#### 1. THE CIRCULATORY SYSTEM

## **FUNCTION**



The circulatory system takes blood to all parts of our body.

## **PARTS**



The circulatory system is made up of the heart

and the blood vessels.



The heart is a hollow muscle.



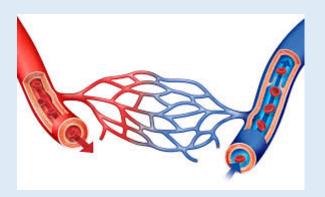
It pumps blood around the body.

## THE BLOOD **•**

The blood carries oxygen and nutrients to all parts of our body and collects carbon dioxide and other waste products to be expelled.

# **BLOOD VESSELS**

Blood vessels carry blood around the body.



# **TYPES OF BLOOD VESSELS**

ARTERIES	VEINS	CAPILLARIES
They carry blood from the heart to the rest of the body.	They return blood to the heart from the rest of the body.	They are tinny blood vessels that connect the arteries to the veins. This is where the blood delivers nutrients and oxygen to the body cells and picks up carbon dioxide and other waste products.
from heart to heart capillaries vein		

## HOW BLOOD TRAVELS AROUND THE BODY

Lungs

The Body

Left side of

Right side

of heart

- 1. Blood enters the right side of the heart through the veins from the rest of the body. It carries carbon dioxide.
- 2. Blood is pumped through the heart to the lungs. The blood picks up oxygen and delivers carbon dioxide to be expelled from the body.

- 4. Blood is pumped through the heart to the rest of the body, delivering oxygen and picking up carbon dioxide.
- 3. The **blood** enters the **left** side of the heart. It carries oxygen.

#### The heart is a DOUBLE PUMP:

1st - blood is pumped to the lungs & returns to the heart, 2nd - blood is pumped to respiring muscles & back to the heart again.

CAPILLARIES IN THE LUNGS

LARIES IN THE BOD

 Deoxygenated blood is pumped from the heart to the lungs 2. The blood receives oxygen and is pumped back to the heart

4. The oxygen leaves the blood to be used for respiration in the body and the blood goes back to the heart

3. The oxygenated blood is then pumped to the rest of the body

# **Circulatory system**

#### **Videos**

The circulatory system in the human body for kids

https://www.youtube.com/watch?v=TmcXm-8H-ks

**Exploring the heart- The circulatory system** 

https://www.youtube.com/watch?v=-s5iCoCaofc THE CIRCULATORY SYSTEM | Educational Video for Kids.

https://www.youtube.com/watch?v=f9ONXd -anM

#### **HOW YOUR HEART WORKS**

https://www.youtube.com/watch?v= eVG45 iF9U

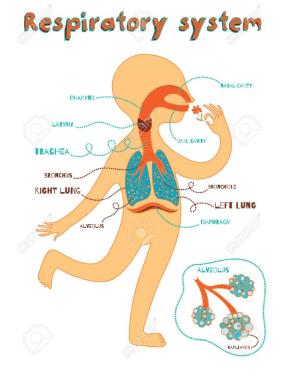
#### **CIRCULATION**

http://www.sciencekids.co.nz/videos/humanbody/circulatorysystem.html

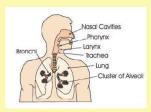
#### Online book

https://www.storyjumper.com/book/index/10182542/The-Circulatory-System#

#### 2. THE RESPIRATORY SYSTEM



## **FUNCTION**



The respiratory system takes in oxygen and expels carbon dioxide.

#### **PARTS**

The **respiratory system** is made up of the **nostrils** in the



nose, the trachea , the two bronchi





the two lungs



## THE NOSE

The nose has two nostrils.



The nostrils have hairs inside. They stop dust, virus and pollen entering our respiratory system.

The nose warms, moistens and filters the air before it goes to our lungs.

## THE TRACHEA AND THE BONCHI.



The trachea divides into two tubes that goes into the lungs. These tubes are called the bonchi. They distribute air to our lungs.

## THE LUNGS AND THE ALVEOLI

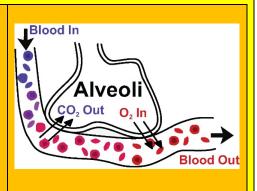


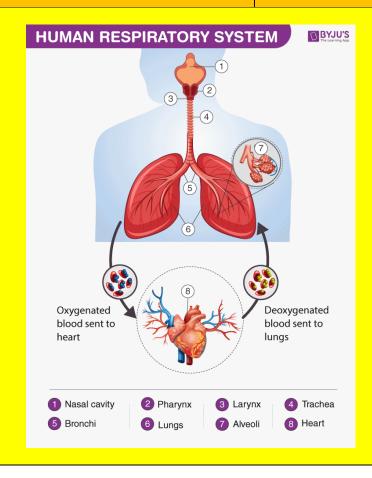
The lungs are like big sacks. They are like a sponge. They are made up of lots of little bags called alveoli sorrounded by blood capillaries.

The alveoli is where the **carbon dioxide** and the **oxygen are exchanged**. They are sorrounded by blood capillaries.

Carbon dioxide in the blood passes into the lungs through the alveoli.

Oxygen in the lungs passes through the alveoli into the blood.





#### **HOW WE BREATHE IN AND OUT**



When we breathe in our chest gets bigger and our diaphragm contracts and goes down.

When we breathe out our chest gets smaller and our diaphragm relaxes and goes up.

# **Respiratory system**

#### **Videos**

Travel through the respiratory system

https://www.youtube.com/watch?v=X2YVt16Kxak

Respiratory system

https://www.youtube.com/watch?v=mOKmjYwfDGU

How our lungs work

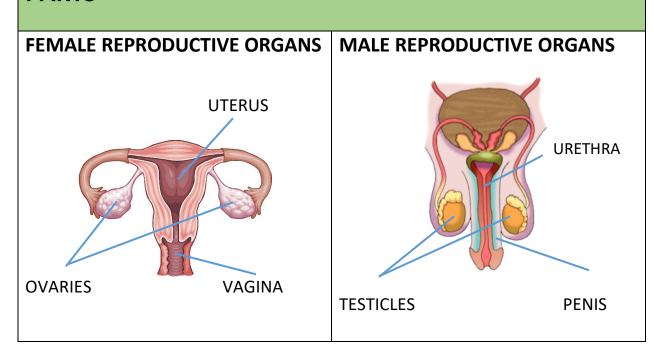
https://www.youtube.com/watch?v=0giiDDBJVQU

# 3. THE REPRODUCTIVE SYSTEM

# **FUNCTION**

The **reproductive system** allows people to create new human beings.

# **PARTS**



# STAGES OF HUMAN REPRODUCTION **Ovaries** in the female reproductive system produce ovules or eggs. **Testicles** in the male reproductive system produce Fertilization happens when an egg is fertilized by a **sperm**. Then the fertilized egg stays in the **uterus**. **FERTILIZATION** The egg develops into an embryo. HUMAN FERTILISATION AND EMBRYONIC DEVELOPMENT An embryo develops. Nutrients and oxygen travel from the mother to the embryo along the umbilical cord. The embryo becomes a **fetus** at **nine weeks**. At three months it has all its organs. At nine months is ready to be born. Stages of Fetal Development **PREGNANCY** The baby moves head first down the vagina and comes out. It's born. The umbilical cord is cut and becomes the belly button and the baby breathes on its own and gets nutrients from its mother's milk. **BIRTH**