RESPIRATORY SYSTEM WORKSHEET

CLIL

- **respiratory system** – dýchací soustava
- **nose** – nos
- **windpipe, trachea** – průdušnice
- **lungs** – plíce
- **alveoli** – plicní sklípky
- **mouth** – ústa
- **larynx** - hrtan
- **bronchi** – průdušky
- **epiglottis** – hrtanová příklopka
- **diaphragm** – bránice
- **breath** – dech
- **breath in** – nadechnout
- **breath out** – vydechnout
- **oxygen** – kyslík
- **carbon dioxide** – oxid uhličitý
- **oxygenate** – okysličovat

Lungs

Put your hand on your chest. Breath in and out. Your chest rises and falls because of the work of your lungs which fill up like balloons as you breath in. As a balloon deflating when pushing air out, your lungs release air when you breath out. Each person has 2 lungs. The right lung is larger than the left. The left lung is smaller so that there is enough room in the chest for the heart, which is also on the left-hand side of the body.

1. What do lungs do? How many do we have?

2. Explain the function of the lungs. What might you compare lungs to?

3. What function to lungs perform? How are the two lungs different than one another?

Pavel Hodál pavel@tybrdo.cz; text Expedice Google Human Anatomy – Respiratory System
The Respiratory System

Powered by the lungs, the respiratory system also includes the nose, mouth and trachea or windpipe. The nose and mouth pull air in and out of the body. The trachea leads to long thin tubes called bronchi which branch out in the lungs. The lungs are full of tiny sacs called alveoli. Within the alveoli, blood flows to get rid of carbon dioxide and get charged with oxygen. The blood then leaves the lungs to take oxygen all over the body.

1. Name 3 parts of the respiratory system.

2. What are the bronchi lined with and why?

3. Name the parts of the respiratory system. How do they work together?

Air Exchange

The lungs work with the heart to make sure our bodies have enough oxygen. The heart pumps blood that doesn't have enough oxygen into the lungs, where it reaches the alveoli. There, the blood leaves carbon dioxide and picks up oxygen. Then, the blood is returned to the heart where it is pumped out to the rest of the body.

1. How do the heart and lungs work together?

2. Explain how blood gets to the lungs and what happens there. Name at least 2 important parts of lungs.

3. How does the circulatory system interact with the respiratory system?
The Trachea
The trachea, also known as windpipe, is 1 inch wide and 4-6 inches long. It connects the mouth and nose to the lungs so that air may flow through. It is made of cartilage, which is the same material on the end of your nose. At the top end of the trachea is the larynx which also helps with breathing and speaking. The epiglottis is a small flap of tissue that covers the trachea when swallowing so food doesn't accidentally go into this tube.

1. Where does the trachea begin and where does it lead to?

2. Describe the trachea in detail including how long it is and what it is made of.

3. What is the epiglottis and what does it do?

Inside the lungs
The lungs are full of intricately connected bronchioles and alveoli. Branching throughout the lungs by the thousands, the alveoli make the lungs spongy and soft. When breathing in, each alveolus puffs out like a balloon, causing the whole lung to grow in size.

1. Describe what the inside of a lung looks like.

2. What are alveoli?


Smoking and Your Lungs
Smoking cigarettes or inhaling smoke of any kind is very bad for the lungs. Many functions that the lungs perform are harmed by smoking. For example, the bronchi produce more mucus in smokers to...
catch all of the dust being inhaled, and so smokers often have bad coughs. Lung tissue, or the cells that make up the lungs die due to smoking. Cancer in the lungs may also be caused by smoking.

1 What does smoking do to the lungs?

2 Why does smoking turn the lungs black?

3 List and explain 3 effects of smoking on the lungs.

Stavba plic
Label the parts of the lungs

<table>
<thead>
<tr>
<th>průdušnice</th>
<th>průduška</th>
</tr>
</thead>
<tbody>
<tr>
<td>levá plíce</td>
<td>pravá plíce</td>
</tr>
<tr>
<td>plicní sklípek</td>
<td>bránice</td>
</tr>
</tbody>
</table>

Dýchací cesty
Place the following terms in order tracing the pathway of air.

<table>
<thead>
<tr>
<th>beginning</th>
<th>end</th>
</tr>
</thead>
<tbody>
<tr>
<td>↓</td>
<td>alveoli (air exchange sacs)</td>
</tr>
</tbody>
</table>

Word Bank:
- plicní sklípky, průdušky, dutina nosní, hrtan, průdušnice, alveoli, bronchi, nasal cavity, larynx, windpipe

Co to znamená epiglotis?
What is the name of the flap that covers the trachea when swallowing?  

Pavel Hodál pavel@tybrdo.cz; text Expedice Google Human Anatomy – Respiratory System