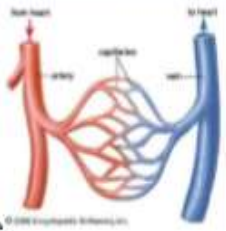


Year 6 – Knowledge Organiser Autumn – The Human Body (Science)

What should I already know?

- Which things are living and which are not.
- Classification of animals (e.g. amphibians, reptiles, birds, fish, mammals, invertebrates)
- Animals that are carnivores, herbivores and omnivores.
- Animals have offspring which grow into adults.
- The basic needs of animals for survival (water, food, air)
- The importance of exercise, hygiene and a balanced diet.
- Animals get nutrition from what they eat.
- Some animals have skeletons for support, protection and movement.
- The basic parts of the digestive system.
- The different types of teeth in humans.
- Respiration is one of the seven life processes.
- The life cycle of a human and how we change as we grow

What will I know by the end of this unit?

What will I know by the end of the unit?	
What is the circulatory system?	<ul style="list-style-type: none"> • The circulatory system is made of the heart, lungs and the blood vessels. • Arteries carry oxygenated blood from the heart to the rest of the body. • Veins carry deoxygenated blood from the body to the heart. • Nutrients, oxygen and carbon dioxide are exchanged via the capillaries. 
Choices that can harm the circulatory system	<ul style="list-style-type: none"> • Some choices, such as smoking and drinking alcohol can be harmful to our health. • Tobacco can cause short-term effects such as shortness of breath, difficulty sleeping and loss of taste and long-term effects such as lung disease, cancer and death • Alcohol can cause short-term effects such as addiction and loss of control and long-term effects such as organ damage, cancer and death
Why is exercise so important?	<p>Exercise can:</p> <ul style="list-style-type: none"> • tone our muscles and reduce fat • increase fitness • make you feel physically and mentally healthier • strengthens the heart • improves lung function • improves skin

Vocabulary

- Aorta** - the main artery through which blood leaves your heart before it flows through the rest of your body
- Arteries** - a tube in your body that carries oxygenated blood from your heart to the rest of your body
- Blood vessels** - the narrow tubes through which your blood flows. Arteries, veins and capillaries are blood vessels.
- Capillaries** - tiny blood vessels in your body
- carbon dioxide**- a gas produced by animals and people breathing out
- Circulatory system** - the system responsible for circulating blood through the body, that supplies nutrients and oxygen to the body and removes waste products such as carbon dioxide.
- Deoxygenated**- blood that does not contain oxygen
- Heart** - the organ in your chest that pumps the blood around your body
- Lungs** - two organs inside your chest which fill with air when you breathe in. They oxygenate the blood and remove carbon dioxide from it.
- Nutrients** - substances that help plants and animals to grow
- Organ** - a part of your body that has a particular purpose
- Oxygen** - a colourless gas that plants and animals need to survive
- Oxygenated blood** - that contains oxygen
- Pulse** - the regular beating of blood through your body. How fast or slow your pulse is depends on the activity you are doing.
- Respiration** - process of respiring; breathing; inhaling and exhaling air
- Vein** - a tube in your body that carries deoxygenated blood to your heart from the rest of your body
- Vena cava** - a large vein through which deoxygenated blood reaches your heart from the body

Scientific enquiry

- How does your pulse change with exercise? What is the most efficient way of presenting this data?
- Which exercise produces the fastest pulse? How would you make this a fair test?

Diagrams

