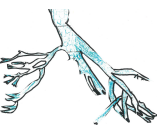


What am I made of... and why do I get sick?



XP.

Organ Systems of the Body Cardio-Respiratory System



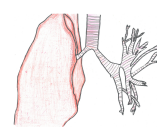
Bronchi

Location
The bronchi are tubes that carry air from the trachea to the smaller airways in the lungs and are located in the chest between the lungs.

Function
The bronchi are inside the lungs. When someone takes a breath through their mouth or nose it travels down into the larynx and then makes its way through the trachea and bronchi. The bronchi have tiny hairs called 'cilia' which line them and together with mucus, they trap small dust particles to help protect the lungs.

Bronchitis
Bronchitis is a disease that affects the bronchi. The walls of the bronchi produce mucus which traps dust, but bronchitis can cause them to make excess mucus which makes you cough lots. The most common cause of bronchitis is infection with viruses; but other things like tobacco smoke, dust, fumes, vapors and air pollution can make it worse. Bronchitis is communicable which means it can be passed on from one person to another.

Keira Moules and Oliwia Walczak



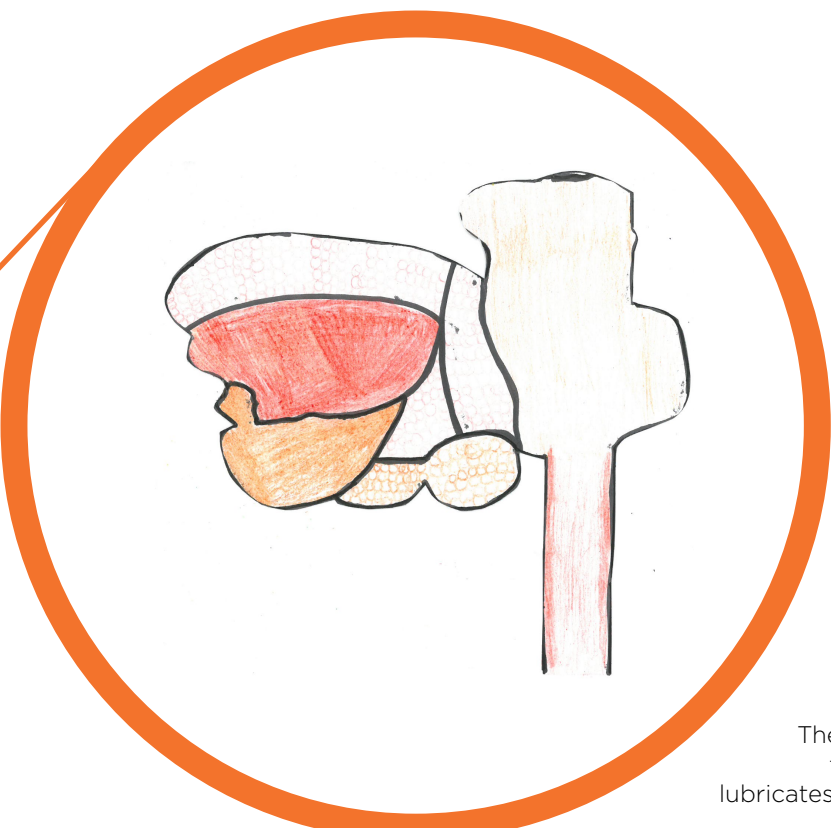
Lungs

Location
The lungs are behind the ribcage. The diaphragm is just underneath the lungs. The lungs allow us to breathe. The left lung is smaller than the right lung because the left makes room for the heart which is on the left side of the chest.

Function
The lungs are part of the respiratory system which allows people to breathe. The breathing process starts when air enters the mouth and nose, before making its way to the trachea. Air then makes its way down to the bronchi and then separates into the bronchioles which are shaped like branches of a tree. The air then goes to the alveoli which are very thin, small spaces that look like bunches of grapes.

Lung Cancer
Lung cancer is one of the most common forms of cancer. It is serious because it can affect how the lungs work and can also have an affect on other parts of the body, such as the liver, brain and bones. Lung cancer is non-communicable which means it cannot be spread between people. Smoking increases the risk of getting lung cancer greatly. Tumours can form in the lungs which make it very difficult to breathe. You should see your doctor if you have a persistent cough. Unfortunately lung cancer kills many people. About 35-40,000 people die every year in the UK from lung cancer, this is about 20% of all people who die from cancer in this country.

Kaius Ameri and Safiya Monks



Mouth, Nose and Trachea

Location and Function
Mouth

The mouth is the first part of the digestive system. You chew food down so you can swallow it but before you do, saliva lubricates the food so it does not hurt or damage your throat when you swallow.

Nose

The nose does a very important job helping you breathe, it filters out large particles and warms the air.

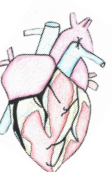
Trachea

The nose and mouth can help a lot of things in your body but the main thing is your breathing. In your throat there is the larynx, pharynx, and epiglottis. The epiglottis is the flap of skin that covers the trachea which stops food going down and prevents choking. The trachea's job is to allow you to breathe as it connects the mouth and nose with the lungs.

Common Cold

A cold is a viral infection that affects the nose, throat, sinuses and upper airways. It's very common and usually clears up on its own within a week or two. The main symptoms are a sore throat, a blocked nose, sneezing and a cough. More severe symptoms are: muscle stiffness, joint pains and a high temperature. A common cold is communicable. You can spread a cold very easily by things such as coughing on or near others or sneezing on your hands and then touching something that another person touches. There is no cure for a cold, but you can look after yourself at home by resting, drinking plenty of fluids and eating.

Katie Smithstone and Millie Finney



Heart

Location

The heart is situated in the thoracic cavity, between the lungs, slightly more towards the left, causing the left lung to be smaller.

Function

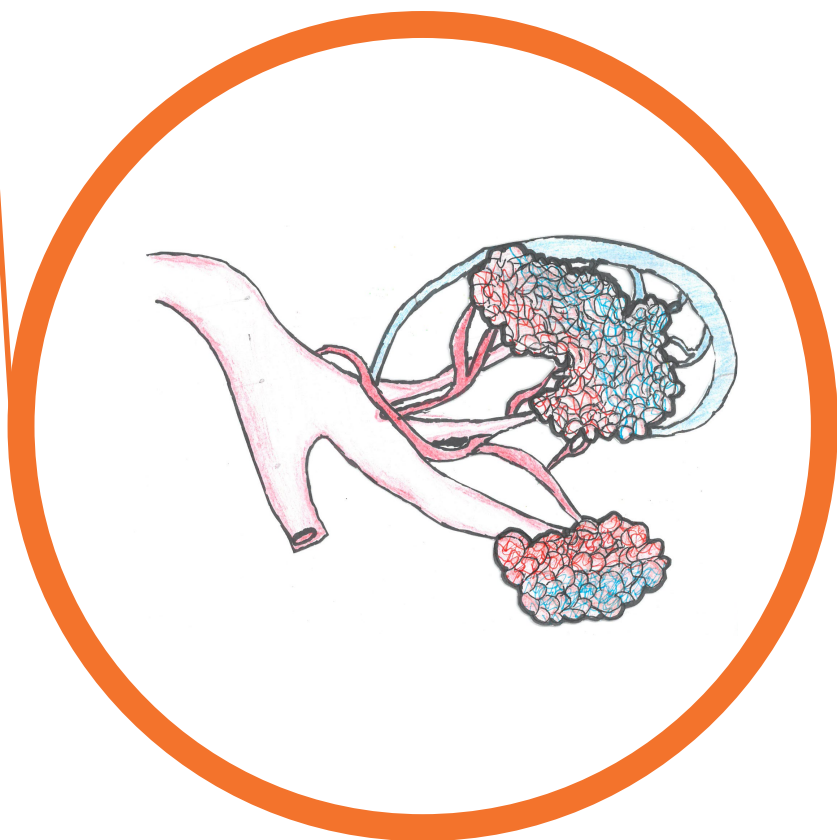
The function of the heart is to pump blood around your body to keep you fit and healthy and make sure all parts of your body have the vital nutrients they need to work.

Heart Disease

Heart disease is a disorder of blood vessels of the heart that can lead to a heart attack. The main cause of the heart disease is a buildup of plaque in arteries which supply the heart muscle. A heart attack can be caused because of a blockage through a blocked artery which stops oxygen and nutrients getting to the heart. It is more common as you age. It is a non-communicable disease, which means that it cannot be caught, usually it develops as a result of the lifestyle you live.

You can help prevent heart disease by doing exercise, you should do at least 2 1/2 hours of exercise a week. Secondly you can also lower your cholesterol levels if you can. A healthy diet can help avoid developing heart disease, so try eating more vegetables, fruit and whole grains and less fried foods high in saturated fat. Giving up smoking is also a great way to reduce the chances of heart disease.

Caitlin Lofthouse and Chloe Ackroyd



Alveoli

Location

Alveoli are found in the lungs. They are positioned at the end of the bronchioles.

Function

The alveoli are tiny air sacs that allow oxygen and carbon dioxide to flow between the lungs and circulatory system. Blood cells pass through alveoli, pick up and drop off carbon dioxide through diffusion.

Asthma

Asthma is a condition which causes the bronchioles to constrict (become narrowed) and also produce more mucus making it harder to breathe. This causes wheezing because your airway is so narrow and irregular it creates a vibration in the air and makes a whistling noise. As bronchioles constrict it makes it harder for air to get to the alveoli. The normal treatment for an asthmatic is an inhaler which contains chemicals which relax the muscles around the bronchioles, allowing the bronchioles to dilate (widen) and carry air more easily.

Joel Gardener and Jack Gill

This information was brought to you by Year 7 students at XP School and was made possible through an association with the Medical Imaging Department at Doncaster Royal Infirmary.

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