Centre of the Cell’s ‘STEM Pod’ Challenge

The Heart

What does our heart do?
The heart is a very strong muscle which is responsible for pumping blood around the body. It is important that blood full of oxygen and nutrients reaches all parts of our body, so that our cells can stay healthy and full of energy.

The connection between the heart and the lungs:
The heart first pumps blood to our lungs to pick up oxygen. The blood full of oxygen goes back to our heart. Then the heart pumps (even stronger) a second time, to push the blood full of oxygen all around our body - from our head to our toes! As the blood in our body starts running out of oxygen, it returns back to the heart so it can be pumped to the lungs again.

Did you know…
On average, your heart beats 100,000 times A DAY!

Try this…
Clench your fist - that’s about the size of your heart! For adults, the size of their heart is two clenched fists together.

Let us know how your challenge goes on social media @CentreoftheCell!
The Structure of the Heart

Aorta
Pulmonary Vein
Pulmonary Artery
Vena Cava
Right atrium
Left atrium
Right ventricle
Left ventricle

You can print out this worksheet, or trace the image to colour in the heart!

Let us know how your challenge goes on social media @CentreoftheCell!
Homemade Stethoscope Activity

What is a stethoscope?
A stethoscope is a piece of equipment used by doctors to listen to the sounds that the inside of your body makes. Doctors might check for the sounds of your tummy gurgling, air going in and out of your lungs - and your heartbeat!

What you will need:
Kitchen roll cardboard tube, funnel/water bottle, tin-foil, balloon, tape

Instructions:
1. Wrap your cardboard tube in tin-foil. This will give it a nice shiny look (like a real stethoscope).
2. Using tape, attach the narrow end of your funnel into the cardboard tube. If you don’t have a funnel, ask an adult to cut a plastic water bottle in half to act as the funnel.
3. Cut the tail end of a balloon off, and use it to cover the wide end of the funnel. Use tape to secure the balloon in place.
4. Place the balloon/funnel side onto someone’s chest, and the other end of the tube against your ear, and listen to the heart beat.

Let us know how your challenge goes on social media @CentreoftheCell!