

# Disclaimer/s

We hope you find the information on our website and resources useful.

## Animations

This resource has been designed with animations to make it as fun and engaging as possible. To view the content in the correct formatting, please view the PowerPoint in 'slide show mode'. This takes you from desktop to presentation mode. If you view the slides out of 'slide show mode', you may find that some of the text and images overlap each other and/or are difficult to read.

To enter slide show mode, go to the **slide show menu tab** and select either **from beginning** or **from current slide**.



# Science

## Animals Including Humans

# Animals Including Humans

## The Heart





## Aim

- To know the three main parts of the circulatory system and describe the job of the heart.

## Success Criteria

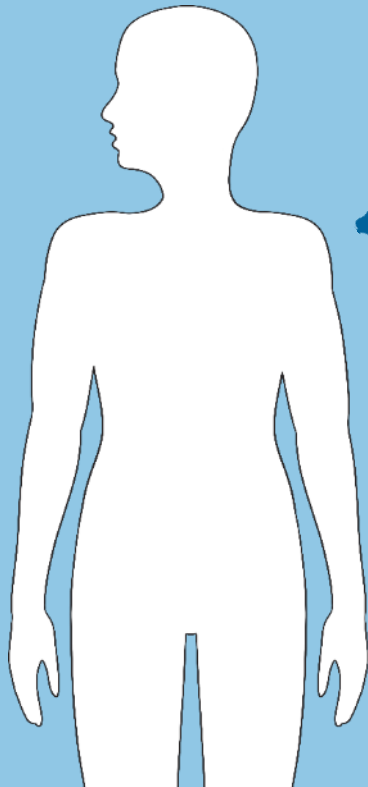
- I can identify the three main parts of the human circulatory system.
- I can explain what the heart does.
- I can work with others to create a living model of the circulatory system.



# Remember It



Can you remember the Animals Including Humans topic from year 4?

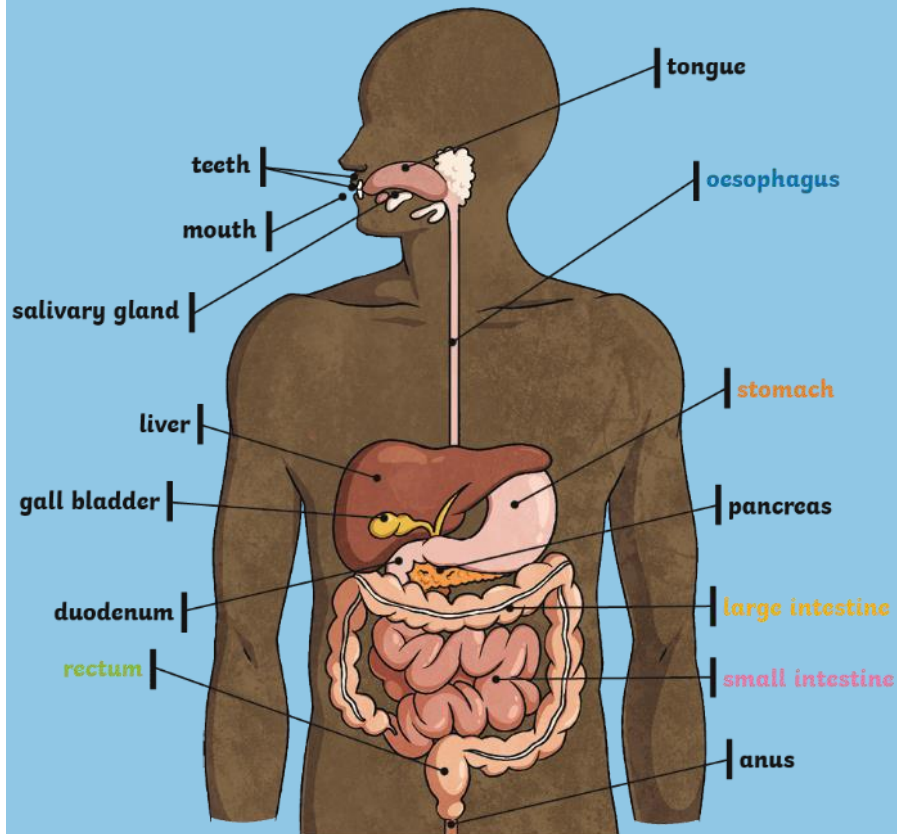


On your own body, point to where you think some of these organs are positioned. Show your partner.

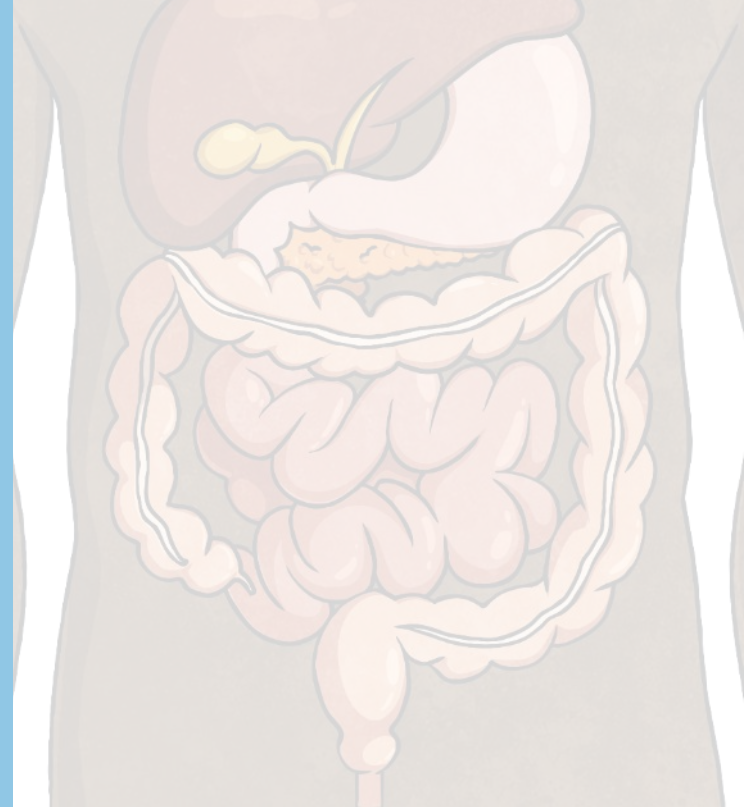
# Remember It



## The Digestive System



Did you remember any of these human organs from year 4?





# Remember It

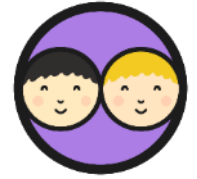


In this unit, we are learning about the circulatory system. The word '**circulation**' means '**the movement to, from or around something**'.

## Animals Including Humans

K	W	L
What I know	What I want to know	What I have learnt
<p>What do you already know about the heart and the circulatory system?</p> <p>Write these things down in the first column on the <b>KWL Grid</b>.</p>	<p>What would you like to find out?</p> <p>Write these things down in the middle column on the <b>KWL Grid</b>.</p>	

# The Heart



## True or False?

Talk to your partner about whether you think the statements are true or false.

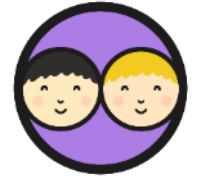
**1** The heart is a strong muscle.

**2** The circulatory system contains the lungs.

**3** The body has tubes that blood flows through.



# The Heart



Let's get started!

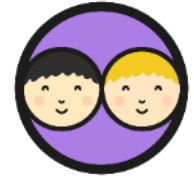
Have you ever seen or used a stethoscope?

What is a stethoscope used for?

A stethoscope is used to listen to sounds in the body, usually the heart, lungs or even the intestines!



# The Heart



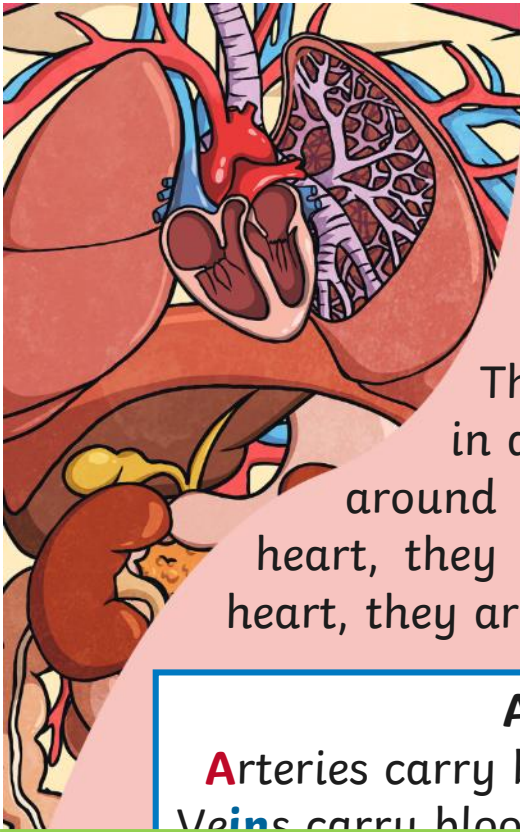
Let's have a look at the **Knowledge Organiser** for this topic.

Animals Including Humans		Year 6	Year 6
<b>Key Vocabulary</b> <b>circulatory system</b> A system which includes the heart, veins, arteries and blood transporting substances around the body. <b>heart</b> An organ which constantly pumps blood around the <b>circulatory system</b> . <b>blood vessels</b> <b>oxygenated blood</b> <b>deoxygenated blood</b> <b>Deoxygenated blood</b> is blood where most of the oxygen has already been transferred to the rest of the body.		Mammals have <b>hearts</b> with four chambers. Notice how the blood that has come from the body is <b>deoxygenated</b> , and the blood that has come from the lungs is <b>oxygenated</b> . nutrients, oxygen and carbon dioxide takes place. Arteries carry <b>oxygenated blood</b> away from the <b>heart</b> . Veins carry <b>deoxygenated blood</b> toward the <b>heart</b> . If you linked up all of the body's blood vessels, including arteries, capillaries, and veins, they would measure over 60,000 miles.	from the body to the rest of the body. (including water); waste products. of oxygen nicals which and relaxed; ore easily; top us from
The <b>heart</b> pumps blood to the lungs to get oxygen. It then pumps this <b>oxygenated blood</b> around the body.			

Do you think a cartoon heart looks like a real human heart?



# The Heart



The heart is a powerful organ that is situated between your lungs and is protected by the ribcage. The heart is a muscle that pumps blood all around your body. It is made up of four chambers (enclosed spaces).

There are many tubes, called blood vessels, coming in and out of the heart. The blood vessels carry blood around the body. If they carry blood away from the heart, they are called arteries; if they carry blood into the heart, they are called veins.

## An easy way to remember this is:

**A**rteries carry blood **a**way - they both start with the letter '**A**'.

**V**eins carry blood **i**nto the heart - 'veins' and 'into' both have the

X

What is the heart and what does it do?





# Order of Blood Flow



In your group, discuss and sort the **Order of Blood Flow Card Sort** cards into the correct order to show blood flow.

## Order of Blood Flow Card Sort

Cut out the cards below and put them in the correct order to show where blood flows through the body.

The first one has been done for you.

1. Your blood travels to the lungs and picks up oxygen.

From here, the blood gets pumped back to the lungs to pick up more oxygen so that the whole cycle can start again.

The blood that is full of oxygen travels to the heart. We call this blood oxygenated.

Look at your **Knowledge Organiser** and discover where the heart is. It will show you where the blood is being transported to.

Do you think the blood is **oxygenated** or **deoxygenated** when it is going into the lungs?



# The Human Heart



Make a fist.  
It is roughly the same size as your heart.  
Have a look at your teacher's fist.  
Are your hearts the same size?



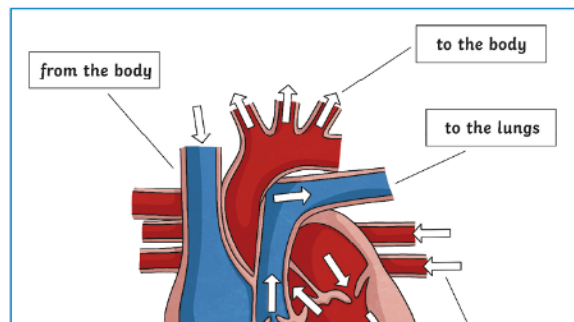
## The Human Heart

To know the three main parts of the circulatory system and describe the job of the heart.



### Task 1

Please add the labels from the box below to the correct place on the heart diagram. Some have been done for you.



~~from the body~~  
~~to the lungs~~  
from the lungs  
~~to the body~~

Show your understanding of the heart and how blood travels around the body by completing **The Human Heart Activity Sheet.**

# The Circulatory System



You're going to need your **Knowledge Organiser** for this bit.

Find the answers to these questions. Your teacher may ask you to write them down on your whiteboard or in your workbook.

**1** What are the three parts of the circulatory system?

heart, blood vessels and blood

**2** What are the three types of blood vessels?

veins, arteries and capillaries

**3** What is the difference between oxygenated and deoxygenated blood?

Oxygenated blood has more oxygen and it is pumped from the heart to the rest of the body. It gets the oxygen from the lungs. Deoxygenated blood is where most of the oxygen has already been transferred to the rest of the body.



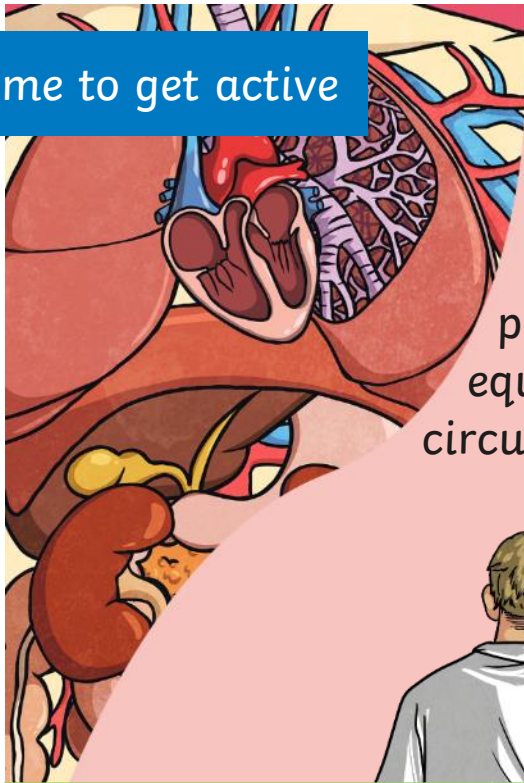
# Living Models - Order of Blood Flow



Time to get active

Your task is to create a living model of the heart or circulatory system. Your teacher will put you into groups.

The people in your group will represent the blood pumping around and you can use the PE equipment to create the different parts of the circulatory system.



X

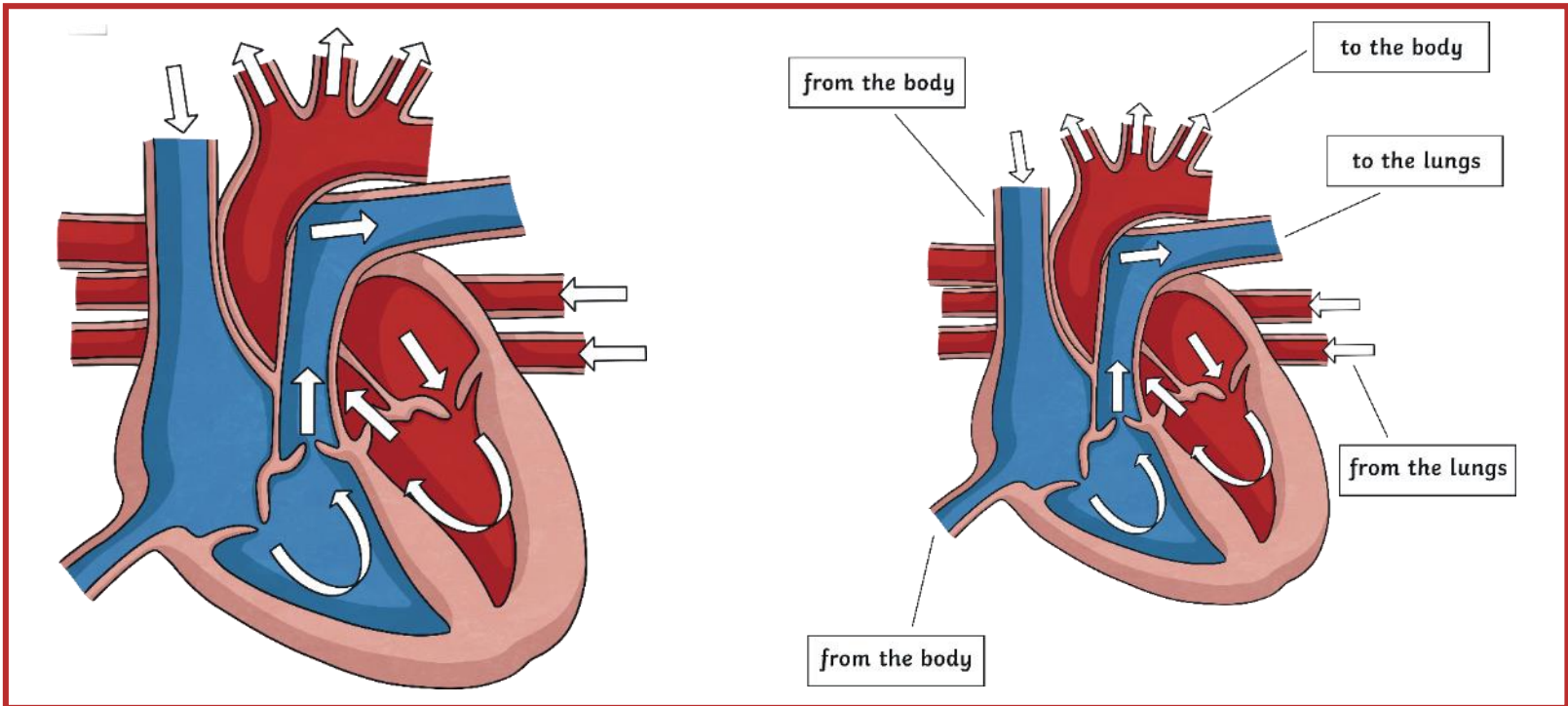
How effective do you think your group's living model was in helping to explain to others how the heart or circulatory system works?



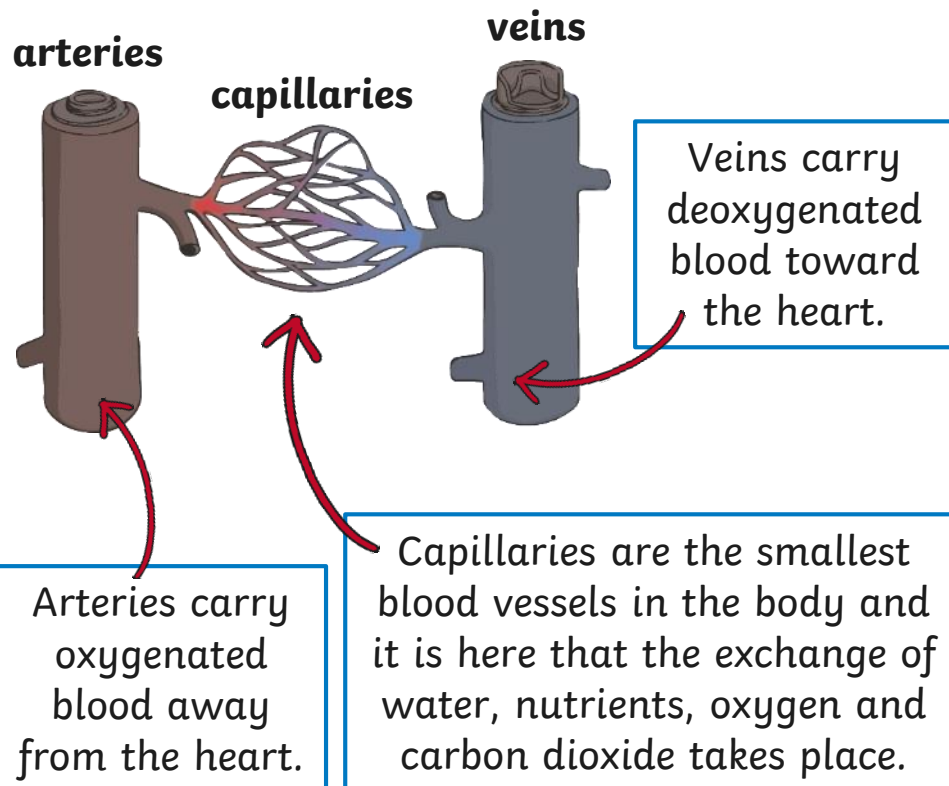
# Share and Review



Let's look at a group who acted out the blood pumping around the heart.  
How many points did they cover?  
How could they have improved their working model?



# Share and Review

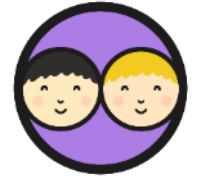


The heart pumps blood to the lungs to get oxygen. It then pumps this oxygenated blood around the body.





# True or False? (Revisited)



**1** The heart is a strong muscle.

**2** The circulatory system contains the lungs.

**3** The body has tubes that blood flows through.

Think of your own true and false statements and write them in your book.

Then, test your partner.

Afterwards, don't forget to write which is true and which is false.

## Aim

- To know the three main parts of the circulatory system and describe the job of the heart.

## Success Criteria

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