



Heart - Why does your heart beat?

Fact

- We can hear our heart beat because our heart is a pump that is pushing blood through it.
- We hear the heart pump beating when the heart valves squeeze shut on the blood flow then open to make the blood circulate around our body.
- Our heart is the hardest working muscle in our body. It beats automatically without us having to think about it. That's why it is called an involuntary muscle.
- With every heartbeat our heart sends about 150mls of blood, which is filled with oxygen, out through the arteries and into the body.
- Our heart has two main chambers. The top chamber is called the Atrium and the bottom chamber is the Ventricle.
- Blood goes into the Atrium and is pumped through to the Ventricle and then on to the rest of the body.

Do you know

- A mouse's heart beats faster than an elephant. A mouse has a pulse rate of around 500 beats per minute and an elephant's pulse rate is around 20 to 30 beats per minute.
- Doing exercise every day that makes you puff or your heart beat faster keeps your heart exercised and healthy.
- Eating fresh fruit and veges helps to keep our heart healthy too.

Experiments you can do

How to see your pulse moving.

What you need:

A drinking straw

A blob of blu-tack or plasticine

A stopwatch or a second hand on a watch

What you do:

First find your pulse in your wrist. You should be able to find it easily on the inside of your arm just below your wrist on the same side of your arm as your thumb. Then attach a blob of blu-tack over the place where you felt the pulse. Carefully push a straw into the blu-tack then let your arm lie flat on the table. Watch the straw move back and fourth with your pulse.

Measure the pulse rate and how many times your heart beats by counting the number of times the straw rocks back and fourth in a minute.

Other Investigations

See how hard your heart works by getting your hand and arm to work at the same time. Perhaps try this investigation outside.

You will need:

A plastic container that holds about 150mls
2 big bowls, one filled with water
A stopwatch or clock with a second hand

What you do:

Set the clock alarm for one minute. Fill the small container with water and start the clock. Empty the container of water into the empty bowl and repeat that until you've emptied 70 of the small containers filled with water from one big bowl to the other one. This is how much blood your body pumps through your heart in one minute!

Joke

What did the big heart say to the cheeky little heart? Beat it.