Healthy Hearts At Home!

Age: 7-11 years

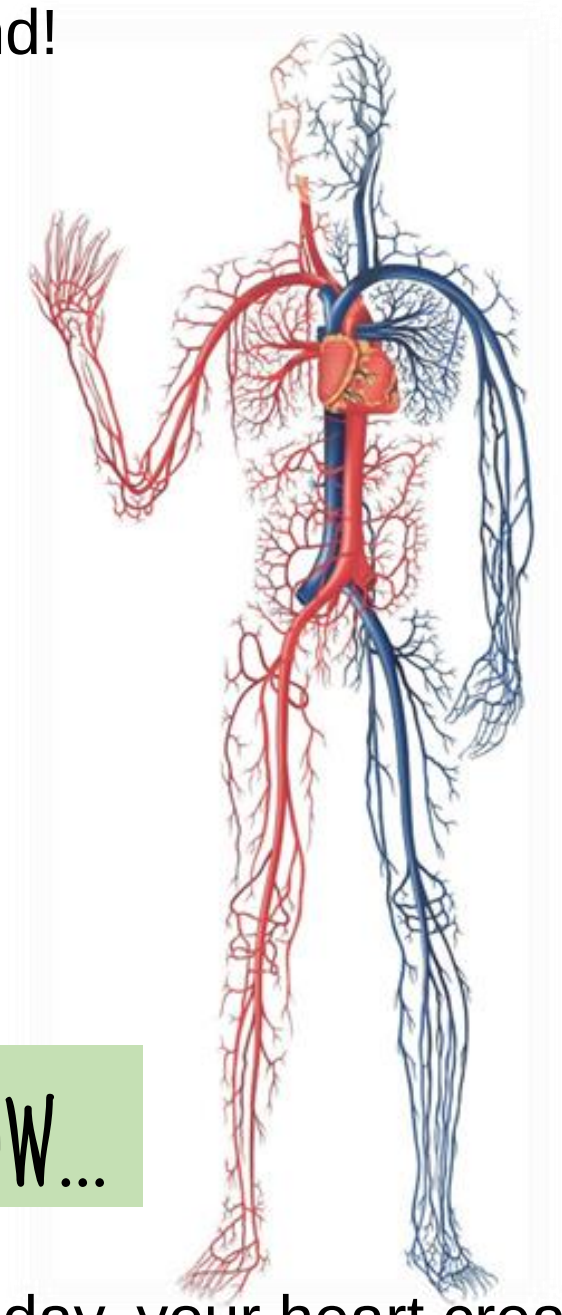
Time: 30-40 minutes

Activity Overview

In this session you will learn some interesting facts about the heart with some fun exercises which include maths and some jumping around!

What you'll need:

- Pen + Paper
- Stopwatch/Timer
- Calculator
- Some floor space!



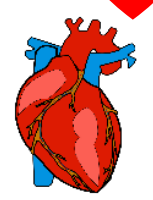
Background Science

Why is the heart unique?

The heart is a large muscular organ with the very important job of circulating blood through the blood vessels to the body. Located in the center of the chest, the heart is the hardest working muscle in the human body — always working, even while we are sleeping. The heart and blood vessels together make up the body's cardiovascular system and are vital to supplying the body with the necessary oxygen and nutrients needed to survive. When you breathe, your lungs take in oxygen. The heart pumps blood to the lungs to pick up oxygen, and then it pumps blood through the body to deliver that oxygen.

It feeds approx. 75 trillion cells in the human body. That's a big number!

DID YOU KNOW...

- Every day, your heart creates enough energy to drive a truck for 20 miles
- On average, it takes about 45 seconds for blood to circulate from the heart, all around the body
- The human heart is not this shape  it actually looks like this  !!!!!!

Run the activity

Can you guess how many times your heart beats in a minute?

Write your answer down.

(answers are at the bottom of the worksheet, upside down)

We're now going to calculate the total number a heart beats in an average lifetime!

This is a good time to practice your long multiplication so have your pen + paper ready!!!

We are going to say your heart beats an average of 100 times a minute.

We will say the average lifetime is 70 years.

First sum: 100 x 60= 1hr

That number x 24= One Day!

That number x 365= One Year!

That number x 70= One Lifetime!

(Try to do the sum yourself or ask your parents or sibling to help you)

Once you have a number have a go and practice how to say the whole number in one go.

Is it anything like this- 2,943,360,000!??

(Two billion, nine hundred and forty million, three hundred and sixty thousand!)

Have a think about why the numbers a slightly different, is there any time during the day when you're heart rate would be less?

Discussion- How can we keep our hearts healthy?

ANSWERS:

Your heart beats between 60-100 times a minute

Average beats- 3,679,,200,000 (Three billion, six hundred and seventy nine million, two hundred million)

Run the activity- the Experiment!

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JOIN THE MOVEMENT

First let's find your heart beat!

Either click on this link- https://www.youtube.com/watch?v=AHHr8qNU9QY
Or follow the instructions below-

1. Hold out two fingers on your right hand
2. Hold out the other hand, bend your elbow and bend your wrist away from your body
3. Place your two fingers on your bent wrist in line with your thumb and press firmly

- You should now feel the faint pump of blood through your veins

NB: Make sure jumpers are pushed back do they are not covering wrists
You may find this hard at first- repeat action several times until you can feel it.

We now Are going record how travelling to school in different ways affects your heart rate.

First we need to find out what your 'resting' heart rate is, this will help you practice being able to find our heart beat easily. To do this sit on a chair for a minute- no fidgeting! Use this time to find your heart beat. After a minute use the stopwatch to count your heart beat for ten seconds. Take that number and multiply by six to get your beats per minute! (Now is a good time to ask your brother or sister or parents to help you. They can do it too!)

For each way of travel do the activity for thirty seconds then find your heart beat and count for ten- then times by 6! Write your results down..

Driving: remain seated and pretend to drive- slowly!

Walking: Stand up and walk on the spot

Scooting: On one foot balance scoot with the other leg- fast!

Cycling: From a crouching position jump up into the air and back down over and over.

We'd love to hear from you!

Share pictures/videos of you taking part in our activities on….

#BIKEITATHOME

Tell us what you think of this activity

Click on the faces to link to our activity feedback survey