

## Colney Heath School ~ Science

**Topic: Animals including humans**

Year: 6

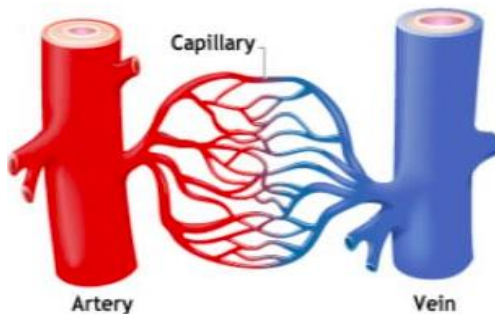
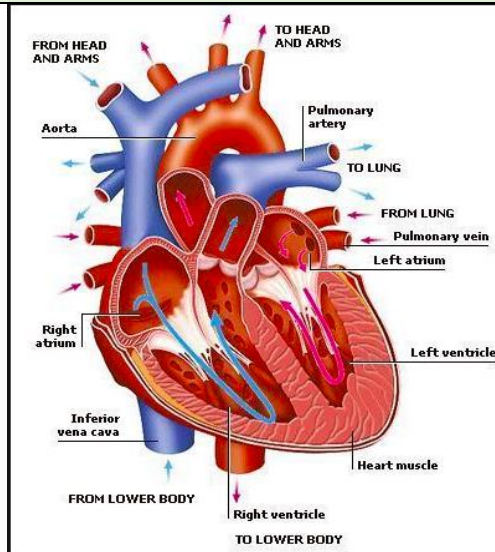
<b>Biology</b>
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### What should I already know?

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 and 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.



## Diagrams



<b>Vocabulary</b>
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Aorta	
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The main artery through which blood leaves your heart before it flows through the rest of your body.

Capillaries
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Tiny blood vessels in your body

Circulatory system

The system that circulates blood through the body and is made up of the heart, lungs and the blood vessels.

Arteries

Muscular-walled tubes that transport blood from the heart to other parts of the body.
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Deoxygenated blood
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Blood that does not contain oxygen.
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Oxygenated  
blood

Blood that contains oxygen that is pumped from the heart to the rest of the body
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Drug	Concentration	Time	Effect
Drug A	100 mg/L	10 min	100%
Drug B	100 mg/L	10 min	100%
Drug C	100 mg/L	10 min	100%
Drug D	100 mg/L	10 min	100%
Drug E	100 mg/L	10 min	100%
Drug F	100 mg/L	10 min	100%
Drug G	100 mg/L	10 min	100%
Drug H	100 mg/L	10 min	100%
Drug I	100 mg/L	10 min	100%
Drug J	100 mg/L	10 min	100%
Drug K	100 mg/L	10 min	100%
Drug L	100 mg/L	10 min	100%
Drug M	100 mg/L	10 min	100%
Drug N	100 mg/L	10 min	100%
Drug O	100 mg/L	10 min	100%
Drug P	100 mg/L	10 min	100%
Drug Q	100 mg/L	10 min	100%
Drug R	100 mg/L	10 min	100%
Drug S	100 mg/L	10 min	100%
Drug T	100 mg/L	10 min	100%
Drug U	100 mg/L	10 min	100%
Drug V	100 mg/L	10 min	100%
Drug W	100 mg/L	10 min	100%
Drug X	100 mg/L	10 min	100%
Drug Y	100 mg/L	10 min	100%
Drug Z	100 mg/L	10 min	100%

A substance that can be natural or man made that has an effect on the body
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Nutrients

Substances that living things need to survive

The Big Picture	By the end of our project we will know that
<p data-bbox="96 180 208 212"><u>Biology</u></p> <p data-bbox="96 225 1388 304">B1: Living things are special collections of matter that make copies of themselves, use energy and grow.</p> <p data-bbox="96 317 1395 397">B2: Living things on Earth come in a huge variety of different forms that are <u>all related</u> because they all came from the same starting point 4.5 billion years ago.</p> <p data-bbox="96 410 1384 533">B3: The different kinds of life, animals, plants and microorganisms, have evolved over millions of generations into different forms in order to survive in the environments in which they live.</p>	<p data-bbox="1467 142 2105 815">The heart and lungs are organs protected by the ribcage. Blood travels around the body transporting nutrients that have been absorbed into the blood stream from digestion. Blood also carries oxygen around the body which is used to power the body. This use of oxygen to create energy is called respiration. The heart beats, pumping blood around the body and blood vessels carry the blood. Arteries carry blood away from the heart; veins carry blood towards the heart. Capillaries are tiny blood vessels that connect the arteries and veins. The heart is composed of four chambers: two atria and two ventricles. The aorta is the largest artery in the body and most major arteries branch off from it. When we exercise, our heart beats more frequently so that the oxygen that is used around the body can be replenished. It returns to a resting heart rate afterwards. Fitter people tend to have lower resting heart rates.</p> <p data-bbox="1467 828 2123 1214">Drugs are chemicals that have an impact on the natural chemicals in a person's body. Drugs can be harmful or helpful, depending on what they are and how they are used. All drugs can be harmful if overused. Paracetamol and aspirin are examples of drugs that can be helpful as a painkiller. Cannabis and cocaine are examples of illegal drugs that can have serious negative effects. Alcohol and tobacco are examples of drugs that are legal to adults but that can have serious negative effects, such as liver disease and lung disease, respectively.</p> <p data-bbox="1467 1227 2067 1286">NB – note that discussion of drugs needs sensitive teaching due to family circumstances.</p>