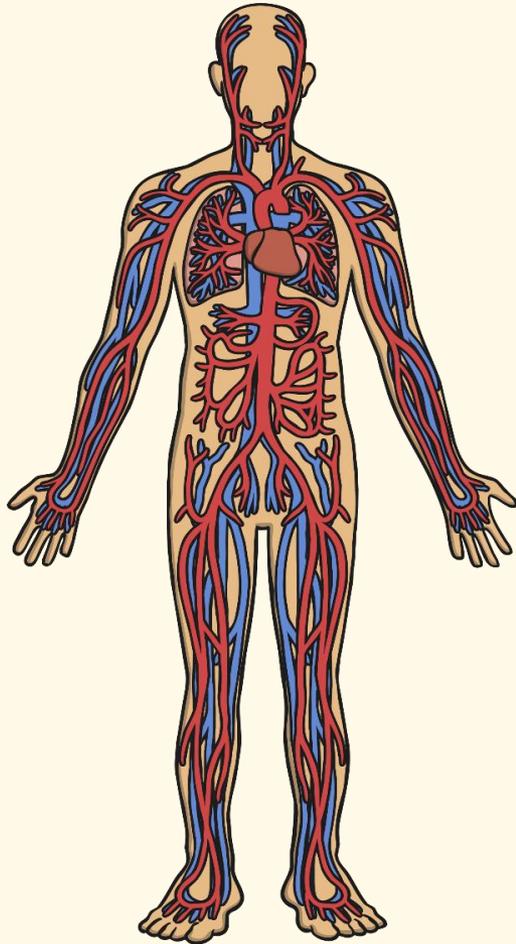


# The role of blood

# Recap



- What parts of the circulatory system can you remember?
- What do each of these parts do?
  1. Heart:
  2. Blood vessels:
  3. Lungs:
  4. Capillaries:

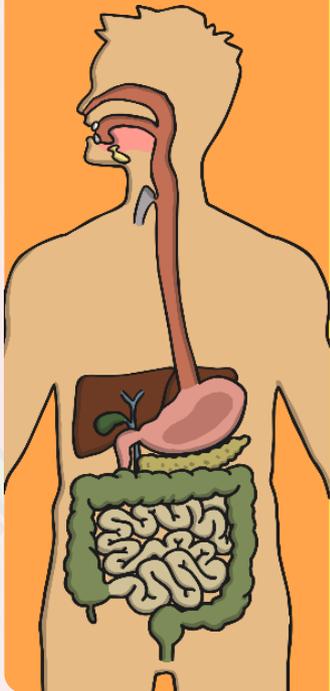
# We are building on your prior knowledge

In Year 4 you learned all about the digestive system and how the body takes in food to create energy.

You know that food contains nutrients which are important for keeping our bodies healthy.

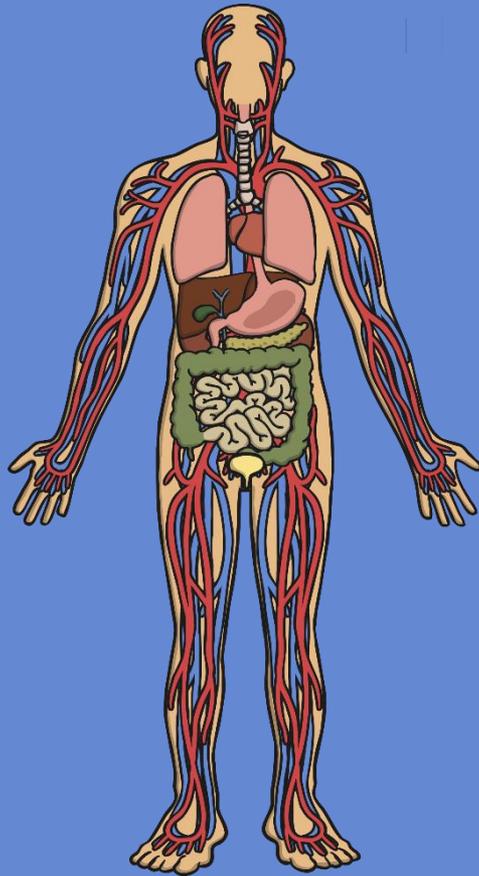
Now that we are studying the circulatory system we are going to find out the next step in the journey of nutrients:

- What happens after we digest food – where does it go?
- How are the nutrients in our food transported around the body?
- How are the circulatory system and the digestive system connected?



# How Does It Work?

## How Does It All Fit?



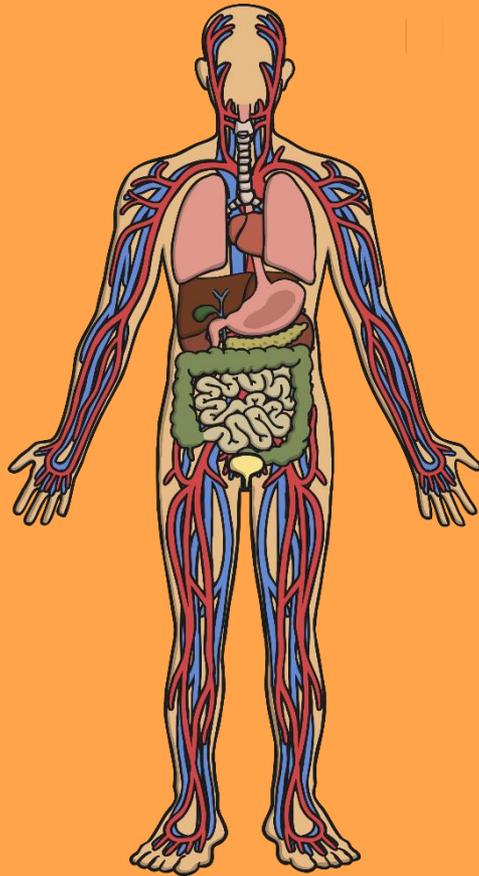
Nutrients and water are absorbed in the system in the stomach, small and large intestines.

They enter the blood stream via the capillaries where they are passed through to the arteries.

The blood is circulated throughout the body (including being oxygenated in the lungs and the heart).

Nutrients are absorbed by the cells that need them and water is absorbed by all cells.

# The role of blood



At all times, blood is moving around your body, constantly delivering water and nutrients to the places that need it.

These nutrients give you energy and allow you to move!

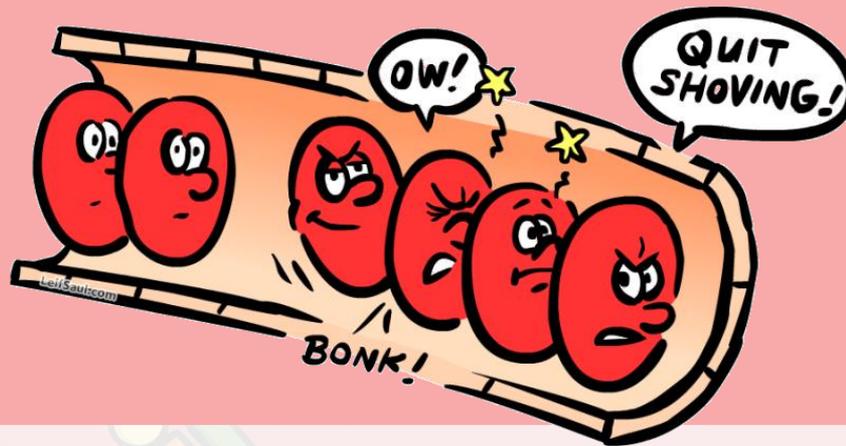
Blood also removes waste from your body, such as carbon dioxide, which it carries back to the lungs to be breathed out.

Without blood, you wouldn't be alive as your body would not be supplied with the water and nutrients it needs.

# The role of blood

If you didn't get the chance last week, make sure you watch this video to find out about the role of blood in our bodies.

<https://www.bbc.co.uk/bitesize/topics/zwdr6yc/articles/zqv4cwx>

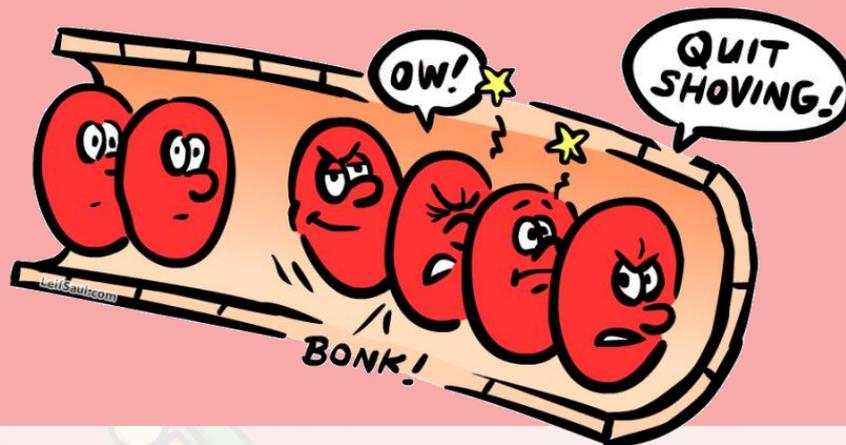


# The role of blood

The more you move, the more blood is required by your muscles.

When you rest, your blood can move more slowly because there isn't as much demand.

When you sprint as fast as you can, more blood is needed and so your heart starts pumping faster so that the blood can move quickly around your body – making deliveries and removing waste.



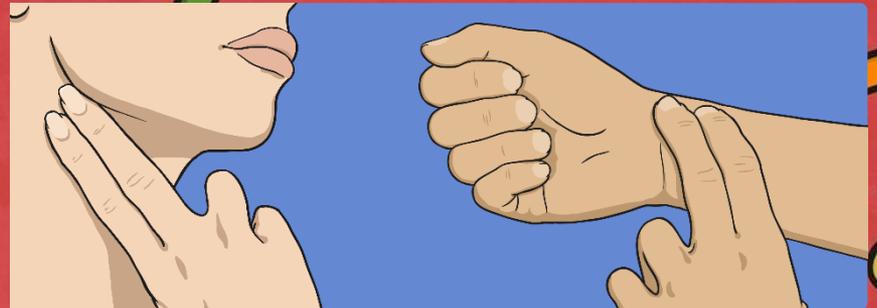
# Pulse

You can measure your heartbeat by measuring your pulse. Your pulse is also known as your heart rate. It is the number of times your heart beats in a minute. You can measure it by taking your pulse for a minute, or count for 30 seconds and multiply by 2.

## Tips for finding your pulse:

- Use your index and middle fingers to find your pulse.
- Press gently and lightly. If you press too lightly or too firm you will not be able to detect your pulse.
- Do not use your thumb. Your thumb has its own pulse that you may feel which would affect your results.

1. Find your pulse in your neck by pressing your fingers on the side of your neck. This should be the soft hollow next to your windpipe.
2. Find your pulse in your wrist by holding out one of your hands with your palm facing upwards and your elbow slightly bent. Put your fingers on the inside of the wrist at the base of the thumb of the hand facing outwards.





# Pulse



Watch this video to find out more about taking your pulse.

[https://www.youtube.com/watch?v=wzdVUSVObOw&ab\\_channel=LynnHefeLe](https://www.youtube.com/watch?v=wzdVUSVObOw&ab_channel=LynnHefeLe)

Now that you know how to take a pulse, it's time to record some results!

## ***Your task***

**Your task** is to record the heart rate of everyone in your house. We also need you to record their age. We will use all of the classes data to see if there are any patterns or trends in our class.

For now, record these in your workbook, but we will collect them all together soon.

