Biology – an introduction
Answer key and audioscript

A - Vocabulary
1. B 2. D 3. A 4. E 5. C 6. F 7. G 8. P 9. I 10. L 11. H
12. J 13. N 14. M 15. O 16. K 17. Q

B - Comprehension
1. T 2. F 3. F 4. F 5. T 6. F

C - Listening
Teacher: OK, listen up class. Today we are going to learn what germs actually are. So let's begin by clearing up one mistaken belief many people have. Germs are not all bad. No, indeed, germs are basically microbes and they can live in many places, such as in human, animals, or plants. While you might think that sounds disgusting, let me explain something: some germs actually help the human body. For instance, they help us digest our food. Of course there are some bad ones which can make us ill too, giving us sore throats, for example.
Anyway, to be more specific, there are actually four basic types of germs – bacteria, viruses, protozoa and fungi. Starting with bacteria, they are single-celled animals and are found everywhere. Be it in the air, the water, the earth, or even in us, this is where they find their food. As you know, we can't see them without a microscope and that's because they are so small that there can be literally billions in, for example, a few drops of water.
You may well ask what they look like and the answer is that it depends. They can be round, like balls, but others are completely different: perhaps long and thin. Alternatively, some have hairs over their bodies which help with their movement. Now, moving on to viruses …

1. mistakenly 2. microbes 3. some 4. germ 5. different shapes

D - Vocabulary
1. threatened
2. mammal
3. crops
4. cell
5. diseases
6. composition
7. adapt
8. species
9. environment
10. building blocks

E - Comprehension
1. zoology, botany, molecular biology, genetics
2. molecular biology
3. By protecting them from becoming extinct.
4. By studying the effect of new types of food crops on the environment.
5. Astrobiology is the science of looking at the possibilities of life on other planets.

F - Listening

Presenter: Good afternoon. Today we're considering how worried we really need to be about climate change. In particular, how worried we should be about plant life and the future of animals on this earth. Sarah's report gives us some reasons to be optimistic and some reasons to really worry.

Sarah: Hello there. Yes, it's true that climatic change does affect animal and plant life but not always to the point of disaster. Many animals and plants are actually very adaptable – you know, able to change according to conditions. Of course, historically ice ages and droughts – a severe lack of water – have completely destroyed certain types of animal and plant life, but many managed to survive extreme, long-term climate change by adapting.

Now, many biologists and ecologists believe the Earth today may again be in the middle of climate change because over the last century many studies have shown rising global temperatures, on average about half a degree centigrade, and although this may seem very little, it is actually happening much faster than before and it can affect life enormously.

Climate change leads some plants and animals to find new homes, while others that are not so lucky become extinct. Mountains are a good example of this. A hotter climate means trees and plants can grow higher up mountains. In the Alps, it's been observed that every decade sees plants moving up about four metres. And how does this influence animal life? Well, unfortunately, some animals which have become highly specialised in order to live on mountain tops, have no escape if conditions change. They simply cannot survive in warm weather.

So let's go over to Dr Bernard in Switzerland who will fill us in with more details …

1. T 2. F 3. F 4. T 5. T

H - Writing

Model answer

Dear Mrs Jones,

I am writing this letter to you about the areas of biology that I am interested in specialising in. These are molecular biology and genetics. I have chosen these areas because I have always been interested in the cell, this tiny living organism, and the way it works. I would like to know everything about how its different systems interact. Also, DNA is another great mystery to me. I would like to learn how all this genetic information is stored and passed on from one generation to the next.

I realise that there are no hard lines between these two areas of study, that is, molecular biology and genetics, so I would like to know how my choice now will affect my career prospects later. What I hope to do when I graduate is work with doctors and chemists and do research in order to find cures for different diseases.

I would very much appreciate it if you could meet me during your office hours in order to discuss my options. Would Monday the 17th October at 10am be suitable for you?

Thank you very much for your time. I am looking forward to hearing from you.

Yours sincerely,

Carly Brown