

Respiration and Breathing (Biology)

Year 7, Autumn Term

<i>You will be taught</i>	<i>You should know</i>
the role of lung structure in gas exchange, including the effect of smoking	that the lungs are specially adapted for gas exchange by having a greatly folded surface, creating a large surface area
	that oxygen is taken into the lungs by breathing and transported to the tissues by the circulatory system
	that smoking is one of the causes of lung cancer and heart disease
	that smoking reduces the surface area of the lungs, leading to severe breathing difficulties
that aerobic respiration involves a reaction in cells between oxygen and food, in which glucose is broken down to carbon dioxide and water	the difference between breathing and respiration
to summarise aerobic respiration in a word equation	that energy is made available by aerobic respiration, summarised by the word equation glucose + oxygen -> water + carbon dioxide + energy
	how to test exhaled air for carbon dioxide using limewater and that limewater goes cloudy with an increase in carbon dioxide
that the reactants and products of respiration are transported throughout the body in the bloodstream	that oxygen and carbon dioxide are carried in the blood and exchanged with the atmosphere through the lungs

http://www.bbc.co.uk/schools/ks3bitesize/science/biology/gas_intro.shtml

http://lgfl.skool.co.uk/viewdetails_ks3.aspx?id=429

<http://www.bbc.co.uk/schools/gcsebitesize/biology/humansasorganisms/3respirationrev2.shtml>

<http://teachhealthk-12.uthscsa.edu/studentresources/AnatomyofBreathing3.swf>