Topic: **Animals including humans**	Year: 6	Strand: **Biology**

What should I already know?

Pupils may be able to locate where the heart is in the body, and that blood moves around the body. **EYFS**

Identify, name, draw and label the basic parts of the human body and say which part of the body is associated with each sense **Y1**

Find out about and describe the basic needs of animals, including humans, for survival (water, food and air) **Y2**

Describe the importance for humans of exercise, eating the right amounts of different types of food, and hygiene **Y2**

Identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat **Y3**

Identify that humans and some other animals have skeletons and muscles for support, protection and movement **Y3**

Describe the simple functions of the basic parts of the digestive system in humans **Y4**

Know that some materials will dissolve in liquid to form a solution and describe how to recover a substance from a solution **Y5**

What will I know by the end of the unit?

What is the **circulatory system**?	• 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**	Smoking and drinking alcohol is harmful to your 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?	Exercise can: • 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** which blood leaves your **heart** before it flows through the rest of your body
arteries	a tube that carries **oxygenated** blood from your **heart** to the rest of your body
atrium	one of the chambers in the **heart**
blood vessels	narrow tubes 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/humans breathing out
circulatory system	the system that circulates 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 round 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
oxygen	a colourless gas that plants and animals need to survive
oxygenated	blood that contains **oxygen**
pulse	regular beating of blood through your body.
respiration	process of respiring; breathing; inhaling and exhaling air
veins	tubes in your body that carries **deoxygenated** blood to your **heart**
vena cava	a large **vein** which carries **deoxygenated** blood reaches your **heart**
ventricle	one of the chambers in the **heart**