

Worksheet 6A: The Lungs

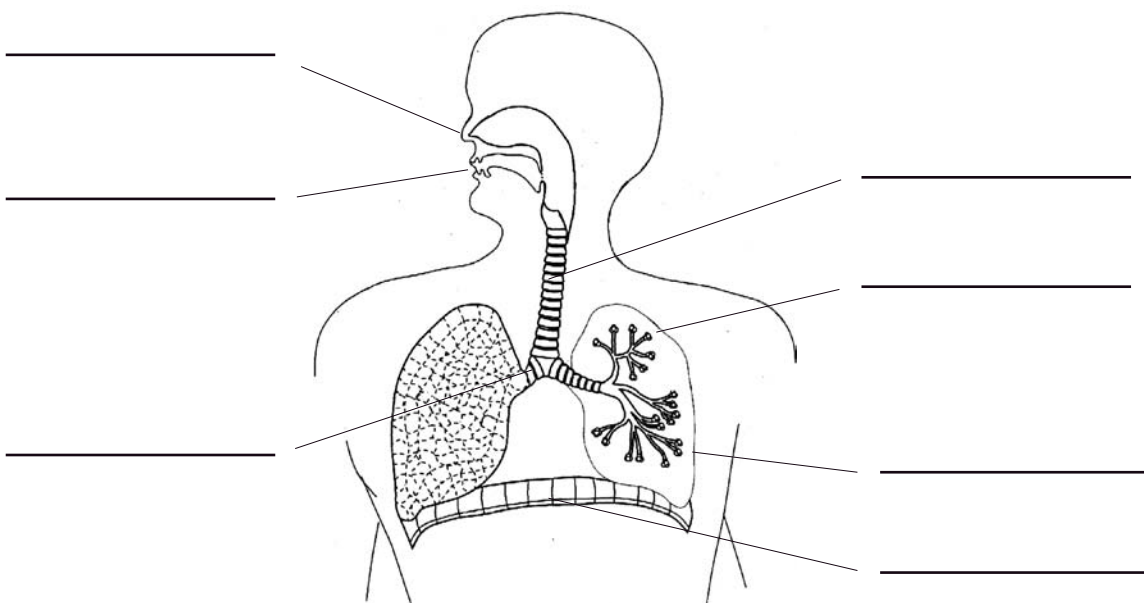
When you've been running around outside or in a game of football, you sometimes get out of breath. This may cause us to become dizzy. Do you know why this happens?

Our bodies need oxygen to function. We get this oxygen from the air around us. The lungs are the main organs of the respiratory system. It is in the lungs that the oxygen is taken into the body. Once, the oxygen is in the lungs, the red blood cells are responsible for picking up the oxygen in the lungs and carrying it to all the the body's organs and muscles. When we are exercising our body needs even more oxygen than normal. When we get out of breath it is a sign that our body is not getting enough oxygen. The fitter people are the greater the amount of oxygen they can hold.

Facts about Breathing:

1. The lungs are the largest organs in the body.
2. The average person takes approximately 21,600 breaths a day.
3. The body requires almost 44 kilograms of oxygen, that is the same as 44 bags of sugar.
4. The brain uses 25% of the body's oxygen.
5. We take about 12 breaths per minute when we are resting.
6. After exercise we can take up to 80 breaths per minute because the body needs more oxygen.
7. The body brings 8000 litres of air through the lungs every day.
8. You have 300,000,000 alveoli in each lung. That's 600 million in total.

1. Label the parts of the respiratory system



Worksheet 6B: The Brain

| Name of child | Time 1 | Time 2 |
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0.25

0.24

0.23

0.22

0.21

0.20

0.19

0.18

0.17

0.16

0.15

0.14

0.13

0.12

0.11

0.10

0.00

Appropriate
time in seconds**Facts About The Brain: Did you know?**

1. Your brain uses 20% of your body's energy.
2. Your brain is divided into two parts. The left side of the brain controls the right side of the body, while the right side of the brain controls the left side of the body.
3. The weight of an average human brain is about 1,300grams. This is heavier than a bag of sugar.
4. A cat's brain only weighs about 30 grams.
5. An elephant's brain weighs 6,000grams or 6 kilograms; that's equal to 6 bags of sugar.
6. Your skin weighs twice as much as your brain.
7. The human brain is approximately 75% water.



Worksheet 6C: Heart Rate : Feel The Beat

Healthy Heart

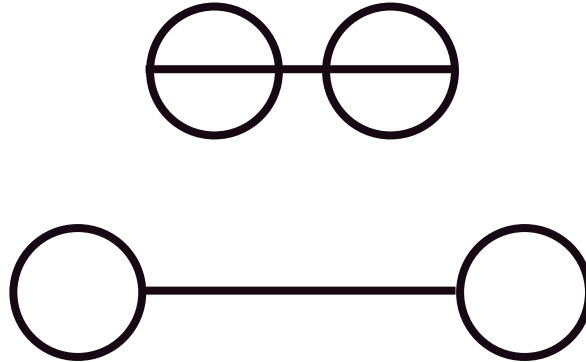
People keep their muscles healthy by doing exercise. So to keep our heart healthy we must also exercise it. We do this by being active and playing sports like those of the GAA. We also need to eat healthy foods and avoid unhealthy foods which are high in fats. As well as exercise, it is important for our bodies to get plenty of rest. Take time to relax, enjoy an occasional nap and get a good sleep each night.

| Name | Heart rate at rest (beats per minute) | Heart rate after exercise (beats per minute) | Heart rate 2 minutes after exercise (beats per minute) |
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Facts About The Heart:

1. Your heart beats about 10,000 times in one day and 35 million times in one year.
2. Your heart is the size of your fist if you are a child and the size of two fists if you are an adult.
3. The muscles of the heart work twice as hard as the leg muscles of a person sprinting.
4. The lub-dub noise your heart makes is the noise of the valves of your heart opening and closing.



Worksheet 6D: Let's investigate....**1. Which line is longer?****2. Find your blind spot.**

- Hold the cross and spot diagram at arm's length with the cross on the right.
- Close your right eye.
- While looking only at the cross, bring the page slowly towards your face.
- What happens?

**3. Find your dominant eye.**

- Pick out a vertical object or line in the distance, for example the edge of a window or door.
- Hold a pencil or finger vertically in front of you and line it up with the vertical object.
- Now close each eye in turn.
- Which eye do you think is the dominant one?



Worksheet 6E: Materials

An Camán – The Hurley

The hurley is mentioned in a number of Irish folk tales, such as that of Setanta, which date from pre-Christian times. Many of these were first written down as far back as the 9th century. Setanta's stick may have been made of ash, yew or even oak, all of which were used in ancient times to make hurleys. The importance of the player was known by the quality of the hurley and how it was banded. Copper, bronze, silver and even gold were used, depending on the wealth of the hurler. More information on the history of hurleys and hurlers can be found in the GAA Museum in Croke Park.

A. Try to remember what you saw on the DVD and then draw a story-line showing the manufacture of a hurley.

1

2

3

4

B. Fair test: Which materials are waterproof?

| Material | Prediction | Result |
|----------|------------|--------|
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Worksheet 6F: Friction

Which force makes the ball go further?

| Type of Force | Predict (m and cm) | Result (m and cm) |
|---------------|--------------------|-------------------|
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Result: _____ is the force that moves the ball furthest.

Which surface causes the greatest friction?

The shorter the distance the ball rolls the greater the friction.

| Type of Force | Predict (m and cm) | Result (m and cm) |
|---------------|--------------------|-------------------|
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Result: _____ is the surface that caused the greatest friction with the ball.

