GOD IS

PURE AND HOLY

Human Biology

Year 8

Term 2

Thinking Skills Pure & Holy Yr 8

The human body 1 Write an acrostic poem for: **S** **K** **E** **L** **E** **T** **O** **N**	**The human body 2** Design a piece of playground equipment that will strengthen the leg muscles.
The human body 3 Design a new and different piece of equipment that will help a person who has lost the use of their legs.	**The human body 4** Invent a new and different type of exercise machine.
The human body 5 The answer is: **"God created people in His image."** Work out 5 questions.	**The human body 6** **Humans are more special to God than animals.** Justify this statement.

Thinking Skills Pure & Holy Yr 8

The human body 6 Draw an exercise bike. Now, redesign I by using the following steps: **B** – igger **I** – instead of **N** – onsense **G** – et rid of **O** – ther uses	**The human body 7** Create a new product for fitness by combining: a ball and a skipping rope
The human body 9 The answer is **"fitness".** Give 5 interesting questions.	**The human body 10** Brainstorm 5 solutions for this problem: **Too many injuries are caused in sport.**
The human body 11 Design a solar powered piece of exercise equipment.	**The human body 12** Predict how people with hearing loss will be helped 50 years from now.

Lolohea Akosita Waqairawai, Fiji

Biography

Lolohea Akosita Waqairawai was born on 18 March 1893, the third child of Maikeli Ratu of Narewa, Nadi, and Litiana Neileqe Saurogo of Nakavu, Nadi, and had three sisters. Her father was a Methodist minister, and taught Lolohea to work hard to improve her life. She was educated at the first girls' school in Fiji (Matavelo Girls School in Ba) by the missionary sisters.

Lolohea was very intelligent and displayed exceptional ability, so when she was 17 years her minister, Rev Lelean, made arrangements for her to do further study at Manly Public School in Sydney, Australia, and then teacher-training at the Sydney Teachers College. She returned to Fiji at the end of 1914.

Lolohea first taught at Butt Street Primary School in Suva, and later at Davuilevu Primary School where she met and married Mosese Bulu. They had four children in five years, and then Mosese died. Later Lolohea married Timoci Waqairawai, a teacher from Jona, Kadavu. She had four sons from this marriage.

Lolohea and Timoci taught at Nadraivatu. In addition to her busy job as a teacher, and raising her eight children, Lolohea began her work with Women, visiting them in their homes and teaching them simple principles of hygiene, ante-natal care, child welfare, homecraft, sewing and general village sanitation. The family were moved to Vunidawa where they taught for 16 years from 1934-1950. Lolohea helped some poor but talented children to go to secondary school.

Lolohea helped set up a number of women's organizations which worked to improve the lives of women so that they could contribute to the development of their families and hence that of their communities and society. She believed that women play an important role in the development of any society, and that education was very important.

Lolohea became vice president of an organization for Fijian women, called *Qele ni Ruve*. The organization spread throughout Fiji and later changed its name to *Soqosoqo Vakamarama.* During her community training sessions for rural Fijian women, Lolohea appealed to Fijian men to lighten the burden of women by doing gardening and other domestic chores so that women could devote more time to family health and home management. She also advocated the use of local resources to upgrade the standard of living of rural families. Her commitment to family health and women's health culminated in her translating a book about childbirth into Fijian language *(Na Tina Ni Gone i Taukei).*

She thought the best way to enhance the status of women in Fiji was to promote their education. She put pressure on the government to establish a learning institution for Fijian girls. The Adi Cakobau School was established in 1948, being the first government secondary school for Fijian girls. Many girls excelled in their studies and influenced Fijian society.

Lolohea's contribution to community education and service continued even after she retired from teaching. She became a child welfare officer in 1950 and traveled extensively throughout Viti Levu conducting health education sessions. On many occasions she walked from one village to the next.

In 1956 she became the acting national leader for the Soqosoqo Vakamarama in Fiji. Lolohea Waqairawai was the first indigenous Fijian woman to represent Fiji in an international women's conference. As a member of the Pan Pacific South East Asian Women's Association (PPSEAWA), she was also actively involved in the promotion of the status of all Women in Fiji through racial tolerance and harmony. She believed that women could play a leading role in racial tolerance and encouraged women of different ethnic groups to learn and understand each other's culture.

Lolohea was awarded the British Empire Medal in 1948 and the Queen's Award for Meritorious Service to the Community in 1953. She had been a dedicated member of the Methodist Church all her life, and contributed two hymns to the Fijian Methodist Hymn book (Nos. 69 and 214).

Lolohea died in February 1967 at the age of 74. She was honoured for her inner strength and serenity, her dignity and humility. At her funeral service, Ratu Penaia Ganilau, (then Secretary for Fijian Affairs and Local Government), said "Lolohea's monument will be found in the closely knit and effective societies she built up in the remote parts of Viti Levu."

Questions:

1. If Lolohea was born in 1893, how old was she when she returned to Fiji after completing her education in Sydney, Australia?
2. How many children did she have?
3. What kind of work did she do to help women?
4. How did she help children?
5. What did she believe about the role of women in society?
6. What did she suggest that men should do to help lighten the work load for Fijian women?
7. Lolohea wrote a book. What was it called and what was it about?
8. How did she help to establish the first government secondary school for girls in Fiji? What was the name of the school?
9. How did Lolohea continue to help the community after she retired from teaching?
10. How was she honoured at her funeral?

The Human Body 1
The circulatory system

Student Activities

The heart is a muscle – the most important muscle in your body! It is divided into four pockets. The heart is a pump that circulates blood through the body at a rate of five litres per minute. Arteries are blood vessels that carry blood away from the heart. They carry oxygen to all the parts of the body. The oxygen makes arteries look red. Veins are blood vessels that carry blood from the body parts back to the heart. The blood in veins has no oxygen, so veins look blue. The heart pumps blood to the lungs where it can pick up oxygen again, and then it goes around the body again, in a continuous cycle.

The heart pumps by contracting and relaxing. Each time the heart contracts it forces blood through the arteries. This is what causes the heartbeat and the pulse rate. You can feel your pulse on your neck or your wrist. The normal pulse rate is between 70 and 80 beats per minute. However after exercise your pulse rate will be much higher.

Heart health
It is good to get your heart pumping rapidly when you exercise. Exercise is good for a healthy heart and healthy arteries. Exercise that causes our heart to pump rapidly is called *cardiovascular* exercise. It makes you huff and puff.

Here are some good things to do regularly for cardiovascular exercise:
running, skipping, swimming, fast walking, aerobics

1. What is the most important job of the heart?
2. What can you do to maintain good heart health?

The Human Body 2

Circulatory system: Food for a healthy heart

We can maintain a healthy heart by eating the right foods. If we become overweight we can put too much strain on the heart. To maintain a healthy weight we need to do regular exercise and eat the foods that are as close to nature as possible. Foods that cause us to put on weight are the processed foods like fast foods and junk foods, white bread and sugar.

There are good fats and bad fats. Eating the bad fats like margarine and the fats in fast food, like chips, burgers and pastries will not be good for our arteries. They can cause the arteries to become narrow, due to a gradual build-up of a substance called plaque, and then the blood cannot flow through properly. If the arteries around the heart get blocked, it can cause a heart attack.

This can happen to older people. It takes many years for the plaque to build up. However, we should look after our heart even when we are young, and form good habits, so that when we are older we have less health problems. We need to eat the good fats like the fats in nuts, butter, eggs, fish, and coconuts. We should avoid the bad fats. We should also eat less of the foods made with white flour and sugar. These foods put on weight.

1. How can being overweight cause heart problems?
2. Which foods would not be good for the heart?
3. Which foods would be good for the heart?

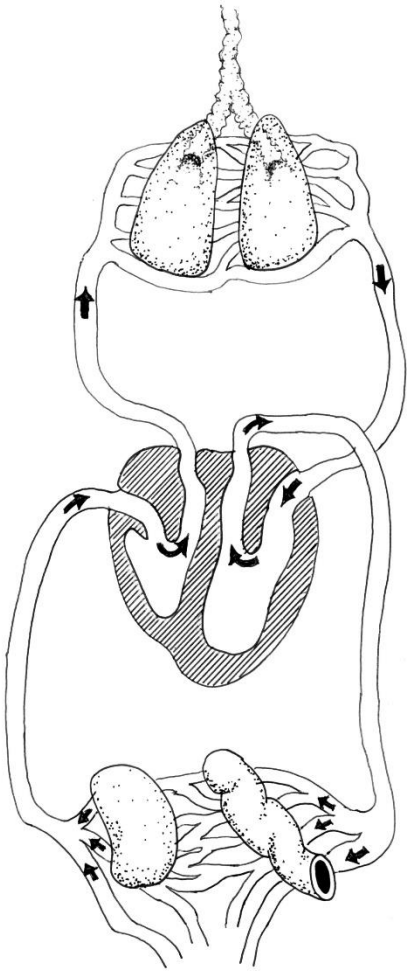
The Human Body 3

Circulatory system: The heart

Draw this picture of the heart and the blood vessels. Follow the arrows, using your finger, to trace the flow of the blood around the body.

Colour the blood vessels on the left, in blue. This is the blood that does not carry oxygen. It comes from the cells of the body, where all the oxygen has been used up. This blood is on its way to the lungs where it will receive oxygen again.

Colour the blood vessels on the right, in red. This is blood that has received oxygen form the lungs. It is taking the oxygen around the body, to the cells.



The Human Body 4

Circulatory system: Functions of the blood

Blood consists of a watery liquid called plasma, with red and white blood cells and platelets.

Red blood cells carry oxygen to all parts of the body.
White blood cells fight infection and protect the body against disease.

Plasma is the liquid part that carries nutrients around the body.
Platelets make blood clot if you cut yourself.

There are many more red blood cells than white blood cells. The blood is a transport system. It transports oxygen and nutrients to the body cells so that the body can live and have energy. It carries the waste products back for filtering out through the kidneys and liver. It takes water to our cells, keeps us at the right temperature, and protects the body against infection. Blood also protects us because it has the ability to clot after an injury. This stops us from bleeding to death!

1. What is blood made of?

2. What are the functions of the blood?

The Human Body 5

Circulatory system: The blood under the microscope

Draw this picture of blood cells. Label the red blood cells, white blood cells and blood plasma.

Clues:

Red blood cells – doughnut shaped and plentiful
White blood cells – irregular shaped, bigger and fewer
Plasma – the fluid containing the blood cells

The Human Body 6
Circulatory system: Facts about blood

Blood is made up of four parts – plasma, red cells, white cells and platelets. Each part has a special job.

- Plasma is a yellow liquid. It helps give you energy and grow.
- Red blood cells carry oxygen to your cells.
- White blood cells clean the blood and fight germs. When a virus enters your body, white blood cells rush to destroy the virus so you get better.
- Platelets help your blood clot. When you cut yourself, a clot forms so the blood stops running. If your blood didn't clot, you could bleed to death.

Copy:

1. White blood cells clean the blood and fight _____. When a _____enters your body, white blood cells rush to destroy the virus so you get better.
2. Blood carries oxygen and nutrients to all the _____in your body so they can grow and stay healthy.
3. Blood is made up of four parts –_____, red cells, white cells and _____. Each part has a special job.
4. Red blood cells carry _____to your cells.
5. Plasma is a yellow _____. It helps give you energy and grow.
6. Platelets help your _____clot. When you cut yourself, a clot forms so the blood stops running. If your blood didn't clot, you could bleed to _____.

The Human Body 7
The immune system

The immune system is a system of defence. As well as blood vessels, (arteries and veins), we have other vessels throughout our body. These are lymphatic vessels, which carry clear, slightly yellowish blood plasma called lymph. This circulating body fluid helps defend the body against disease-causing agents. Lymph carries special cells that will attack invaders. Some will eat (ingest) bacteria. Others will fight viruses and any unusual cells like cancer cells. Some cells, called natural killer cells, have little spears that make holes in the enemy cell, making little channels. Surrounding fluid flows into the enemy cell so that it fills up and bursts. This reminds us of how God fights for us, just like the armour of God in Ephesians 6.

The skin is also part of the immune system. It keeps out bacteria. However it does not keep out all chemicals. The skin has pores through which waste product are eliminated as sweat. Substances can also be absorbed through our skin into the bloodstream, so we have to be careful about what we put on our skin. We should never touch toxic chemicals.

1. **What is the immune system?**
2. **What does it do for us?**

The Human Body 8

How to build a healthy immune system

A person's immune system can be strong or weak. A person with a strong immune system is a healthy person who does not get sick very often. They don't catch many colds and flu because their defence system is working hard to keep out the invaders. If they do happen to catch a cold, or a contagious illness, this person will recover very quickly and return to good health. A person with a weak immune system will be the opposite – often sick, and their recovery time is slow.

We can make our immune system stronger by eating healthy food. Sugar is one of the worst foods for making our immune system weak. This is because it's hard for the body to break sugar down into small units. Raw fruits and vegetables are the best foods for building a strong immune system.

We can build a healthy immune system so that we can resist the effects of germs, by following the rules for healthy living:

- **N**utrition – eat healthy food
- **E**xercise – at least half an hour every day
- **W**ater – 6 glasses a day, (not fruit juice or fizzy drink)
- **S**unlight – for vitamin D. Keep sun exposure to 10 minutes at a time, in the cooler parts of the day
- **T**oxin-free – avoid food additives and avoid toxic chemicals in the environment
- **A**ir – get fresh air every day
- **R**est – don't stay up late
- **T**hink happy thoughts and trust in God

1. Which two words can you make using the first letter of every rule?
2. Write the eight rules for healthy living and draw a symbol for each rule.

The Human Body 9
The skeletal and the muscular systems

These two systems are connected because the muscular system holds the skeletal system in place. There are 400 muscles supporting the spine.

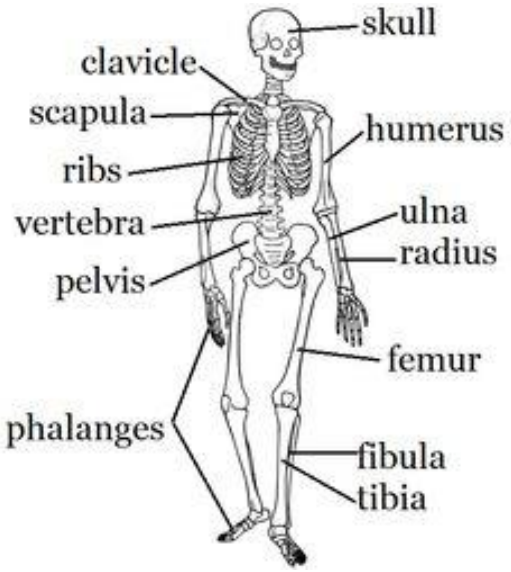
The skeleton is made of bones, which are the hardest material in the human body. Yet our bones are living tissue in which red and white blood cells are made, and also a storage site for calcium. Bones have the ability to grow and repair themselves if they are fractured or broken. Although bone is the hardest tissue in the body, it contains nearly 50% water.

There are two parts to the skeletal system:
1. The axial skeleton consists of the skull, the spine and the rib cage. This part of the skeleton protects the brain, the heart and the lungs.
2. The appendicular skeleton consists of the bones of the arms, shoulders, legs and hips. This part of the skeleton has joints, which allow us to move, and do activities.

The spine is a very important part of the skeletal system because it is also part of the nervous system, which sends messages to the brain. The spine is made up of 26 bones called vertebrae. If the spine is broken, the nerves can no longer send messages to the brain, so a person may become paralyzed.

1. What are the two parts of the skeletal system?
2. Which important organs are protected by the skeletal system?
3. What happens to a bone if it is broken?
4. What happens if the spine is broken?

The Human Body 10
The skeletal system



1. Draw a human skeleton and label the bones.
2. Now draw a table and match the common names on the left with the technical names on the right. (They are mixed up.)

Thigh bone	Scapula
Back bones	Humerus
Collar bone	Tibia
Shoulder blade	Femur
Hip bone	Vertebra
Shin bone (lower leg)	Clavilce
Upper arm bone	Pelvis
Lower arm bone (inner)	Ulna
Toes	Radius
Lower arm bone (outer)	Phalanges

The Human Body 11

Bone health

To build strong and healthy bones we need to do two things:

1. eat nutritious food
2. exercise

The bones are storage places for calcium. Bones are made from calcium. When the body needs calcium, it can get it from the bones. The bones will send calcium into the blood and the blood takes it around the body as needed. So we need to eat foods that give us calcium. Although milk contains lots of calcium, that form of calcium is not the best form of calcium to build bones. We also need foods like fruits and vegetables – especially green ones – to help the body absorb the calcium.

To build bones we need to do exercise called *weight-bearing* exercise. This type of exercise makes the muscles work hard, but the heart does not have to work hard in this case. You do not huff and puff, but you do stretch and push. Weight-bearing exercise is hard work.

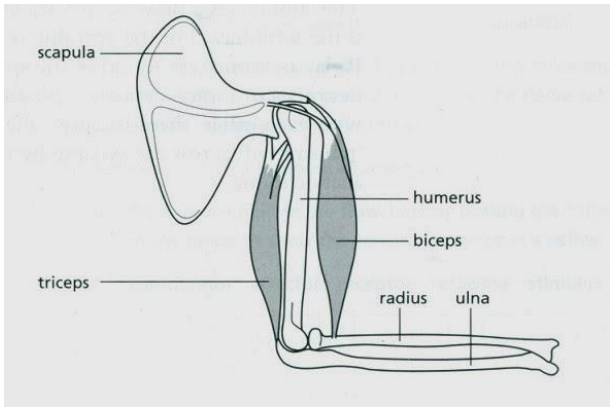
Good forms of weight-bearing exercise are: riding a bike uphill, walking uphill, climbing, lifting weights and swimming.

What can you do for good bone health?

The Human Body 12

Muscles

We use our muscles to move. The muscles are joined to the bones by tendons. Muscles pull on the bones to make them move. Muscles are always in pairs. One muscle pulls the bone forward and one pulls it back. When a muscle is working, (contracting) the other muscle is relaxing. Draw a picture of your arm muscles and label the biceps and triceps.



Muscles are made out of many stretchy, elastic cells and fibers. As well as helping us to move, muscles also help to hold organs in place. The diaphragm muscle under our ribs helps the lungs breathe. Heart muscles make the blood move through the body. Muscles help us to chew food and close our eyelids.

1. Name three functions of muscles.
2. Why are muscles in pairs?

The Human Body 13
The digestive system

Digestion starts when you chew your food and swallow it.
Digestion begins in the **mouth** and ends in the anus. In the mouth, when the food is properly chewed, enzymes in the saliva start to break down the carbohydrates. Carbohydrates are in foods like potatoes, rice, pasta, bread and sugars.

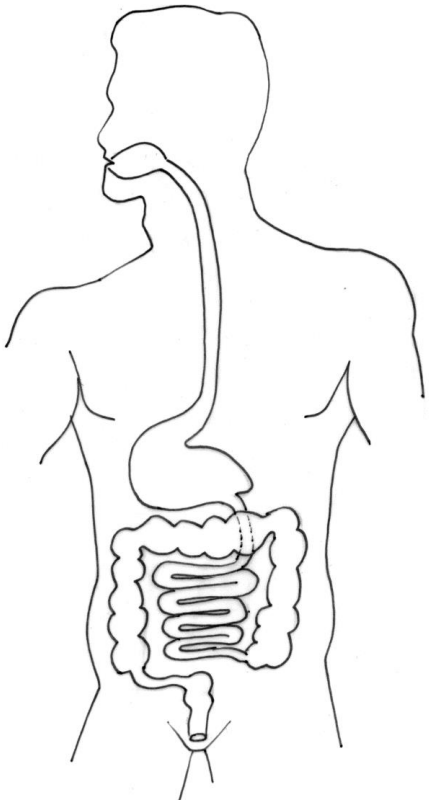
Then the food travels down the **oesophagus**. Muscles in the wall of this tube push the food along after it has been swallowed. The muscles make the food travel in little wave-like movements, until the food arrives in…

- the **stomach**, which is like a bag. Here the food is mixed with digestive juices and acids which break the food down into a liquid state. Little by little, the liquid food passes into…

- the **small intestine.** Here there is more breaking down of the liquid food into smaller particles, until the particles are so small that they can be absorbed into the bloodstream. The wall of the small intestine has tiny hair-like projections called villi. Their job is to absorb the food and deliver the nutrients to the bloodstream. Once the nutrients are in the blood, they travel to where they are needed.
- The waste products pass into the **large intestine**. Water is absorbed here, and is used by the body, but the remaining waste material gets expelled as faeces through the **anus**.

The Human Body 14
Draw the digestive system

Draw and label these parts of the digestive system:
mouth, oesophagus, stomach, small intestine, large intestine, anus



The Human Body 15

Rules for digestive health

Make a poster. Use drawings and some words, (Don't copy all the words below – just the main points.)

- Chew your food well. Your body can't take in the nutrients unless the food is chewed well enough, so that the enzymes and digestive juices can act on it.
- Eat foods that contain the best nutrients, so that your blood can deliver the right fuel to the cells.
- Avoid white, highly processed foods like white flour. These foods slow down the movement of food through the digestive system.
- Eat plenty of fresh fruits and vegetables.

The path of food through the digestive system (copy)

Digestion begins in the _____. Food travels down the_____

and arrives in the _____. The food is mixed with

digestive_____ and gets broken down into _____. The liquid passes

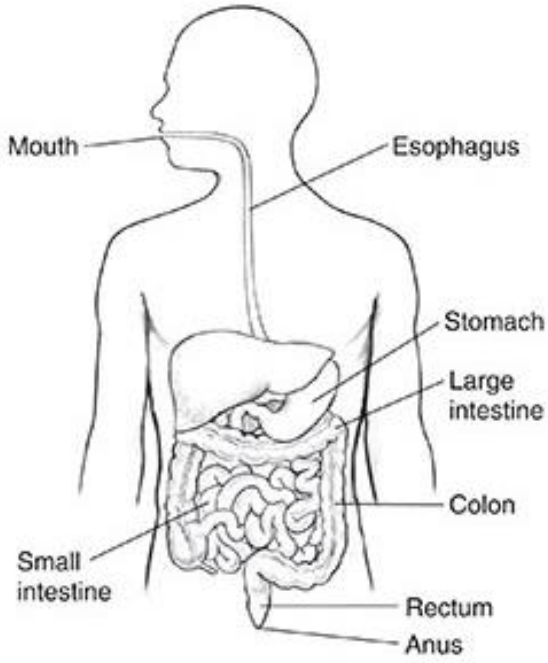
into the _____ and then the tiny particles get absorbed into the

_____. The blood takes the nutrients to the _____. The waste products

pass into the _____ _____and then out through the _____.

Missing words: mouth, oesophagus, stomach, juices, liquid, bloodstream, body, large intestine, anus

The Human Body 16
The digestive system: Quiz



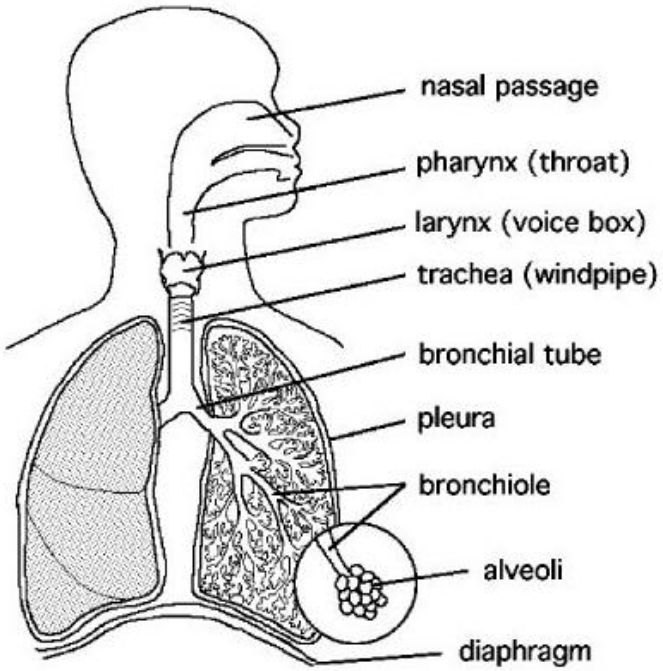
Name the part that these sentences are describing:

1. This is like a bag. Here acid and juices are mixed with the food to digest it.
2. Food that cannot be digested comes out here.
3. This is a long, narrow, bent-up tube. Most of the food is digested here. The goodness from the food is then taken by the blood to all parts of the body.
4. Water is taken out of the food as it passes through this wide tube.
5. Muscles in the wall of this tube push the food along after it has been swallowed.
6. Here the food is mixed with saliva. This saliva starts to digest the food.

The Human Body 17
The respiratory system

Draw a picture of the respiratory system and label the parts. Then draw a line to show the passage of the air from the nose to the bloodstream.

1. nasal passage
2. throat
3. trachea
4. bronchial tube
5. lungs
6. bronchioles
7. alveoli
8. diaphragm



The Human Body 18

Respiratory system: The lungs

Our lungs are organs in the chest. Lungs are used for breathing. The lungs are filled with air and emptied by the up and down movement of the diaphragm. Chest muscles move the diaphragm.

Air passes from the nose, through the trachea, the bronchial tube and bronchioles then into smaller branches where there are tiny air sacks called alveoli.

Oxygen is necessary for all cells to function as tiny energy-giving machines. Without oxygen we would die. We can live without air for a maximum of 3 minutes.

The body also needs to get rid of the waste product called carbon dioxide. The carbon dioxide goes out of our body through the lungs.

The lungs have passageways with many branches like a tree. At the end of the passageways are little balloons called alveoli that fill up with air and deliver oxygen to the blood, which then takes it to the cells. The cells need oxygen to stay alive.

Air is made up of 79% oxygen, 16% nitrogen and 4% carbon dioxide. The air that we breathe **in** contains 79% oxygen. The air we breathe **out** does not contain oxygen because it has been used up by the body cells. But it contains a lot of carbon dioxide as the cells get rid of this waste product after creating energy.

The Human Body 19

Respiratory system: Respiratory health

There are many pollutants in the air that can affect our lungs…things like car exhaust fumes, tobacco smoke, air sprays, dust and gases. These can make the passageways of the lungs inflamed. Smoking is the worst way to damage your lungs and many people who smoke eventually die of lung cancer.

Some people suffer from asthma, when the alveoli (little air sacs in the lungs), tighten up and the person cannot breathe properly for a time. This can be a very frightening experience.

We all need clean fresh air, but it’s not always easy to get if you live in the city. It’s a good idea to do exercise in fresh air. Going to the beach or a park or bushland where there are trees, is a good way to get fresh air.

Sometimes air inside houses can become stuffy. Remember that we breathe out carbon dioxide. If the air in the house becomes high in carbon dioxide content, we feel drowsy. It’s good to keep windows open and to go and play outside regularly.

Write three rules for good respiratory health.

The Human body 20

Respiratory system: Summary of the passage of air

Copy the following and fill in the missing words:

Air is breathed in through the _____ and travels to the

_____. Air goes in and out of the lungs because of the movement of

the _____.

The air passes through many branches. At the end of the branches are little balloon-

like structures called _____. The air then goes into the

_____ and then into the _____. Air that is breathed in

contains mostly _____.

Air that is breathed out contains mostly _____. This is a waste

product that comes from using _____.

Missing Words: nose, lungs, diaphragm, alveoli, blood, cells, oxygen, carbon dioxide, energy

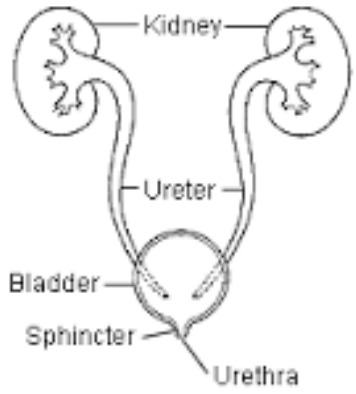
The Human Body 21
The urinary system

The urinary system is made up of:

- kidneys: two bean-shaped organs that filter waste from the blood and produce urine
- ureters: two thin tubes that take urine from the kidney to the bladder
- bladder: a sac that holds the urine until it's time to go to the toilet
- urethra: the tube that carries urine from the bladder out of the body when you pee
- sphincter muscles: allow the flow of urine to start or stop.

Draw a picture of the urinary system and label:

1. kidneys
2. bladder
3. ureters
4. urethra
5. sphincter



The Human Body 22
The urinary system: kidneys

The average kidney is reddish-brown in colour and approximately 10 cm. long. The function of the kidneys is to filter waste products from the bloodstream. The kidneys also remove a type of waste called urea from your blood. Urea is produced when foods containing protein, such as meat, are digested. The body does not need urea, so it gets taken out of the body through urine. That's what gives urine its strong smell.

The kidneys also help to adjust blood pressure and keep check on how much water is in the body. Water is essential to life. Every one of the cells in our body depends on it. If our body is not getting enough water, the kidneys will take steps to slow down the loss of water from the body. The kidneys do this because they work with the lungs, skin and intestines.

If we do not have enough water, our blood can become thick, and we can eventually die. A person can live only 3 days without water.

1. What is the function of the kidneys
2. What is urea?
3. The kidneys get rid of urea and it gets taken out of the body through _____.
4. What other important function do the kidneys have?
5. What happens if you do not drink enough water?

Water is essential

The urinary system keeps the good salts and certain minerals in our body. If we lose water, we also lose the good salts from our body. Sweat is salty. As we lose water through sweat, we also lose the good salts, which come out through the pores of our skin.

When our body does not have enough water, it is called dehydration. People who are dehydrated can feel faint from lack of water and may get a headache. People who are dehydrated need to drink water containing special good salts to replace the salts that have been lost. It is important to drink plenty of water before and after exercise. Dehydration puts a lot of strain on the kidneys. We must drink 6-8 glasses of water every day so that we do not get dehydrated and do damage to our kidneys.

Water is essential for brain function, bone function and nerve function. It is required for making energy in the cells, and for digestion. Lack of water creates all kinds of illnesses, including heartburn and ulcers. Many people are dehydrated, but they don't know it. You can become dehydrated through not drinking enough water. You may not even feel thirsty, but you can still be dehydrated. Many people think that water is not tasty enough. That's because they are used to drinking other drinks like fruit juice and fizzy drinks. But these drinks actually take water out of the body at the same time as putting it in. So they do not hydrate the body very well. We need to have plain water to do this.

1. What does *dehydrated* mean?
2. Why is it bad to be dehydrated?
3. What is water used for in the body?

The Human Body 23
Summary of the urinary system

Copy:

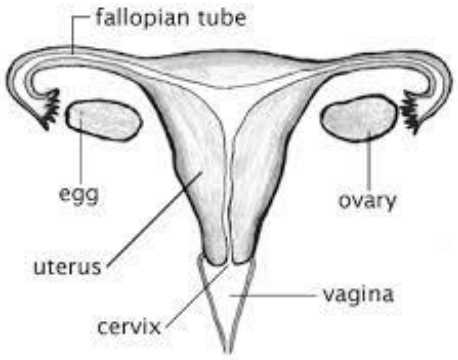
The main function of the urinary system is to remove _____ from the body and keep the good salts in our _____. If we don't drink enough water our blood can become _____. A person can live without water for only _____ days. We must drink water so that we don't become _____. When we are dehydrated our body systems do not _____ properly. We should drink _____ glasses of water per day. Fizzy drinks, are not good sources of water because they take water _____ of the body at the same time as putting it in.

Missing words: waste, cells, thick, three, dehydrated, function, six, out

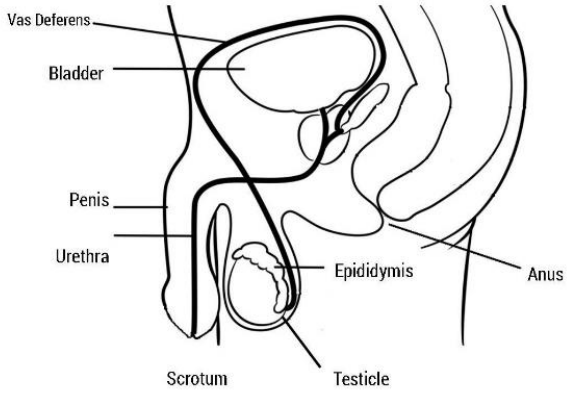
What should we do for health of the urinary system?
Answer: Drink plenty of _____.

The Human Body 24
The reproductive system

Female: ovaries, uterus, uterine tubes, vagina, mammary glands



Male: scrotum, testes, penis, prostate glands



The reproductive system is responsible for the continuation of the human race. The male and female systems are composed of several organs. The male testes and female ovaries produce single cells. Males produce sperm cells and females produce ova. A sperm and an ovum join together to form a new person.

1. In males _____ are produced in the _____.
2. In females, _____ are produced in the _____.

The Human Body 25
The reproductive system: Hormones

Puberty is the time when there are great changes to the body. This usually happens in early teenage years. Many changes take place in the male and female body at puberty.

The testes and ovaries secrete hormones to make these changes happen. Hormones are little messenger substances that tell the body what to do. The main female sex hormones are estrogens and progesterone. The main male hormone is testosterone. These hormones tell the body when it is time for the reproductive system to change and develop.

The female reproductive system allows for growth of the foetus, (the tiny new baby being formed). Hormones control the development of the baby, and the production of milk for feeding the new baby after birth. The foetus develops in the uterus for nine months, until it is time for birth.

The body must produce exactly the right amount of each hormone for good reproductive health. If hormones get out of balance, (too much of one or too little of another), the reproductive system may not function properly. Man-made chemicals in processed foods, perfumed products and household cleaners and sprays can upset the balance of hormones. It's best to cut down on such chemicals if possible.

Copy:
The testes and ovaries secrete little messenger substances called _____. Hormones give the body the signals for making changes, such as the changes that occur at _____. Hormones can be put out of balance by man-made _____.