

The human circulatory system

- This blood remains run throughout the body supplying oxygen to every cell in the body.
- They are made up of 3 types - arteries, veins and capillaries.
- **Arteries** are thick blood vessels that you can easily feel in the form of a pulse.
- They transport oxygenated blood to the cells.
- As they are full of oxygen, they appear to be a deep red colour.
- **Veins** are thick blood vessels.
- They transport blood back to the heart from the cells.
- As they have little oxygen, they appear to be more a blue colour than red.
- **Capillaries** are thin blood vessels.
- They allow oxygen and nutrients to pass to the cells, and waste products and carbon dioxide to be removed from them.
- They are used to allow them to reach every cell in the body.
- Blood (with oxygen and nutrients) goes round our bodies via the heart. We call this circulation (from the word 'circus').
- The heart sends blood to the lungs first to collect the oxygen from the air we've just breathed-in. Then it goes to where it's needed (this is where it red).
- The blood then returns to the lungs via the heart (this is shown in blue) with carbon dioxide - the gas that we breathe out.
- This is described as a figure of 8.
- When you exercise parts of your body need an increased blood supply (more oxygen and nutrients) so your heart beats faster.
- You also breathe faster - to get more oxygen into your lungs, and to get rid of the carbon dioxide.
- You also get hot and sometimes flushed (or red faced).
- By doing exercise regularly:
- Our hearts get bigger and bigger - better at pumping blood and not tiring so much so heart attack.
- Our lungs get stronger and have increased capacity so we are able to take in more oxygen in a single breath.
- We will feel healthier.