



Circulatory System

Parts

Lesson 2

**Respiratory system and the
muscular system**

Aim

- To explore how the respiratory system is linked to the circulatory system.
- To explore how our lungs work.

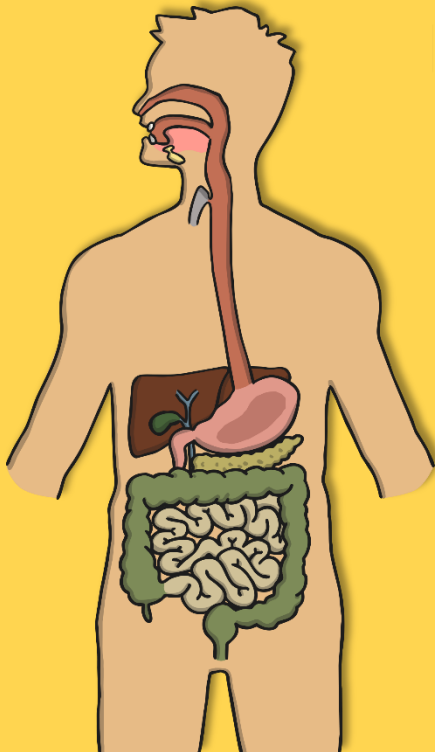
Success Criteria

- I can identify the main parts of the respiratory system.
- I can identify the roles different parts play in the respiratory system.
- I can explain the link between the respiratory and circulatory system.

Quick Quiz



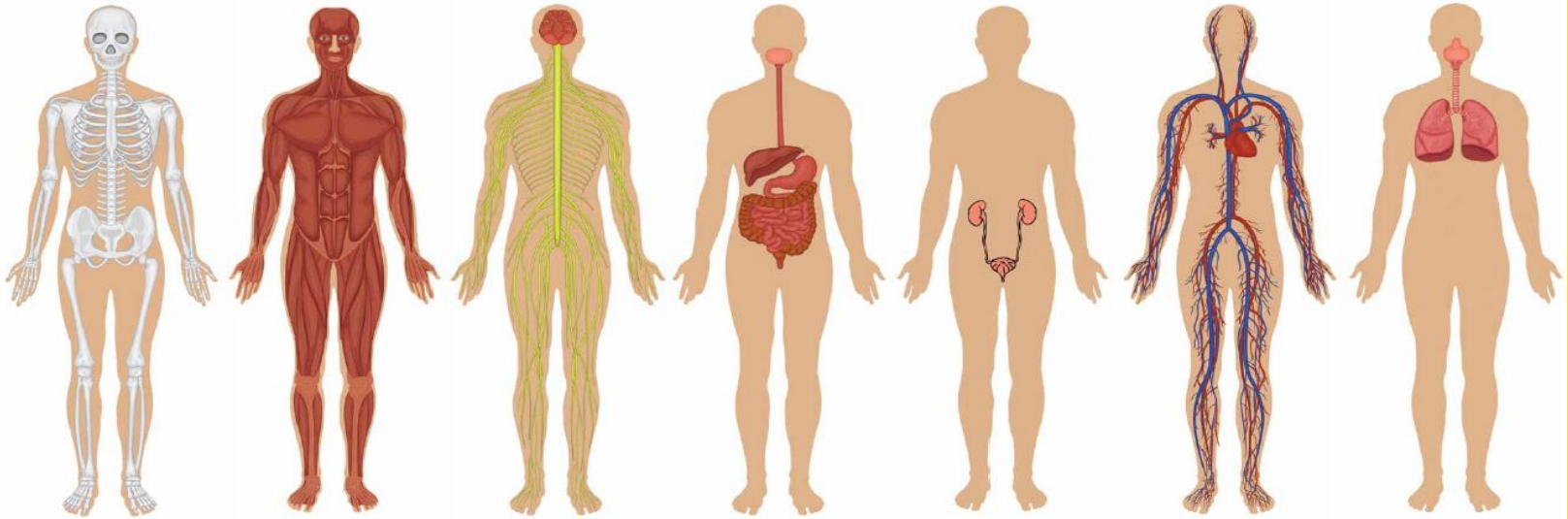
How many different systems in the human body can you name?
(clues for 2 are below!)



Quick Quiz



Did you remember all 7?



Skeletal
system

Muscular
system

Nervous
system

Digestive
system

Renal
system

Circulatory
system

Respiratory
system

The Respiratory System



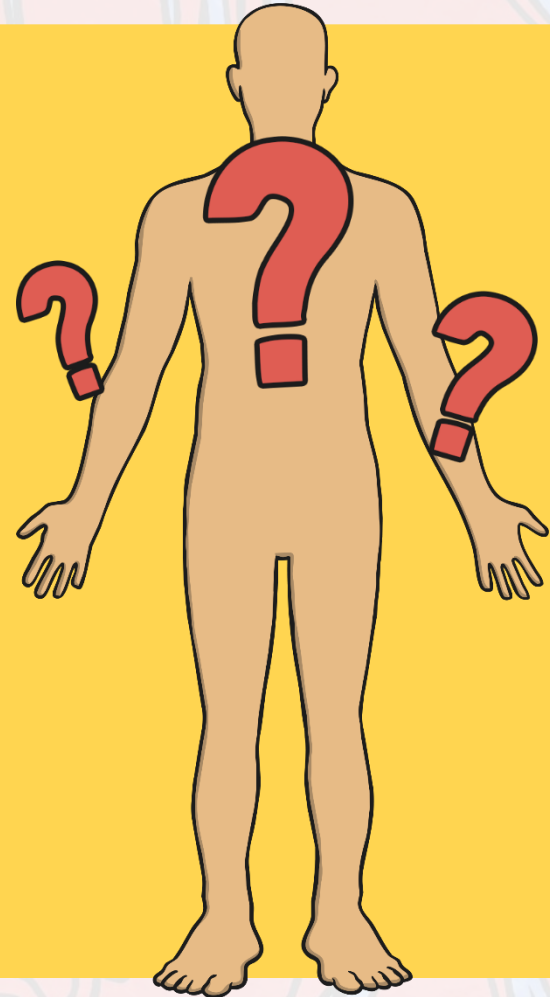
Today we are going to explore the respiratory system.

What do you think is the purpose of the respiratory system?

Have a think:

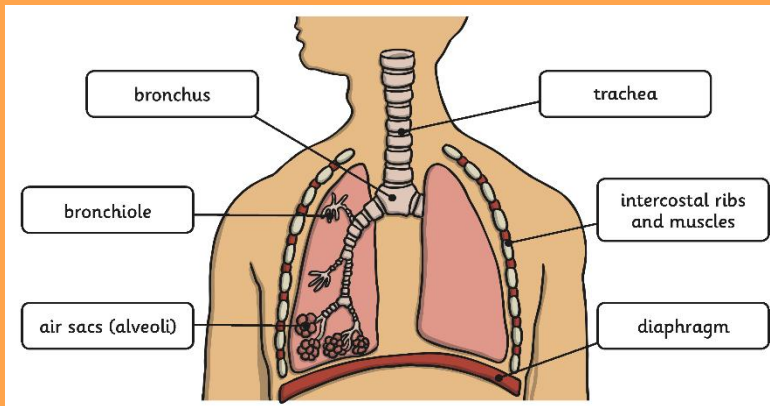
What do you think the system does?

Do you know the names of any parts of the system?



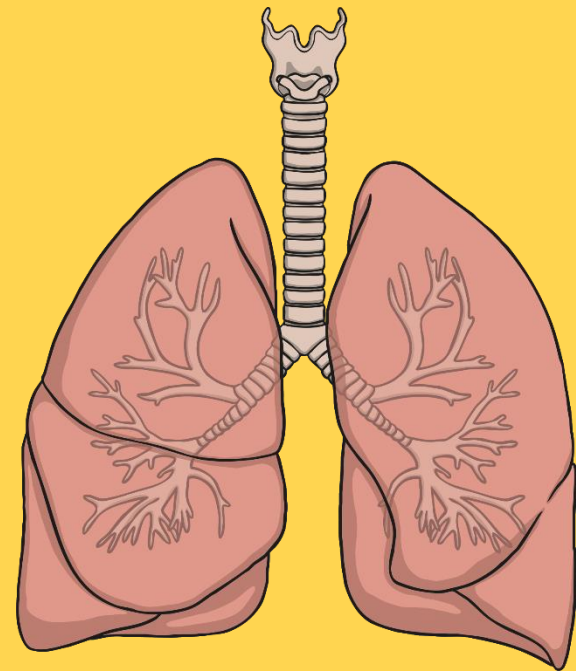
Parts of the Respiratory System

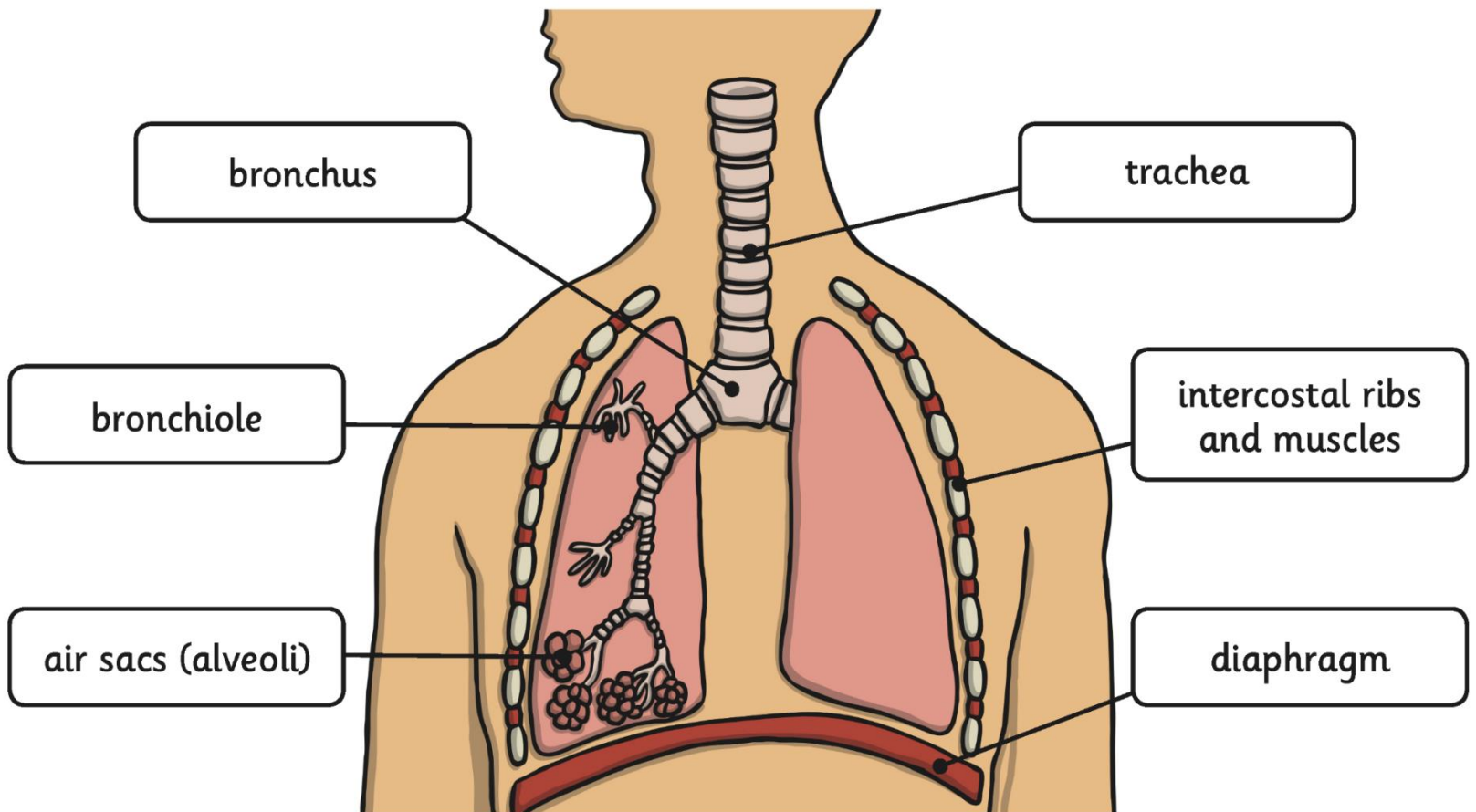
We saw this yesterday but let's take some more time to understand it.



See the next slide for a larger version of this diagram

Air breathed in through the mouth or nose travels down the trachea, through the bronchi into one of the lungs. The air travels into the bronchioles and into the air sacs (alveoli). From here, the gas is able to pass in to the bloodstream.





Parts of the Circulatory System



Complete page 4 in your booklet about the respiratory system and then continue.

You may also want to look at:

<https://www.ducksters.com/science/breathing.php>

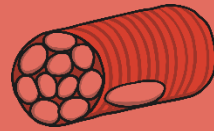
Mighty Muscles



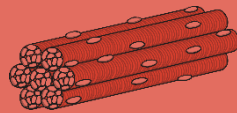
What are Muscles?

There are three types of muscle:

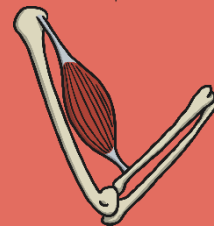
Our bodies are made up of different types of cells



Cells form to make tissue



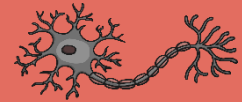
Skeletal muscles are made up of just muscle tissue



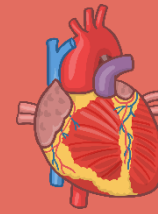
smooth muscle cell



bone cell



nerve cell



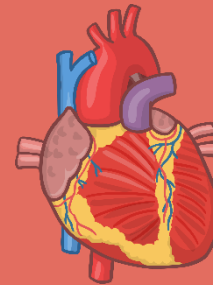
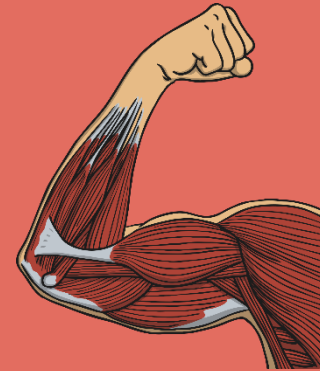
Organs are made up of more than one type of tissue

Voluntary and Involuntary

Some muscle movement is voluntary and we can control it. Other muscle movement is involuntary and we don't have control over it.

Look at the pictures to the right: Which shows voluntary muscle movement and which shows involuntary?

Can you think of any other involuntary or involuntary movements?

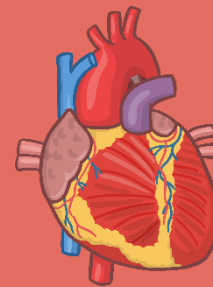


Voluntary and Involuntary

Watch the following video and see what facts you can gather about the muscles of the human body.

<https://www.youtube.com/watch?v=UGSiHwgX0k>

Use this information to help you complete the work on page 5 of your booklet.



What's the difference between a muscle, ligament and tendon?

Match the name to the description:

muscle

A short band of tough, flexible fibrous connective tissue which connects two bones or cartilages or holds together a joint (such as the knee).

ligament

A flexible but inelastic cord of strong fibrous collagen tissue attaching a muscle to a bone.

tendon

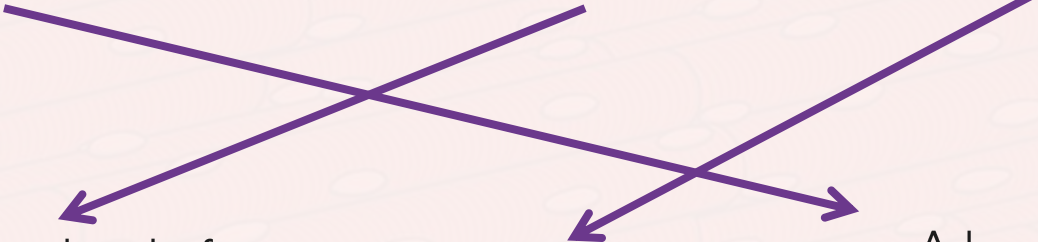
A band or bundle of fibrous tissue in a human or animal body that has the ability to contract, producing movement in or maintaining the position of parts of the body.

What's the difference between a muscle, ligament and tendon?

muscle

ligament

tendon



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Parts of the Circulatory System



Complete page 5 in your booklet.