

### Pupil A – Piece D: an explanation

Context: as part of a science unit of work, the pupils learned about the circulatory system with a focus on the movement of blood around the body. Using the scientific language they had learned, pupils were asked to write an explanation for an academic journal for an older audience. The pupil's original draft was handwritten and their handwriting was assessed as joined and legible. The pupil then chose to type their explanation.

The circulatory system has a huge role to play in the human body. It is a process in which blood carries oxygen and travels around the entire body. The circulatory system is made up of the following components: the heart, blood, the lungs, veins and arteries.

First of all, the process starts with the de-oxygenated blood which is in the right chamber of the heart. The blood is oxygen-deprived, so the heart pumps the blood to the lungs. Within seconds, the blood collects oxygen –storing it in the haemoglobin of the red blood cell, and then it goes to the left chamber from which it is sent around the body to deliver oxygen. When all the oxygen from the blood has been used up, the de-oxygenated blood travels back to the heart and the process starts again.

The circulatory system is crucial to keep humans alive, because it supplies to four of the major organs: the brain, the kidneys, the liver and the intestines. Without the brain, you will not be able to think; without the kidneys, your body would not be able to clean blood; without the liver you would not be able to urinate and without the intestines you would not be able to break your food down.