of outside forces. E.g. geology of the Grand Canyon which has many 100s of years of evolution that can be studied. The case study of the wolves of Yellowstone is another example, demonstrating the effect of human activity on an entire ecosystem.
2. Crisis implies things are very bad. The whole of the ecosystem (landscape, plants, insects, animals, birds, rivers) is in danger of collapse.
3. The subheadings help the reader find the information they need in the text. The rhetorical questions help the reader begin thinking about the information that is to follow.
4. Before: "Overgrazed grasslands", "desolate landscape", "few species could survive", sound very negative. After: "Recovery of the grasslands", "meadows began to flourish", "food webs were restored", a river was "reinvigorated" and the area is now a "flourishing ecosystem...teeming with biodiversity". These latter phrases are more positive and show the author approves of the changes the wolves have made.
5. Without man, the park was flourishing. When man intervened (and hunted the wolves) the park began to change for the worse, losing its biodiversity and becoming a barren landscape. When the natural balance was restored and man left the park alone, nature took over and the Park was restored. If man had remained "absent" as Attenborough suggests, the park may never have been put in crisis as the wolves would have maintained the natural order.

I: To protect and preserve areas of natural beauty and ecological significance, so we can monitor the natural order of things and study our planet's history.

I: The way the park's ecosystems work is fragile and can be altered in a big way by even small changes. They need to be left alone, as in the case of Yellowstone, if we wish these areas to remain protected and preserved in their natural state.

R: Wolves were hunted for their fur, for sport and because they were seen as a threat.

V: Predators, such as wolves, hunt and eat prey, such as rabbits, mice and birds. Wolves, hawks, eagles and mountain lions are apex predators because they are the top predator in their food chains and food webs (nothing else eats them).

R: Flourishing grassland means lots of insects for birds to eat and trees can grow, which the birds can use for nesting.

Answers - Stage 6 - Shark Fin Soup:

1. A huge variety of sea-life.
2. They are swirling round in a circular motion, moving with speed as if spinning around a central point or in a funnel shape.
3. It is not orderly! It all happens quickly and almost chaotically. The diver is not sure which way to look.
4. Because of their shape, they can glide very quickly and quietly through the water and sneak up on their prey.
5. People complain about and feel threatened by sharks, despite not really understanding them or their role in marine food chains.

E: There was a sense of anticipation before the dive, like before a show and they have just watched a fascinating “show” of the sharks feeding. They had to remain quiet during the performance (due to their dive gear and to keep safe) and get to discuss it afterwards like theatre goers or critics.

I: They did enjoy it. The language use to describe the underwater world is all very positive to describe the “wonders of the reef” and this “magnificent ecosystem”. They admire the sharks “streamlined stealth” and “masterclass” in precision n teamwork. He says he was “glad to be here” to witness it.

R: Endangered by people hunting them for their meat and fins and because they are seen as a threat and it is a trophy wanted by some sea-fishermen.

I: Sharks are endangered because they are killed for their fins which are turned into a soup. It also works because the “frenzy of feeding” the diver describes, creates a “soup” of fish parts in the area round where the sharks are swimming.

P: Says he promises he, “Will do what I can to help protect and conserve their many sub-species for all marine enthusiasts to enjoy.” At the start it says he has spent a career working with marine life, so he might talk about what he has seen to other scientists or documentary makers or help persuade others to help protect sharks. He might work with conservation charities or try to get laws passed to help sharks or set up websites to persuade people sharks are not a threat, but an important part of the underwater world.