

What Lies Within.....

By Andrea Hartshorne

Context for our work

As a nursery school, we value the opportunities we can provide for children that foster conditions of collaborative learning that arises out of the curiosities and fascinations of the children. We see children as capable and confident learners, who alongside each other can enquire, question and discover learning for themselves, rather than being instructed or told. It is through this lens of active enquiry that educators generate long term projects that promote opportunities for children's creativity and critical thinking that enables children to express and develop theories about the world around them.

Project 2018/2019

This year, the enquiries of each group began as an investigation of the human body as this is an area of particular fascination for many children. We may begin with a shared starting point, however, each of the learning groups developed their projects in their own unique ways based upon the children's own specific interests and motivations. What follows is an account that holds aims to both describe the learning process of each of the groups experiences whilst also offering opportunity to reflect on what we as educators have learnt about how children learn, and the ways in which best to support the growth of their thinking and the expression of their ideas.

While playfully exploring our skeletons, the children noticed a small red part on the spine. This was referred to as 'blood' or 'bleed' and through this fascination, blood became our first investigation. Germs have also been explored as this was a theory by the group as to why some blood was blue.



What do you know about blood?

“When blood comes out it’s red”

“It makes people alive”

“When we cut ourselves you get blood”

“Blood is cold”

“It’s red”

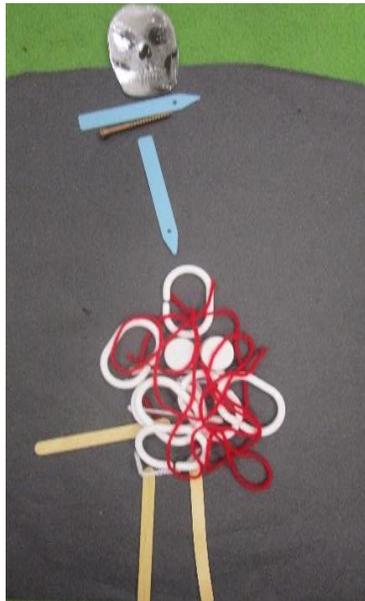
“It comes out your body”

“It looks like slime”

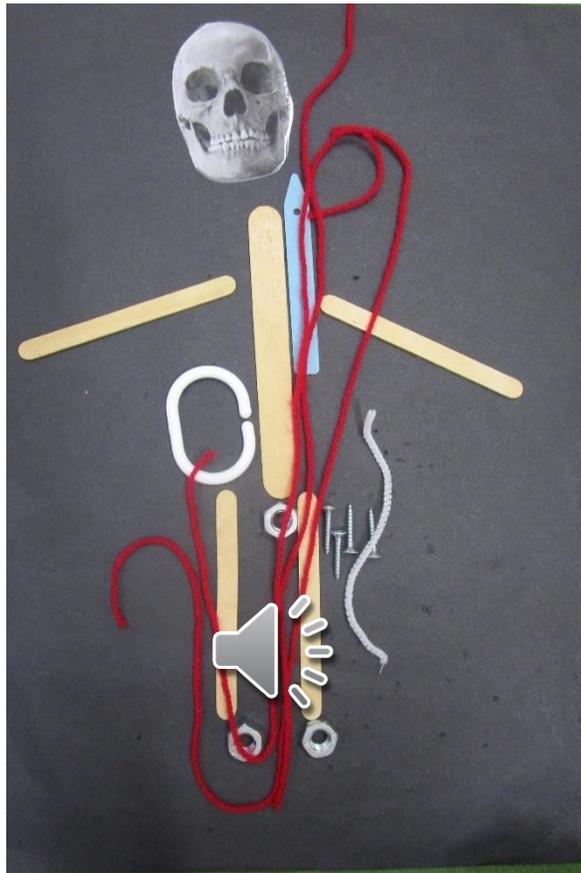
“I tripped over, my knee went red, red, red. Blood came out, ten much of blood”



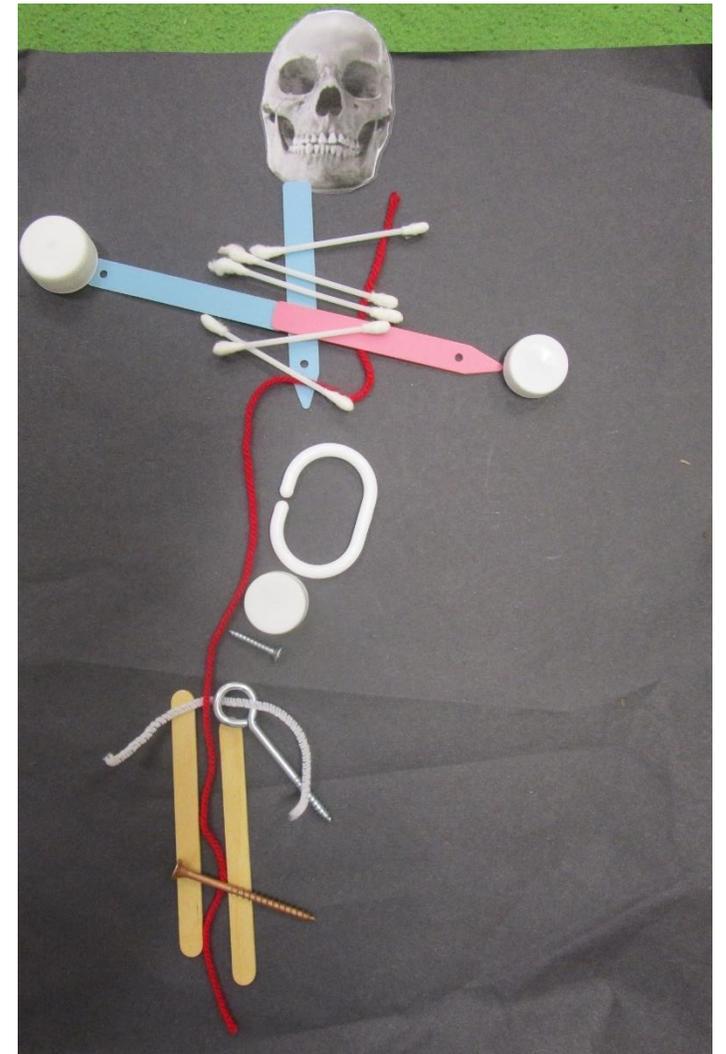
Images of the circulatory system were added as a provocation to using placing and arranging materials. By using these materials such as lids, rings and sticks, the group created skeletons, adding red wool to represent the blood. When talking about their skeletons, it became obvious that they were developing a new vocabulary using words such as, ribs, brain, chest and skull.



“Mines got blood. This is the brain. The blood is on top of his ribs and his bones. It goes up, up into his neck.”

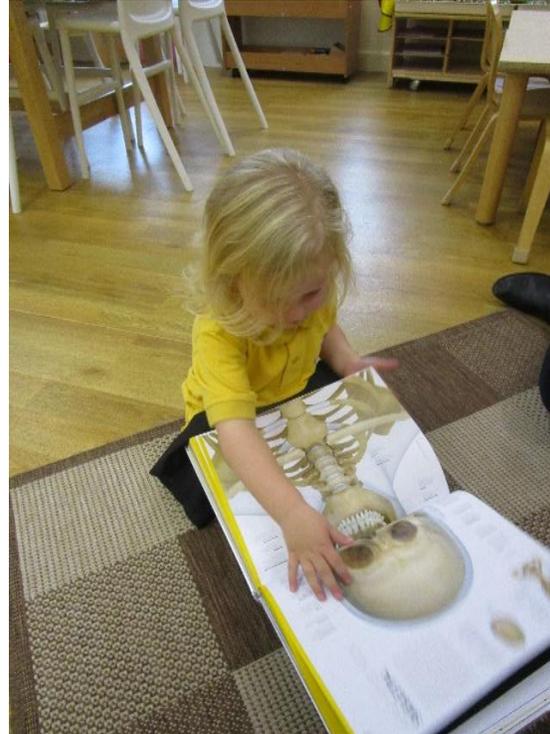


“I need some more blood. It goes in his heart and goes in his brain, then it sucks up his hands.”



“He’s got ribs and hands. The blood goes to his head and down to his feet.”

The circulatory system was projected using the human body app on the tablet in order for the group to see where the blood came from. This app was used independently by the children to interact with and discover and investigate for themselves along with human body books.



“That’s our heart beat. It goes up and down.”

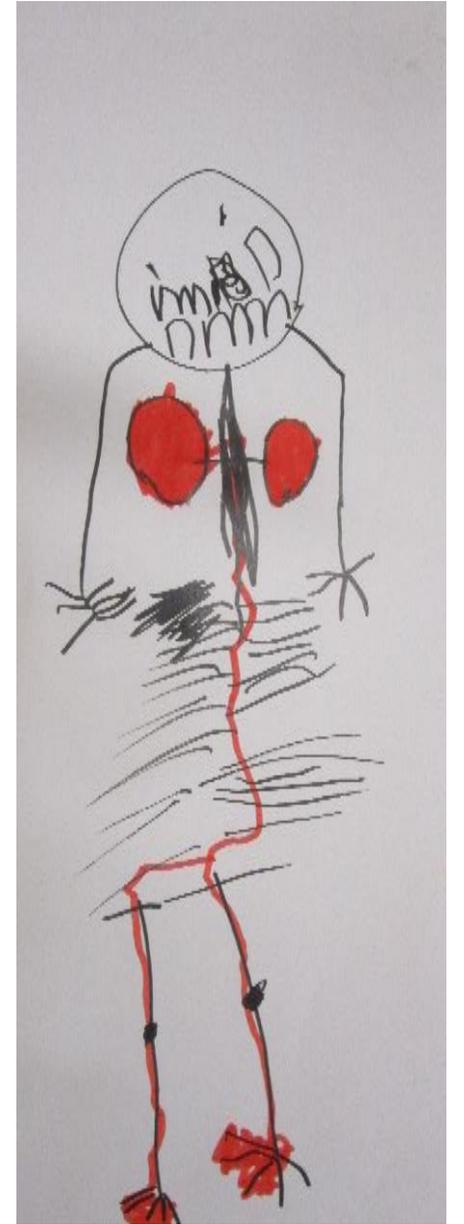
“It’s pumping blood.”

Skeletons were drawn and red blood added using felt pen. When talking about their drawings, it became obvious that the children showed an understanding of blood around the body and blood in the organs such as the heart and brain.



“I need to draw the heart and colour the blood in. It [blood] goes across and down through there [ribs] and down one leg and across to the other leg. It [blood] goes down to the toes.”

“I'm drawing a little heart. Its blood is going down him. Blood down to his feet, blood down his arms and hands and across his knees. The blood comes down to his feet. Blood is in his skull. My blood is everywhere.”



To challenge their thinking about blood only being red, images of the circulatory system showing both red and blue blood were offered. The children had a good understanding that blood came from the heart and was pumped around the body, one side having blue blood and the other red and only red comes out when you're hurt. This was depicted in their drawings.



Why do you think the blood is blue?

“It’s blue because there are germs in it.”

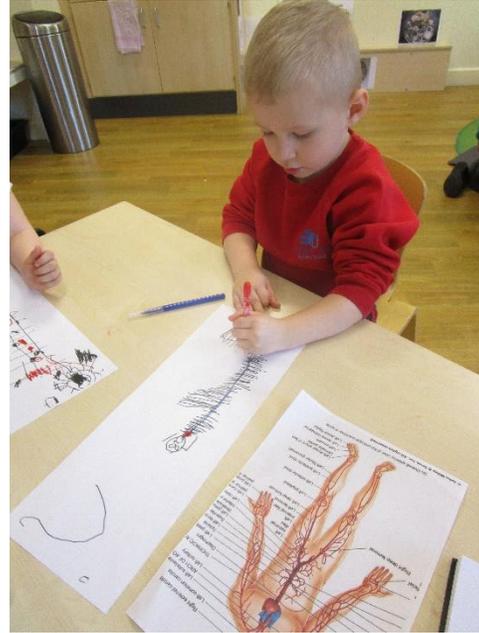
“Because the heart makes the blood blue.”

“The bones make it blue.”

“Blood comes from the heart. The blood goes to the heart like the red blood. Those are the hearts [o-o]. I made the blood change.”

How?

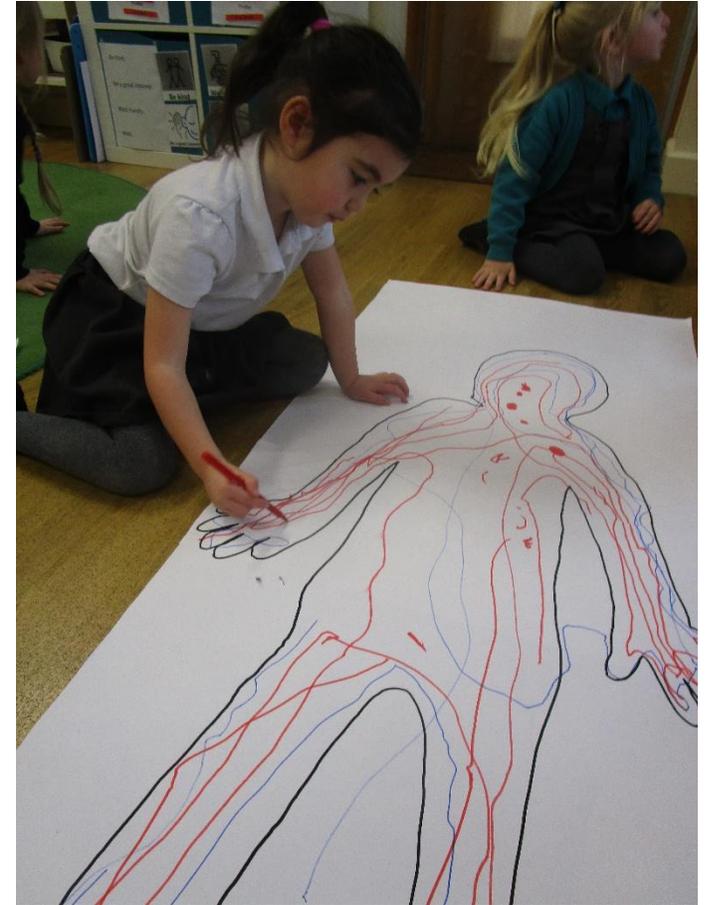
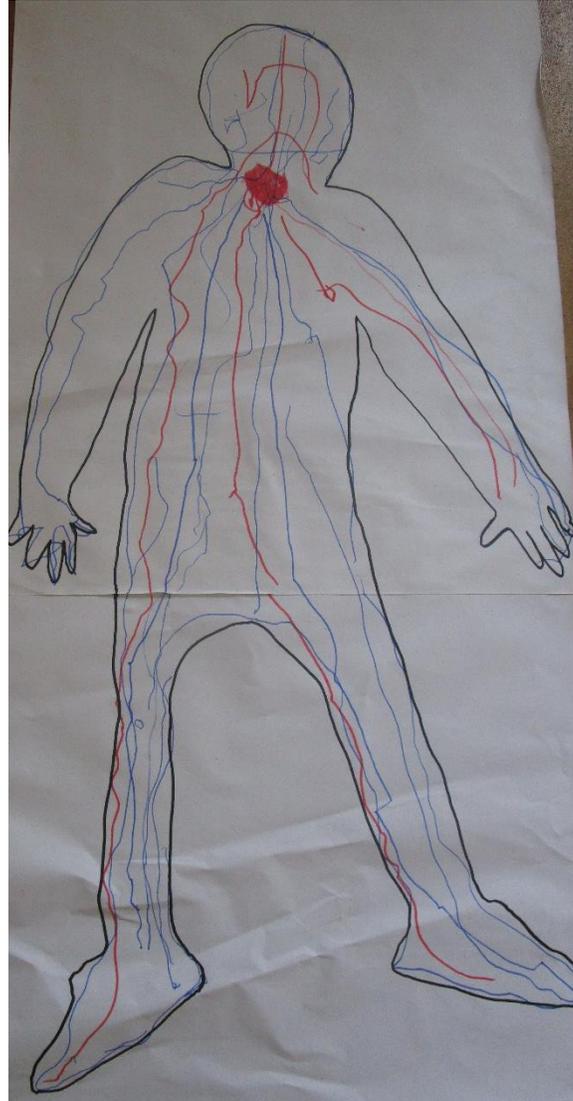
“By doing it with the red [pen] and then the blue [pen] on top. The blood sucks up. The heart pumps and then pumps the blood up.”



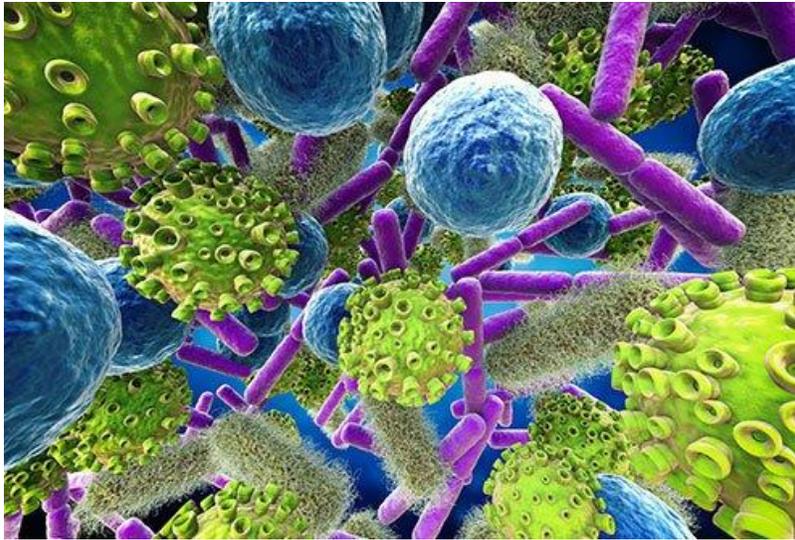
“The heart pumps and the blood goes all the way down to there [feet]. The blood is going all the way out. The blood goes all the way around like a circle. It goes round and round and round in your tummy.”

“He’s got lots of red and blue blood. It comes from his heart. It goes all over the body. The heart makes the blood go into his head and his legs. Some blood has stuck together, some of the blue blood and some of the red blood. It’s mixed together in the body.”

Adding blood to the body was drawn on a large scale. The way in which the children drew the blood, starting and ending at the heart showed that they understood about blood going around the body in a circuit.



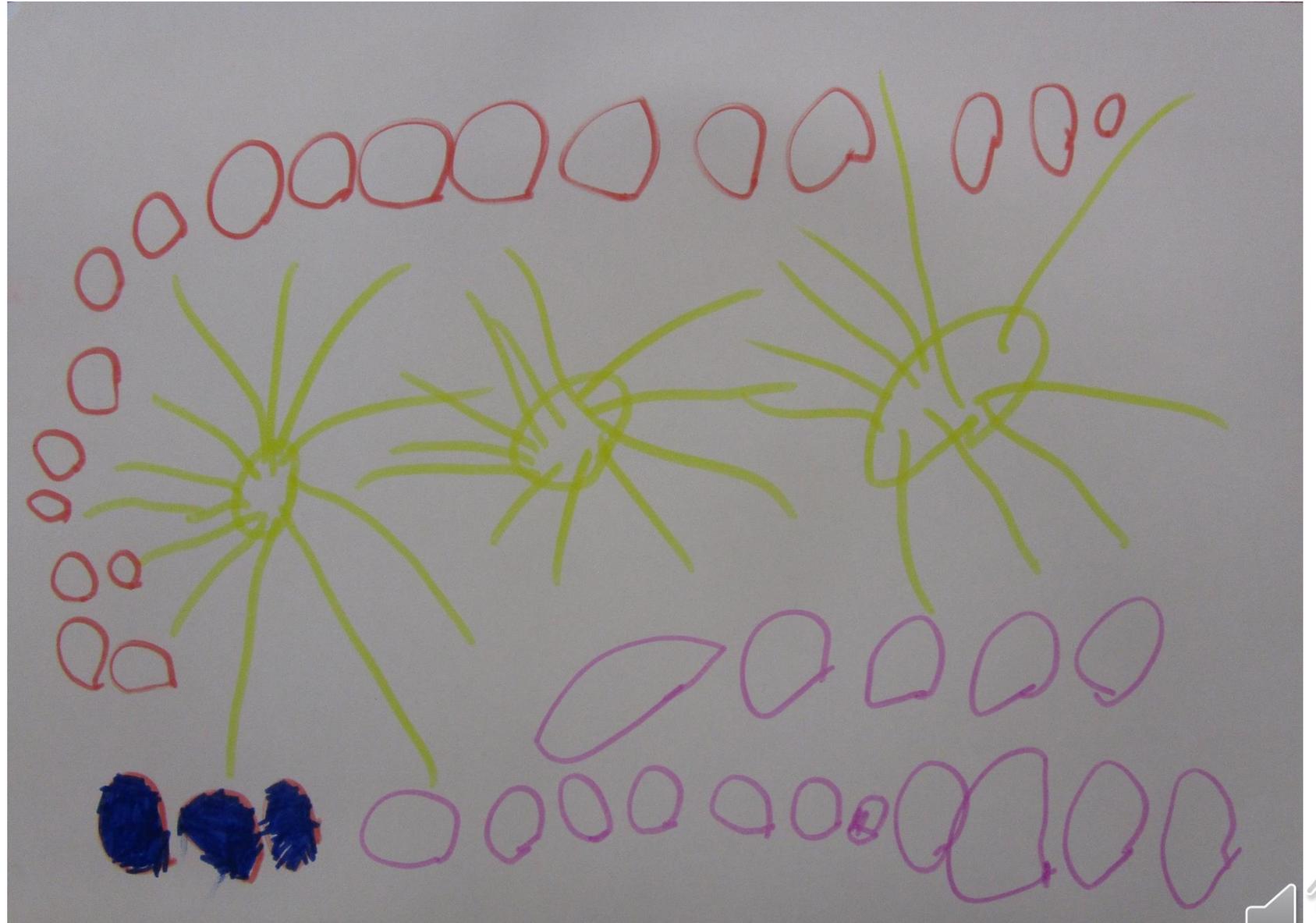
A video clip of inside a blood vessel was shown to deepen their knowledge and understanding about blood. Two theories about what they thought was inside the blood were offered back to the group for them to draw.



“The spiders are dancing. There’s spirals. They are crawling all around the blood. The ice [purple] is shaking.”



“I think the spiders are chasing the purple and the heart beats. The yellow are the spiders and the red are the heart beats.”



The parts of the blood the group had drawn, were cut out and laminated. These provided placing and arranging pieces along with other red and blue materials such as glass beads, lids and mosaic tiles to add to a large scale body drawing. This featured the red and blue blood that had been drawn on by the group.



As hand gel is used to cleanse hands at snack time, it was decided to use this as a way of introducing a discussion about germs.

Why do you think we need hand gel?

“If you put hand gel on they will be clean so you don’t have germs.”

“Cause the germs get on our hands.”

“Because if you don’t use hand gel, the germs will get on your hands and when you put your fingers in your mouth, you get bad.”

What does a germ do?

“Wiggle.”

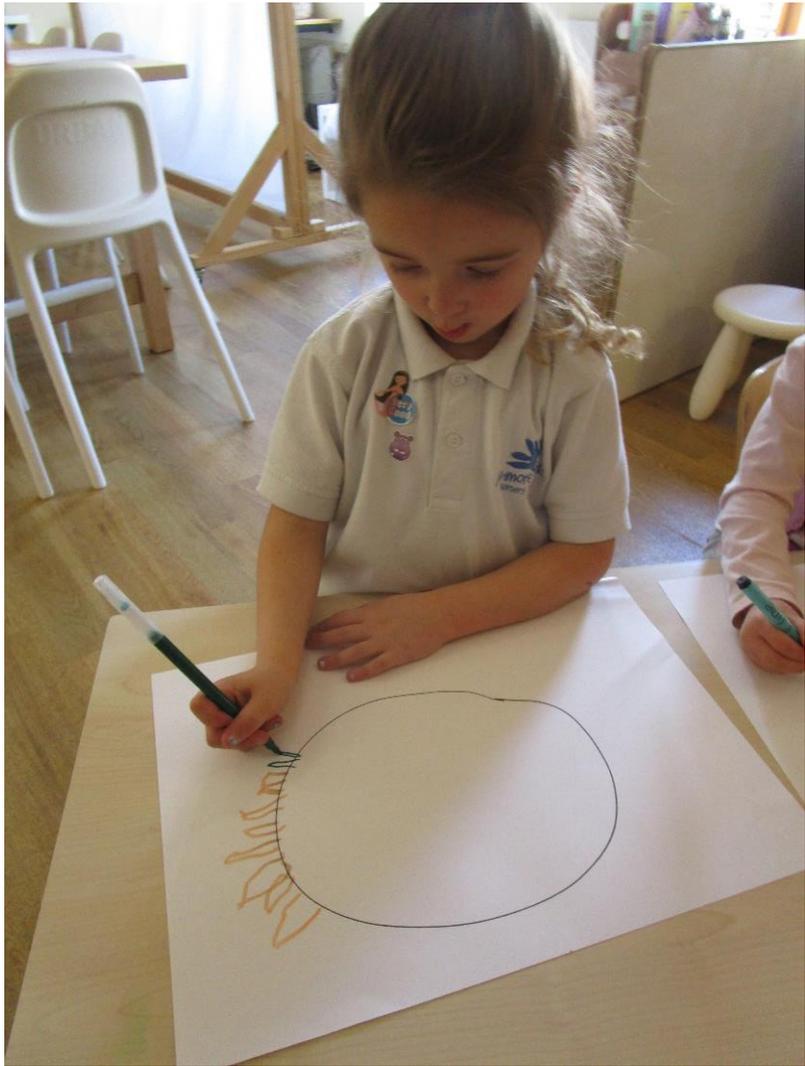
“If you get a massive germ it will make your tummy go bad and you will have a tummy ache.”

Where do you think we find germs?

“In the ground where all the dirt covers them.”

“In your mouth by opening your mouth.”





“One big germ turns around and then it tumbles everywhere behind the little ones and the little germs walk around the big one. They shake in our body, turn around everywhere and make our body not healthy.”





“This big germ is going in your mouth ‘cause it’s so huge it fits in your mouth and these little ones go in your mouth as well. They went down your throat and then down your tummy. It makes you feel poorly.”





“My germ jumps in the mouth and when you swallow, the germ goes down your throat. It makes you feel sick.”

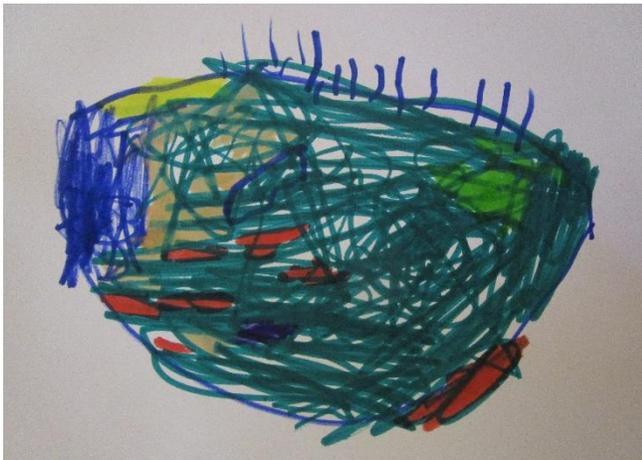


“It’s a curl round germ. It gets it’s energy from the vending machine [brown].”



“It hurts your throat and makes you poorly. When you eat the germ, it hurts your back as well and tickles you and you keep laughing and laughing. It still makes you feel poorly.”

“These [lines] sting and hurt you and the bleed will come out.”



Skull images were offered along with loose parts suggestive of facial features.



To end our project work for this year, a large skeleton was produced collaboratively using all the skills and knowledge they had learned over time.





A layer of plastic was added on top of the skeleton and the group added the red and blue blood using marker pens.





The children's drawn germs were laminated and tagged to the skeletons.



During this project the children have extended their vocabulary about their bodies and body parts, for example, ribs, skull, brain and heart.

They know we have both red and blue blood that travels around our bodies in a circuit, beginning and ending at the heart.

They were aware that germs can enter your body on unclean hands when put into the mouth and that you will become ill.

They have become proficient in using the human body app on the tablets, navigating their way around and interacting with the body and its systems, demonstrating turn taking and sharing.

There have been several connections to our project work during other times of the session, for example;

- ❖ Adding red and blue blood to a drawing of a mum for mothers day.
- ❖ Saying that the red water colour paint looked like blood.
- ❖ Feeling their ribs and saying they could feel bones in there.
- ❖ Pulling the bottom of their eyes down saying they had blood in their eyes.
- ❖ Commenting about when they fell over and bumped their lip, there was blood, red blood and a little bit of blue blood.
- ❖ Showing the veins in their wrist saying there was blue blood in there.
- ❖ When a child was reluctant to have hand gel, it was said that it is very important to have hand gel so you don't get germs in your tummy.

Reflections

This project has reminded us that we must continue to take the time to listen and find out about children's prior knowledge of the subjects they become interested in. It is important to revisit children's ideas in order to allow them to evolve and also build upon their previous ideas. The importance of using digital languages within our project work such as projectors, have provoked new ways of seeing things that enriched the children's thinking around their developing theories. Sharing video clips has enabled the children to discuss and theorise about things that cannot be seen within the body, e.g. blood and germs. It was also important for the educator to consider carefully the questions (open ended questions) offered to the group as these are essential when encouraging discussions, and allowing children to process their thoughts. Over time, the children have offered rich descriptive ideas and thoughts, moving on from labelling their drawings or what they have seen.

“Children – for the ways in which we have encountered them – are the first great researchers. If we are capable of listening to them, children can give us back our pleasure in wonder, in marvelling, in doubt. Children can convey the joy of search and research which belongs not only to children, but to women, to men, to humankind: it belongs to life.”

-Carlina Rinaldi