The Circulatory System

The circulatory system is made up of many different organs. These organs are responsible for circulating blood and oxygen around the body. The heart transports blood around the body through vessels called arteries and veins.

The heart is a very important muscle and one that should not be overlooked. The heart is the size of a fist and is in the rib cage, in between the lungs. In total, the heart has four main chambers. These chambers are known as the left and right atrium and the left and right ventricle. The heart's main function is to pump blood around the body. It supplies oxygenated blood to the body and pumps the de-oxygenated blood to the lungs.

There are three types of blood vessels within the human body. These blood vessels are known as the arteries, veins and capillaries. Blood vessels carry blood to every part of the human body. Arteries are thick tubes which separate and become smaller. Arteries are required to carry blood away from the heart. The largest artery in the human body is called the aorta.

When arteries separate and become smaller, they turn into capillaries. Capillaries deliver nutrients and oxygen to cells in the body. They are the smallest vessels. These are millions of capillaries in the human body and they help to remove waste materials.

Veins are thin tubes which are significantly thinner than arteries. The veins are responsible for carrying blood to the heart when the oxygen has been used by the human body. Capillaries join to form veins.

The circulatory system is the most important transport system in our body. Without the functioning and connection between arteries, capillaries and veins, there would be no way our bodies could function the way they do. The heart is the most important muscle as it is the one that pumps the blood around the body for us to survive.

Summarise It! Write a summary of the text. **Paraphrase It!** In your own words, explain the three types of blood vessels within the human body.

Quote It! Use a quote from the text to answer this question:

What role does the heart play within the human body?



Spiders

Spiders belong to the arachnid family because they have an exoskeleton. Spiders are invertebrates and are very fascinating creatures to study.

Spiders live all over the world. They do not live in cold regions. They are most likely to be found in dark and dry places including grasslands so they don't get washed away in the winter. Some spiders are even known to live in rubbish bins. Trap door spiders live in burrows and many other spiders can be found living between the bricks in people's homes or even between wood piles in backyards.

Spiders come in many different and unique shapes and sizes. The largest spider is the tarantula. These spiders can grow up to 12cm long. The smallest is the money spider, which only grows to 1cm in size.

All spiders have two body parts consisting of a head and abdomen and eight legs. Spiders are known to have a tough, hard outer covering called an exoskeleton. Their bodies are often hairy and they can cleverly camouflage their body from predators.

Summarise It! Write a summary of the text. **Paraphrase It!** In your own words, explain which spider is the largest.

Quote It! Use a quote from the text to answer this question:

How do spiders protect themselves?



Cyclones

Cyclones are fierce, tropical storms. Meteorologists explain that cyclones are caused by low-pressure weather systems with ferocious winds spiralling inwards and blowing at more than 150 kilometres per hour. Cyclones are known as 'typhoons' when they occur in the Far East and 'hurricanes' in the Atlantic Ocean.

Cyclones generally occur during the hotter summer months and they begin as thunderstorms over warm seas. Wind and clouds start to spin in a large circle, becoming faster and faster. Their speed can reach up to 300 kilometres per hour. Cyclones usually begin around the equator where the oceans are warm. They occur in many parts of the world.

Cyclones look like a large funnel of spinning wind. They have a calm part in the centre called the 'eye' which is between 10-20 kilometres in diameter. The eye of the cyclone brings a temporary stillness; however, the severe winds return when it passes.

Cyclones spin in a large circle and they fade away when they go further inland. They need the sea or water to maintain energy.

Cyclones can cause tidal waves which cause floods. They can uproot trees and strip off their leaves. They can knock down buildings and destroy houses. They can also destroy many people's lives.

It is important that all people take notice of cyclone warnings.

Summarise It! Write a summary of the text. **Paraphrase It!** In your own words, explain how a cyclone can make an impact on the environment.

Quote It! Use a quote from the text to answer this question:

How do cyclones occur?



The Spotty Octopus

Many years ago, in the deep blue sea, there lived a spotty octopus. He was the most fantastic octopus in the entire ocean. He had sparkly, shiny spots and the other sea creatures were amazed at his beauty. They called him Spotty Octopus. The other sea creatures often asked if they could play together but he would just swim swiftly past them.

Early one morning, Little Red Fish followed Spotty Octopus. The Little Red Fish asked very politely for one of Spotty Octopus' sparkly, shiny spots, but Spotty Octopus replied, 'Of course not!' Little Red Fish could not believe how rude Spotty Octopus was! He told all the creatures in the ocean.

At sunset, Spotty Octopus decided to visit Wise Sting Ray. He swam inside the cave and Wise Sting Ray said, 'I have been expecting you. I've heard about your behaviour. You must share your sparkly, shiny spots with all the other sea creatures. You won't be the prettiest octopus in the world, but you will understand the meaning of true happiness.'

Spotty Octopus felt very confused. 'How can I give away my beautiful sparkly, shiny spots?' he wondered. Suddenly, he felt a gentle brush on his tentacle. It was Little Red Fish. Once again, he asked politely for a spot. Spotty Octopus pulled off the smallest spot he could find and gave it to him. Little Red Fish danced around happily. Suddenly, all the other sea creatures came over to Spotty Octopus and he began giving away the rest of his most prized possessions. The other sea creatures were so happy and so was Spotty Octopus. They said, 'Come and play with us!' and Spotty Octopus glided happily and speedily off to join them.

Summarise It! Write a summary of the text.

Paraphrase It!

In your own words, explain why Spotty Octopus decided to give the sea creatures his sparkly, shiny spots. **Quote It!**

Use a quote from the text to answer this question:

How did Spotty Octopus feel after giving away his spots?



The Elephant Who Danced

Once upon a time, there lived an elephant whose name was Bennett. He was a very kind elephant who wouldn't hurt a fly. He was big and grey and he loved to dance. Every time he did, he shook the building because he was so heavy.

Bennett had five friends called Bear, Cat, Dog, Cow and Bee. One day, when he was at school, they all started to tease him.

'Na, na, na, na, na! You can't dance properly,' they said. They were so mean to him all day. They tripped him over, put worms in his lunch box and they even pretended to be nice to him by giving him a flower. However, when he smelled it, a wasp flew out and stung him on his trunk.

By the end of the day, Bennett couldn't take it anymore. He started to cry and then went and told the teacher. The teacher was very angry with Bennett's friends and came down on them like a tonne of bricks. 'We don't like bullies in this school!' she said.

Bennett's friends began to realise that the way they had been behaving was unacceptable. They started to feel sorry for him because they had been so mean to him. 'We're sorry!' they said. 'Please forgive us! We know that how we were treating you was wrong. We didn't think that you would take things so seriously. We were only joking around. Please forgive us!'.

Bennett had to think very long and hard about his decision in making Bear, Cat, Dog, Cow and Bee his friends again. He didn't want to lose their friendship because deep down he knew that they would always be there in times of trouble. 'Okay,' said Bennett, 'but you must realise that sometimes jokes can go a bit too far and feelings can get in the way.' From then on, they never made fun of each other again.

Summarise It! Write a summary of the text. Paraphrase It!

In your own words, explain why Bennett couldn't handle the way his friends were treating him. **Quote It!** Use a quote from the text to answer this question:

Why did Bennett forgive Bear, Cat, Dog, Cow and Bee?

