

Answers

The respiratory system includes

- the nose and nasal cavities to filter air that is breathed in,
- the throat or pharynx,
- the voice box or larynx
- the windpipe or trachea
- the lungs
- the bronchi which are air tubes branching out in the lungs
- the airsacs

The body's cells convert oxygen into energy in the air sacs generating carbon dioxide as a waste product. The lungs are protected by the rib cage and the diaphragm underneath. The lungs surround the mediastinum which contains the heart as well as the oesophagus, blood vessels, bronchi nerves and parts of the trachea. The parietal pleura is a membrane that lines the thoracic cavity.

When someone breathes in the ribs, diaphragm and thoracic muscles expand to increase the capacity in the thoracic cavity. When they breathe out the ribs and muscles contract to reduce the capacity.