THE RESPIRATORY SYSTEM

By: Gabby and Daisy

PURPOSE OF THE RESPIRATORY SYSTEM

- In our body oxygen is take out of the air and into our lungs to transport oxygen to all the parts of our body.
- Our lungs produce carbon dioxide which is released into the air when we exhale from our lungs.
- Haemoglobin in our red blood cells takes the oxygen that our lungs produce and transport it throughout the body.

PARTS THAT MAKE UP THE RESPIRATORY SYSTEM

SINUSES: HOLLOW SPACES IN THE SKULL THAT ARE FILLED WITH AIR.

NASAL CAVITIES: THE NASAL CAVITIES ADJUST THE TEMPERATURE AND HUMIDITY OF THE AIR THAT WE BREATHE.

TRACHEA: THE TRACHEA IS A WIDE, HOLLOW TUBE THAT CONNECTS THE LARYNX TO THE BRONCHI OF THE LUNGS. THE TRACHEA PROVIDES AIRFLOW TO AND FROM THE LUNGS.

PARTS CONT.

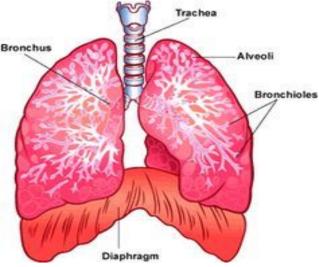
BRONCHIOLE: BRONCHIOLES CARRY AIR FROM THE TRACHEA INTO THE LUNGS. THE SMOOTH MUSCLE TISSUE IN THEIR WALLS HELPS TO REGULATE AIRFLOW INTO THE LUNGS.

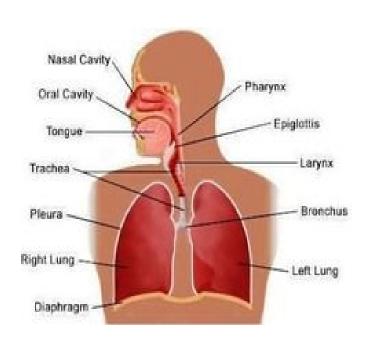
<u>LUNG</u>: THE LUNGS TAKE THE OXYGEN OUT OF THE AIR THAT WE BREATHE AND TRANSFORMS IT INTO THE NECESSARY ENERGY THAT THE BODY NEEDS. THE LUNGS ALSO EXCRETE CARBON DIOXIDE WHICH IS CONSIDERED A WASTE PRODUCT OF THE BODY.

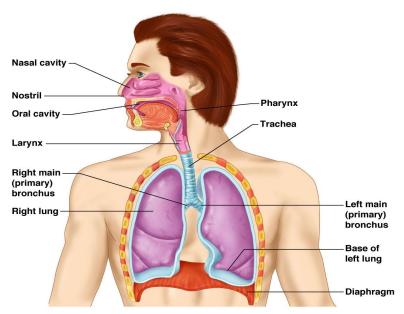
PARTS CONT.

<u>DIAPHRAGM</u>: THE MUSCLE THAT SEPARATES THE CHEST CAVITY FROM THE ABDOMEN. IT IS THE MAIN MUSCLE OF THE RESPIRATORY SYSTEM AND THE CONTRACTION OF THE MUSCLE EXPANDS

THE LUNGS WHEN BREATHING AIR IN.







Copyright © 2009 Pearson Education, Inc., publishing as Pearson Benjamin Cummings.

RELATIONSHIP OF THIS SYSTEM TO OTHER BODY SYSTEMS

- Works with the Circulatory System to circulate blood and Oxygen through the body
- Works with Digestive System by contracting to muscles to break down the food
- Works with the Nervous System by shooting off sensors when sensing deflation, inflation or chemical stimulation

MEDICAL DISEASES

CHRONIC OBSTRUCTIVE PULMONARY DISEASE OR EMPHYSEMA IS A DISEASE THAT DAMAGES THE AIR SACS (ALVEOLI) IN YOUR LUNGS, MAKING YOU PROGRESSIVELY MORE SHORT OF BREATH. THIS DISEASE IS USUALLY CAUSED BY SMOKING.

EMPHYSEMA

Healthy Lungs



 Normal Resolution of Inflammation

Tobacco Smoker's Lungs



- Failure to Resolve Inflammation
- Chronic Inflammation