Step Step

TPS Science Knowledge Organiser

Year 6

Animals, including humans. Be a doctor and a nutritionist.

heart	The heart is like a big pump made of muscles It is the organ, or body part, that pumps blood through the body.
pulse	A beating heart creates a pulse . The beat results from the regular widening of an artery in the body as blood flows through it
rate	A person's pulse , or heart rate , is the number of times the heart beats per minute.
pumps	Each time the heart beats it squeezes the blood around the body inside the blood vessels
blood	A liquid that transports oxygen and nutrients to the cells and carries away carbon dioxide and other waste products.
blood vessels	Tubes that carries blood in the circulatory system
transported	Carried.
lungs	Bag-like organs, or body parts, used for breathing.
oxygen	A gas people and animals breathe in to supply their bodies with air.
carbon dioxide	A gas people and animals release when they breathe out.
nutrients	Something in food that humans and animals, need to stay alive and healthy. (year 3)
water	A liquid necessary for life. It moves nutrients around your body and helps to get rid of waste.
muscles	All movement in the body is controlled by muscles. Some muscles work without us thinking, like our heart beating,
cycle	A sequences of events that repeat themselves
circulatory system	The system that contains the heart and the blood vessels and moves blood throughout the body.

The heart pumps blood in the blood vessels around to the lungs. Oxygen goes into the blood and carbon dioxide is removed. The blood goes back to the heart and is then pumped around the body. Nutrients, water and oxygen are transported in the blood to the muscles and other parts of the body where they are needed. As they are used, they produce carbon dioxide and other waste products. Carbon dioxide is carried by the blood back to the heart and then the cycle starts again as it is transported back to the lungs to be removed from the body. This is the human circulatory system.



NOTE This is a diagram. Your blood is always red in your body.

Diet, exercise, drugs and lifestyle have an impact on the way our bodies function. They can affect how well out heart and lungs work, how likely we are to suffer from conditions such as diabetes, how clearly we think, and generally how fit and well we feel. Some conditions are caused by deficiencies in our diet e.g. lack of vitamins.

diet	The food and drink that a person or animal usually consumes. A balanced diet will keep you healthy.
exercise	A way of keeping the body healthy through being active
drugs	A drug is a chemical that is not food and that affects your body. Some drugs are given to people by doctors to make them healthy.
lifestyle	The way in which a person lives (or chooses to live) his or her life