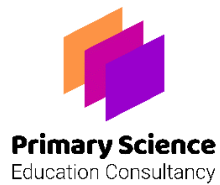





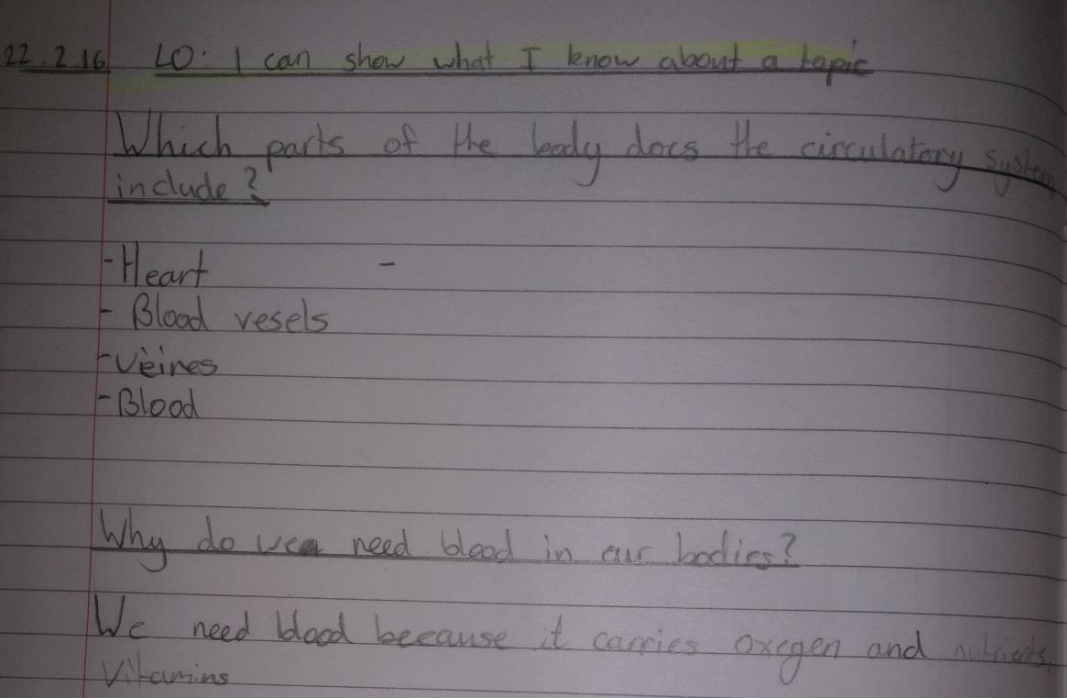
Examples of Work

Muharem

Animals, including humans - Year 6



	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. 			
	Description of activity			
	The children were given prompt questions to help them think about what they already knew about the circulatory system.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		This initial activity shows that Muharem already has some knowledge about the parts of the circulatory system and the role of the blood.
Teacher observations		Working scientifically



Year

6

Topic

Animals, including humans

Focus of assessment (National Curriculum statements)

- Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood.
- Describe the ways in which nutrients and water are transported within animals, including humans.

Description of activity

Continued from the previous page.

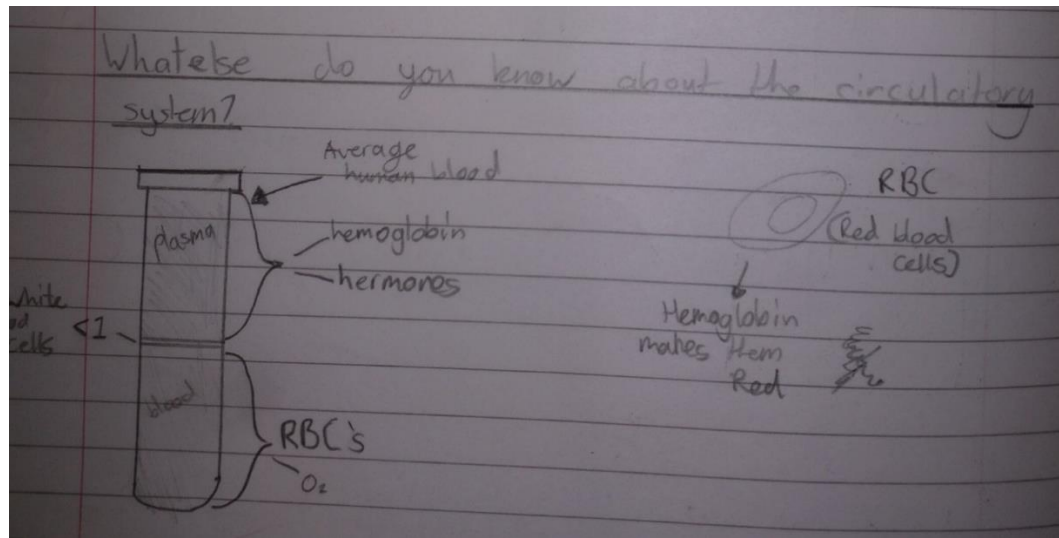
EVIDENCE OF LEARNING

ASSESSMENT

Oral evidence

Examples of work


Knowledge

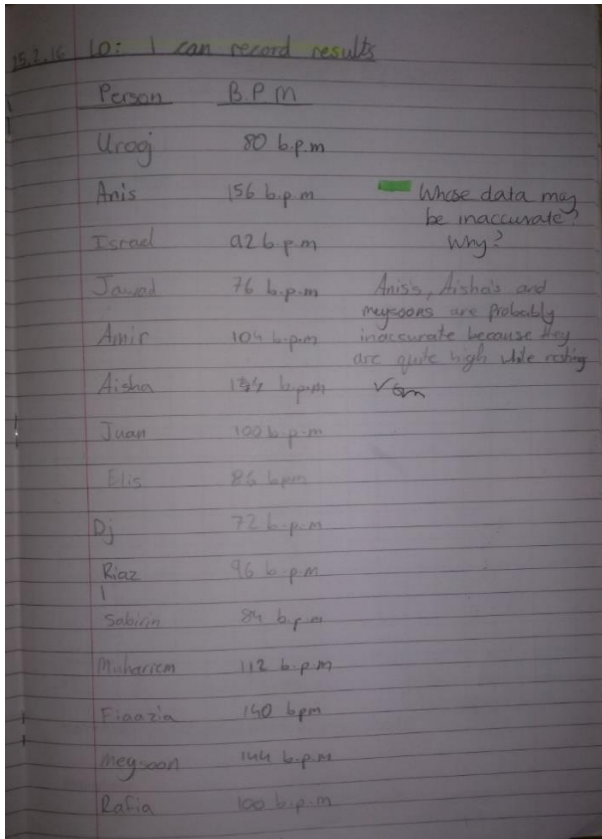


This shows that Muharem has clearly read about blood in the past and has in-depth knowledge on this particular aspect. This is beyond the requirement for Key Stage 2. What this initial assessment activity shows is that he is not secure with the function of the circulatory system in terms of transporting water around the body. Neither does he show an awareness of the double circulatory system.

Working scientifically

Teacher observations

	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. 			
	Description of activity			
	The children were shown how to measure their pulse rates, and they recorded this information for the whole class so that they could answer the question, 'Are our resting pulse rates all the same?' They were then asked to think about why the pulse rates were different.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		Working scientifically
<p>While discussing this with his group, Muharem suggested that some people may have counted wrongly.</p> <p>He also suggested that maybe people who do more sports activity have different pulse rates, or maybe there is a difference between boys and girls.</p>		<p>In his response to the teacher's marking, he identifies results that do not fit the overall pattern.</p> <p>He makes suggestions for ideas that can be explored using pattern seeking.</p>



Year

6

Topic

Animals, including humans

Focus of assessment (National Curriculum statements)

- Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function.

Description of activity

To make it easier to look for a pattern between the pulse rates of boys and girls, Muharem presented the data as two bar charts.

EVIDENCE OF LEARNING

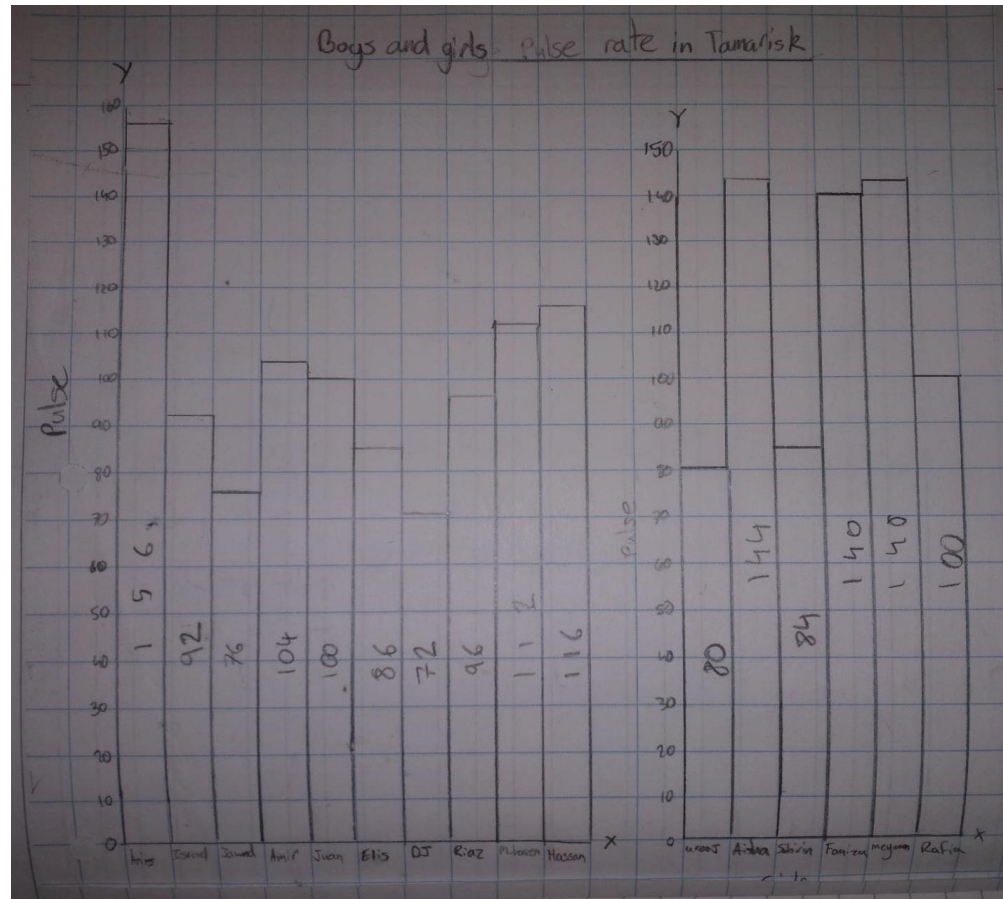
ASSESSMENT

Oral evidence

Examples of work

Knowledge

“The bars on the right look higher, but three of them are very high and may have been counted wrongly. If you ignore those, there is not much difference between the two graphs.”




Teacher observations

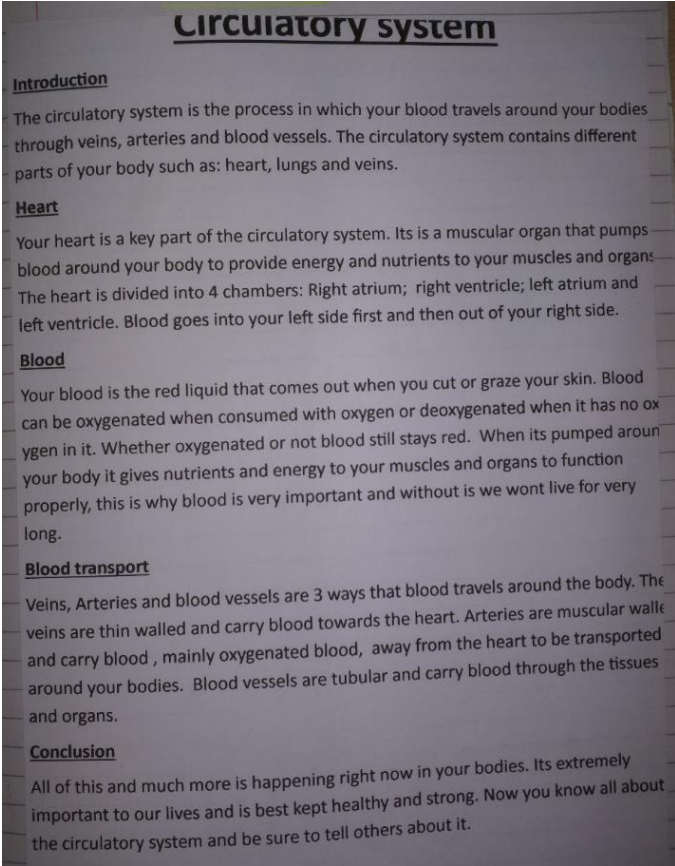
Working scientifically


Muharem draws the axes, selects a suitable scale, labels the axes and plots the bars correctly.

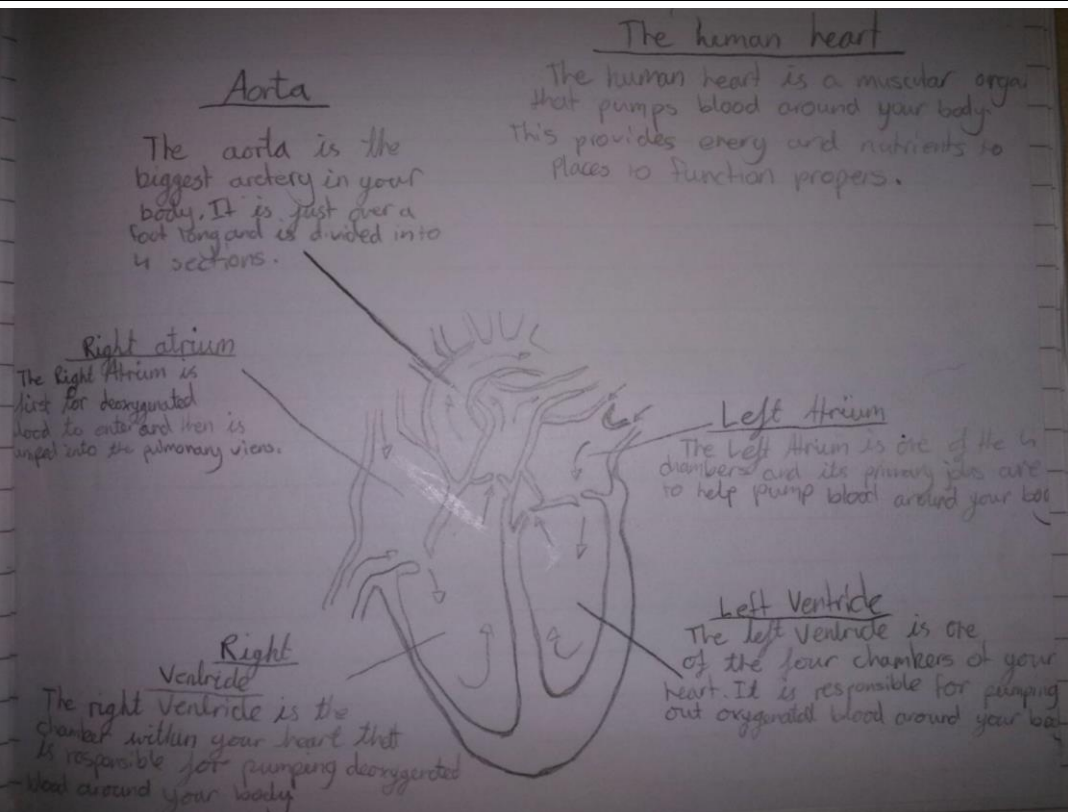
He uses the data to refute his initial idea that there might be a difference between the pulse rates of boys and girls.


He picks out the anomalies and looks for a pattern (or lack of one) in the results.

	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
	After carrying out some independent research, the children wrote reports about the circulatory system.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		Working scientifically
<p>The information about the heart goes beyond the expectations of the National Curriculum.</p> <p>Understanding about energy is also beyond the expectations of the National Curriculum.</p>		<p>This writing shows that Muharem is secure in naming the basic parts of the circulatory system and can describe their functions. He also understands that nutrients and oxygen are transported around the body in the blood. He is not showing an understanding of the double circulatory system.</p> <p>Muharem selects secondary sources for his research and reports his findings in a non-chronological report.</p>

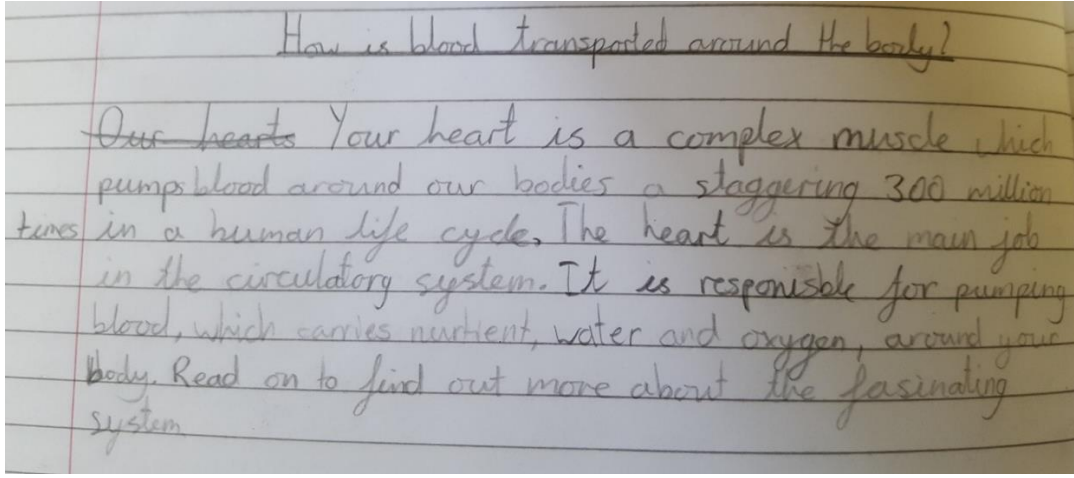
	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. 			
	Description of activity			
	This is some additional research that Muharem carried out at home.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		Although there is a lot of vocabulary in this work, it is not clear from this whether Muharem understands that the oxygenated blood is pumped around the body and the deoxygenated blood is pumped to the lungs.
Knowledge about the chambers of the heart and the names of the different vessels is beyond Key Stage 2.		Working scientifically

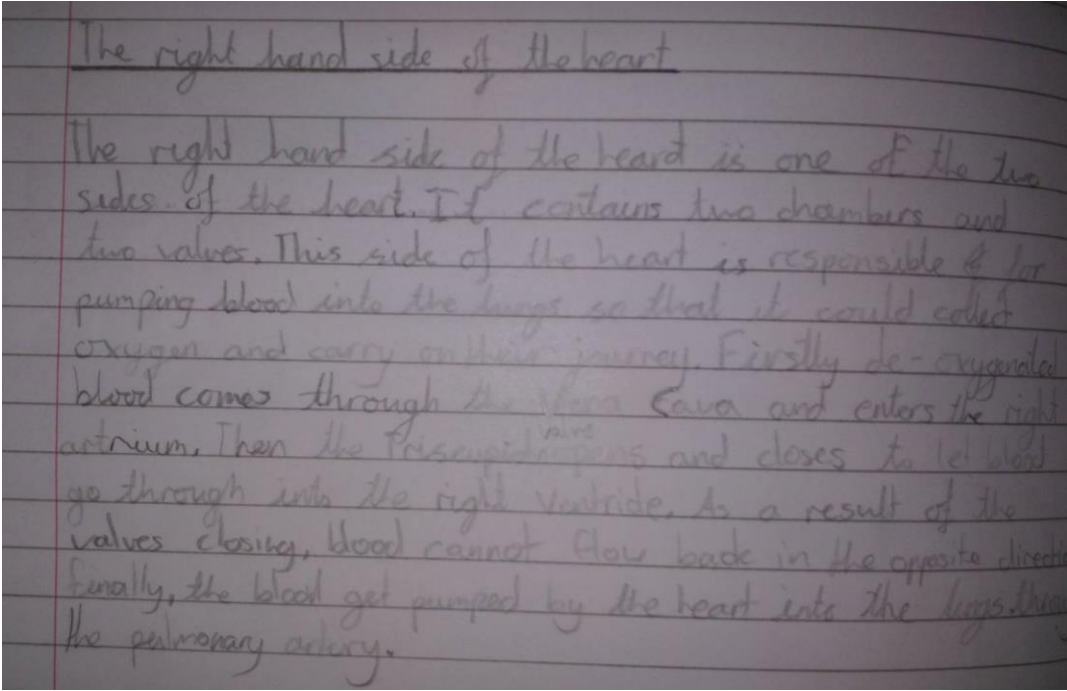
	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
	<p>The basic parts of the of the circulatory system were mapped out onto the floor in the playground – heart, lungs, blood vessels and muscles. The children moved around the body as though they were the blood. When the teacher said freeze, the children stopped moving and explained to the person in front of them where they were in the circulatory system.</p>			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
<p>“I am in the left ventricle at the moment. I am going to be pumped into the aorta and then I will take the water, nutrients and oxygen to the muscles in the body.”</p>		<p>By the end of this activity, it was clear to the teacher that Muharem had a good understanding of the double circulatory system that is required to be secure at Key Stage 2. The additional detail about the parts of the heart and the names of the different blood vessels is beyond Key Stage 2.</p>
<p>Teacher observations</p> <p>While moving through the complete circulatory system, Muharem demonstrated that he could explain where he was and what he was doing.</p>		Working scientifically

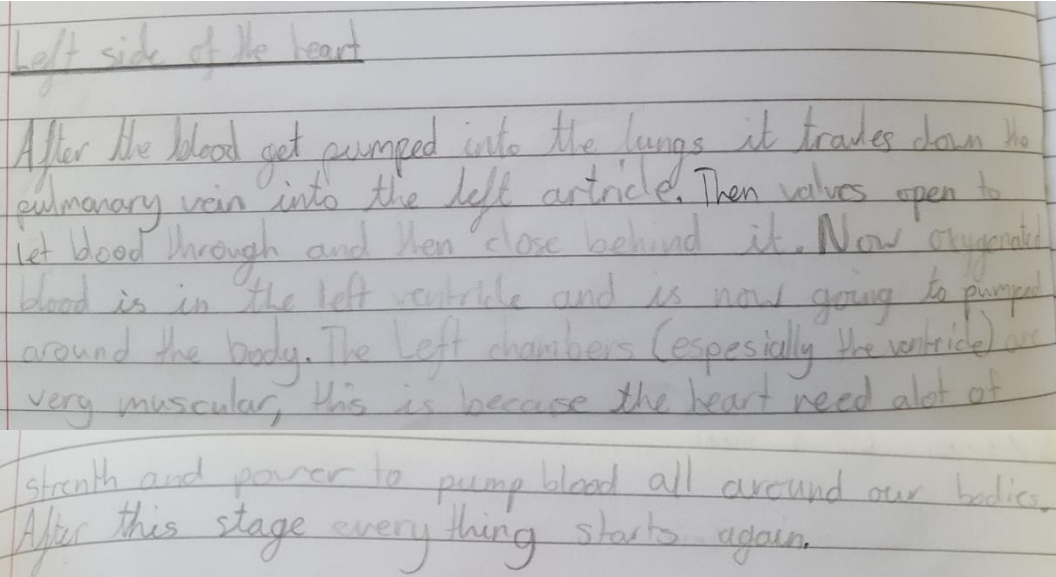
	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
	After the role-play, the children were asked to write their now fuller understanding of the circulatory system.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		This is further evidence that Muharem is secure in the understanding that the blood transports nutrients, oxygen and water around the body.
Teacher observations		Working scientifically

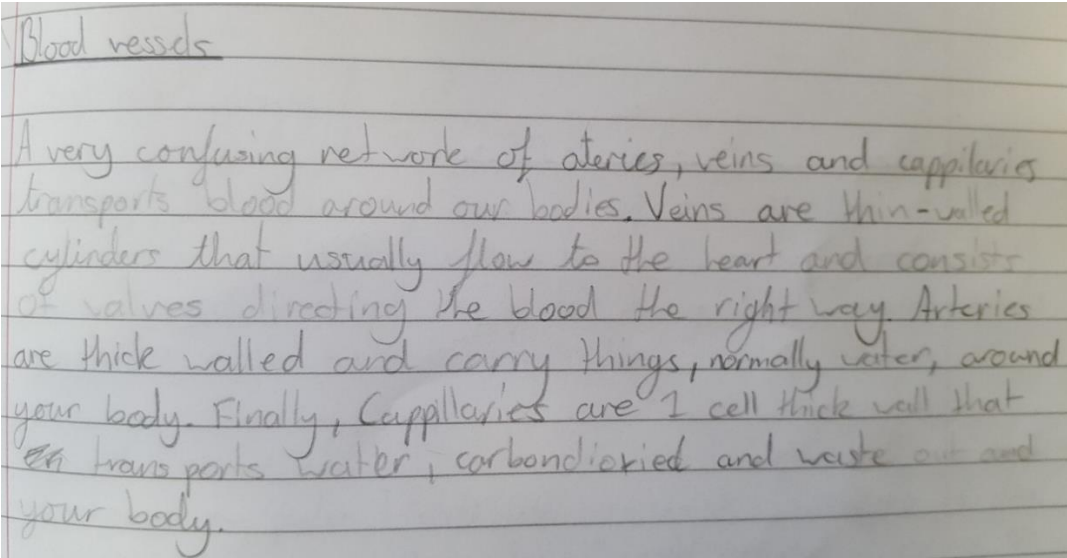
	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
Continued from the previous page.				


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		This portion of writing shows that Muharem has a clear understanding of oxygenated and deoxygenated blood, and the flow of blood from the heart to the lungs.
Muharem has added additional detail beyond Key Stage 2 about the chambers of the heart and the function of the valves.		Working scientifically

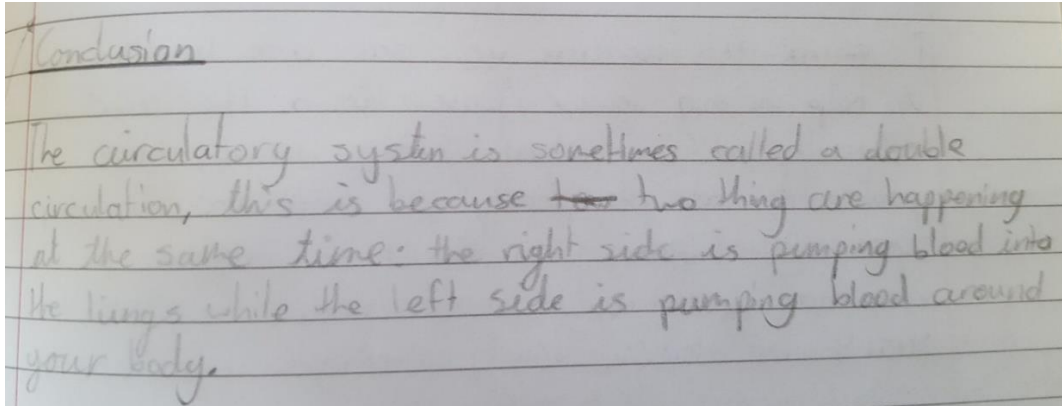
	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
	Continued from the previous page.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		<p>This portion of writing shows that Muharem has a clear understanding of the double circulatory system, as he knows about the difference in the structure of the two sides of the heart. The detail is beyond Key Stage 2.</p>
		Working scientifically

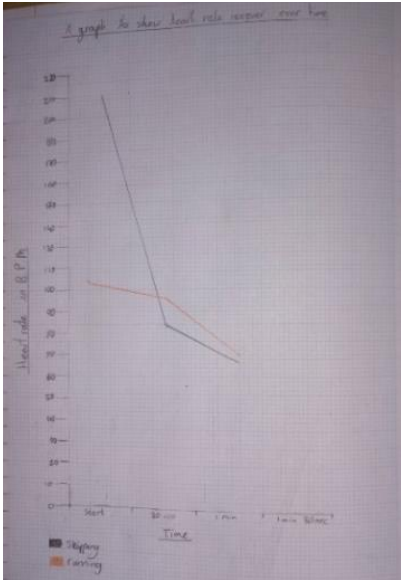
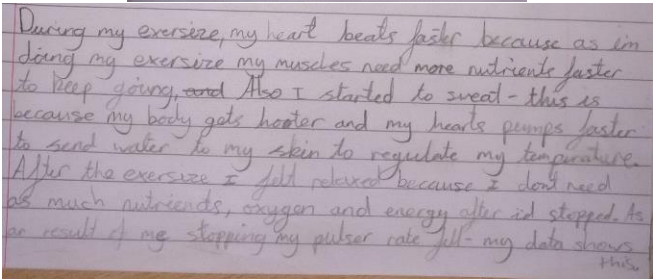
	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
	Continued from the previous page.			


EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		<p>This portion of writing shows that Muharem has a clear understanding of what is transported in the body, including waste products such as carbon dioxide.</p> <p>Again, he has added additional detail beyond Key Stage 2 about the different blood vessels.</p>
Muharem is an EAL learner and, when asked later why he used the word 'normally' when referring to what is carried around in the blood, he explained that he was giving an example. The teacher suggested the phrase 'such as' would be more appropriate.		Working scientifically


	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood. Describe the ways in which nutrients and water are transported within animals, including humans. 			
	Description of activity			
	Continued from the previous page.			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
		This part of the writing summarises the double circulatory system in the way expected for a child secure at Key Stage 2.
Teacher observations		Working scientifically

	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. 			
	Description of activity			
<p>The children were asked to plan and carry out an investigation to observe their pulse rate after exercising. Muharem chose to try two different types of exercise and measured his pulse rate every 30 seconds. He chose to plot his data as a line graph.</p>				

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		<p>This conclusion is further evidence that his subject knowledge about the circulatory system is secure, as he is able to relate this to his observations during the enquiry – the blood transporting oxygen and water to where it is required.</p> <p>It also shows that he can describe the impact of exercise on his body.</p>
<p>The values are not put on to the x axis appropriately for a line graph. He has put the times between the marks instead of on the marks.</p>		Working scientifically
		<p>He plans a simple comparative test, collecting data and presenting his findings as a line graph. His conclusion focuses on scientific reasons for the overall pattern rather than a comparison of the types of exercise.</p>

	Year	6	Topic	Animals, including humans
	Focus of assessment (National Curriculum statements)			
	<ul style="list-style-type: none"> Recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function. 			
	Description of activity			
	<p>The teacher asked the children in groups to discuss their ideas about how to keep their bodies healthy and what can damage their bodies. The children shared their ideas with the whole class and were then asked to produce a poster to share this understanding more widely.</p>			

EVIDENCE OF LEARNING		ASSESSMENT
Oral evidence	Examples of work	Knowledge
Teacher observations		Working scientifically
<p>Muharem was able to give a number of examples of ways to stay healthy and some things that can damage your body.</p>		<p>This poster shows that Muharem is secure about the impact of exercise and diet on the body. He does not include the impact of lifestyle or drugs, but he talked about these things during the group discussion.</p>



Overall summary

Secure

Muharem started with some prior knowledge of the circulatory system – the basic parts. He was not aware of the function of the circulatory system as a transport system or the double circulatory system. Talk during lessons and his written work show a continually increasing ability to explain the double circulatory system and the range of substances transported by the blood.

His final discussion and poster show a secure understanding of the impact of diet, exercise, drugs and lifestyle on the way the body functions.