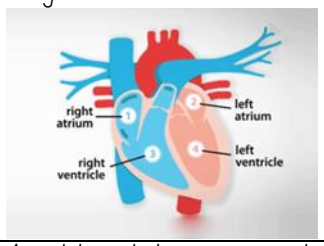
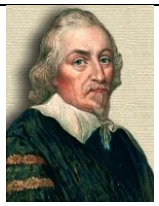
Powick CE Primary Knowledge Organiser for Science.

Topic	Animals Including Humans	Term	Spring - Summer	Year Group	6

Vocabulary

heart muscle	A muscle is made of body tissue; the heart is a muscle that pumps blood around the body. 
blood	A red liquid that is pumped around the body.
oxygen	A gas that we breathe in and our muscles use to work.
carbon dioxide	A gas that is breathed out of the body from the lungs.
blood vessels	Tubes that carry blood around your body.
artery / arteries	Blood vessels that carry blood away from the heart.
vein / veins	Blood vessels that carry blood to the heart.
circulation pulse rate	Blood is pumped around the body to and from the heart and to and from the lungs; we use the term 'circulatory system' when talking about blood, heart and lungs. Pulse rate measures the beats of the heart in the circulatory system
nutrients	Parts of our food that are needed to help us grow and be healthy. Nutrients and water are carried in our blood around the body.
diet	What we eat. A healthy diet includes all the nutrients we need to be healthy.
life style	The way we live our lives – this could include taking exercise for example.
heart muscle	A muscle is made of body tissue; the heart is a muscle.

Concepts and Knowledge

What we will learn about the circulatory system in animals, including humans, and about making healthy choices.	**The main parts of the circulatory system** include the heart and lungs. **The Function of the heart** is to pump blood around the body. **We need blood pumped around the body** to carry oxygen, water and nutrients to our muscles and organs so they work effectively. **When oxygen is used up** by the muscles and organs, the blood pumped back to the heart has carbon dioxide in it that needs to be pumped to the lungs to be exhaled (breathed out). **Blood vessels** are part of our circulatory system. **Blood is made up of** red blood cells, white blood cells and plasma. **Food travels through the digestive system; water and nutrients are transported** in animals, including humans travel through the blood. **Diet, exercise, drugs and life style** all have an impact on the way our bodies function.
	William Harvey (1578 - 1657) William Harvey's discovery of the function of the heart and the circulation of blood was one of the greatest medical discoveries of all time.
	When carrying out a scientific investigation, we need: **an independent variable** (the thing we are changing) **control variables** (the things we are keeping the same) **observations and measurements when the independent variable changes** **dependent variable** (what happens as a result of the independent variable changing)
	We will set up an investigation to show the effect exercise has on our bodies and why and make observations over time.
	Draw conclusions from data and observations, use evidence to justify ideas, use scientific knowledge and understanding to explain findings. Use scientific ideas when describing simple processes.