Hand-out for Home Assignment Day 2

UJUZI FURSA AFRICA

SKILLS FOR OPPORTUNITIES

SL 2.1 Mouth – Teeth and Tongue

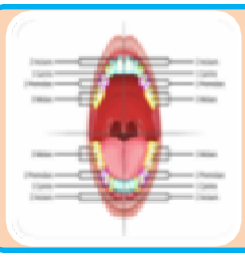
In this module, you will learn about:

- **The different types of teeth**
- **The structure of a tooth**
- **The structure of the tongue**
- **How the tongue detects a taste**

Summary

1. **An adult has 32 permanent teeth. In each quadrant, there are:**
    1) **2 incisors**
    2) **1 canine**
    3) **2 premolars**
    4) **3 molars**
2. **The visible part of the tooth is the crown and the part embedded in the jaw is the root**
3. **The gum helps attach the tooth to the jaw**
4. **The parts of a tooth are:**
    1) **Enamel**
    2) **Dentine**
    3) **Cementum**
    4) **Pulp**
    5) **Nerves and blood**
5. **The tongue is attached at the back to hyoid bone in the throat and at the bottom of mouth by frenulum**
6. **Small bumps called papillae on tongue contain taste buds with hair cells, nerves and blood supply**
7. **Each taste bud can detect four tastes, which are sweet, sour, salty and bitter**
8. **The following process describes how we can taste food:**
    1) **The hair on the taste buds detect the taste**
    2) **It sends signals to the nerves**
    3) **The nerves transmit the signal to the brain**
    4) **The brain interprets the signals and we taste a food or drink**

SL 2.1 Mouth – Teeth and Tongue



An adult has 32 permanent teeth. In each quadrant, there are: 1) 2 incisors 2) 1 canine 3) 2 premolars 4) 3 molars

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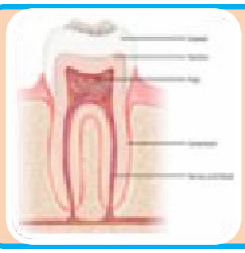
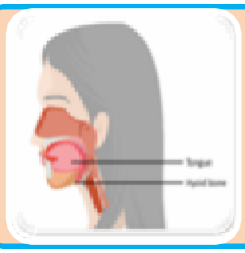


The parts of a tooth are: 1) Enamel 2) Dentine 3) Cementum 4) Pulp 5) Nerves and blood



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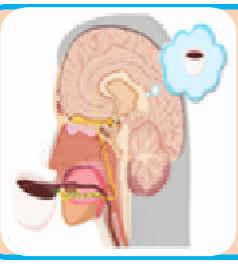
SL 2.1 Mouth – Teeth and Tongue

Each taste bud can detect four tastes, which are sweet, sour, salty and bitter



1) The hair on the taste buds detect the taste 2) It sends signals to the nerves 3) The nerves transmit the signal to the brain 4) The brain interprets the signals and we taste a food or drink

SL 2.2 Skin Hair and Nails

In this module, you will learn about:

- The structure and function of skin
- How do we feel touch
- How does skin regenerate
- The structure and function of hair
- How hair grows
- The structure and functions of nails
- How nail grows

Summary

1. Our skin:
    1) Covers and protects the structure inside the body,
    2) Helps us feel what we touch,
    3) Helps get rid of waste, and
    4) Helps regulate our body temperature
2. The three layers of skin are:
    1) Epidermis
    2) Dermis
    3) Subcutaneous layer
3. The receptors in the skin detect what we touch and send signals to the brain through the spinal cord
4. The hair:
    1) Protects the skin, nose, ears, and eyes
    2) And keeps the skin warm
5. The main parts of a hair are:
    1) Papilla
    2) Follicle
    3) Hair shaft

Summary

6. The process of hair growth is as follows:
    1) The hair cells at the papilla divide and form new hair cells
    2) The old cells move upward and are cut from the blood supply
    3) These dead cells are converted to keratin
7. Our nails:
    1) Protect the tips of fingers and toes
    2) And help in scratching and picking objects
8. The process of nail growth is as follows:
    1) The epidermal cells below the matrix divide to form new cells
    2) The old cells move up and are cut from the blood supply
9. As more cells are generated, the nail is pushed forward and the nail grows longer

SL 2.2 Skin Hair and Nails

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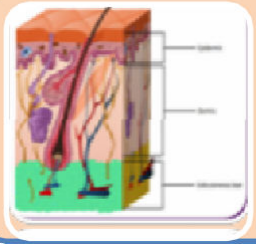
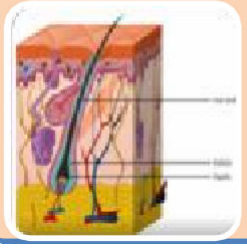


The three layers of skin are: 1) Epidermis 2) Dermis 3) Subcutaneous layer

The receptors in the skin detect what we touch and send signals to the brain through the spinal cord

The hair: 1) protects the skin, nose, ears, and eyes 2) Keeps the skin warm



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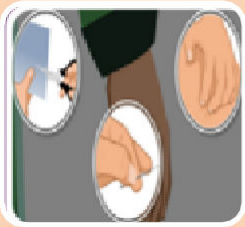
SL 2.2 Skin Hair and Nails



Our nails: 1) Protect the tips of fingers and toes 2) Help in scratching and picking objects

The process of nail growth is as follows: 1) The epidermal cells below the matrix divide to form new cells 2) The old cells move up and are cut from the blood supply

As more cells are generated, the nail is pushed forward and the nail grows longer

SL2.3 The Ear and Hearing

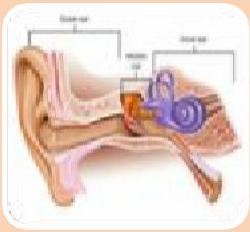
In this module, you will learn about:

- **The anatomy of the ear**
- **How we hear sounds**
- **How the various parts of the ear help in maintaining the balance of our body**

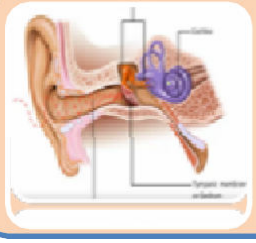
Summary

1. **The structure of ear can be divided into:**
    1) **Outer ear with pinna and external auditory canal**
    2) **Middle ear with the eardrum, auditory ossicles, and the Eustachian tube**
2. **Inner ear with cochlea, vestibule, and the three semicircular canals**
3. **The following process describes how we hear:**
    1) **The external ear directs sound waves to the eardrum**
    2) **The eardrum vibrates and transfers the vibrations to the auditory ossicles**
    3) **The auditory ossicles transfer the vibrations to the cochlea**
    4) **The fluid inside cochlea moves**
    5) **The hair cells move and send signals to the brain**
4. **The brain interprets the signals and we hear the sound**
5. **The vestibule helps the brain understand any linear movement of the head**
6. **The semicircular canals help the brain understand any movement if head moves at an angle**

SL2.3 The Ear and Hearing



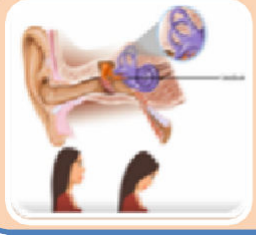
The structure of ear can be divided into: 1) Outer ear with pinna and external auditory canal 2) Middle ear with the eardrum, auditory ossicles, and the Eustachian tube



Inner ear with cochlea, vestibule, and the three semicircular canals

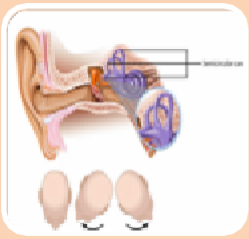
The following process describes how we hear: 1)The external ear directs sound waves to the eardrum 2) The eardrum vibrates and transfers the vibrations to the auditory ossicles 3) The auditory ossicles transfer the vibrations to the cochlea 4) The fluid inside cochlea moves 5) The hair cells move and send signals to the brain

The brain interprets the signals and we hear the sound



The vestibule helps the brain understand any linear movement of the head

SL2.3 The Ear and Hearing



The semicircular canals help the brain understand any movement if head moves at an angle

SL2.4 The Eyes and Vision

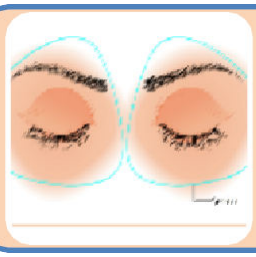
In this module, you will learn about:

- The anatomy of the eyes
- How we see objects

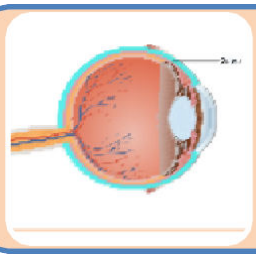
Summary

1. Eyes are located inside the eye socket
2. Sclera covers and protects the eyes
3. Light enters the eye through pupil
4. Muscles in the iris help the pupil to change shape
5. Conjunctiva produces mucous, which lubricates and protects the eyes and eyelids
6. Cornea helps make the vision clearer
7. Lens and the ciliary muscles help the eye focus on objects
8. Aqueous humor in anterior chamber nourishes the eye and keeps it healthy
9. Vitreous humor in vitreous chamber gives the round shape to the eyes
10. A clear image can be seen when the reflected light from an object strikes the macula
11. The following process describes how we see objects:
    1) When light reflects from an object, the cornea bends the light rays before they enter the eye through the pupil
    2) The light ray strikes the retina
    3) The rods and cones in the retina convert the light into signals
    4) The optic nerve transmits the signals to the brain
    5) The brain interprets the image, enabling us to see the object

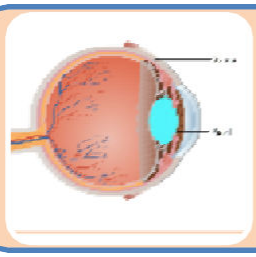
SL2.4 The Eyes and Vision



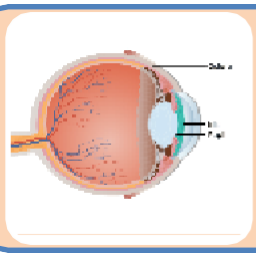
Eyes are located inside the eye socket



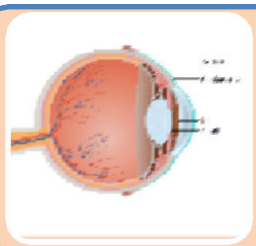
Sclera covers and protects the eyes



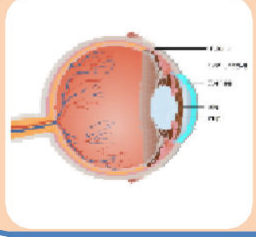
Light enters the eye through pupil



Muscles in the iris help the pupil to change shape

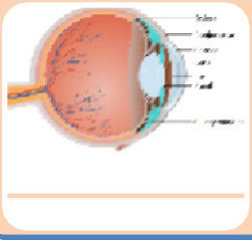


Conjunctiva produces mucous, which lubricates and protects the eyes and eyelids

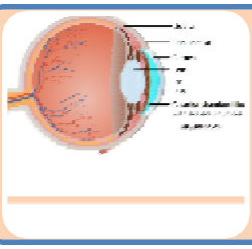


Cornea helps make the vision clearer

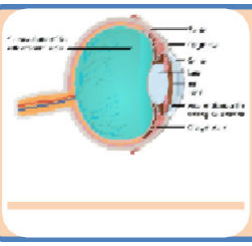
SL2.4 The Eyes and Vision



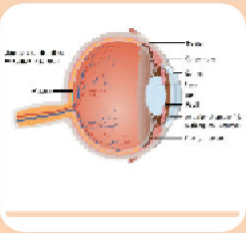
Lens and the ciliary muscles help the eye focus on objects



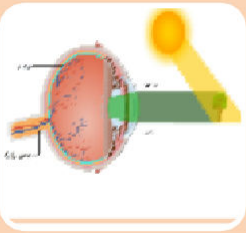
Aqueous humor in anterior chamber nourishes the eye and keeps it healthy



Vitreous humor in vitreous chamber gives the round shape to the eyes



A clear image can be seen when the reflected light from an object strikes the macula



The following process describes how we see objects:

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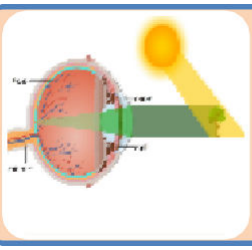
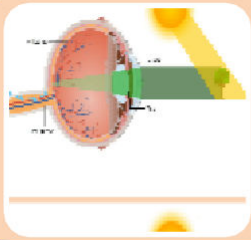
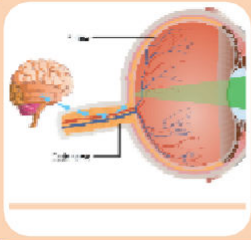


2) The light ray strikes the retina

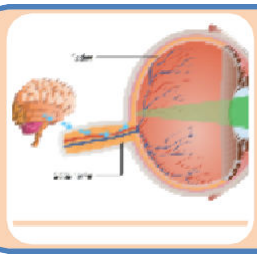
SL2.4 The Eyes and Vision



3) The rods and cones in the retina convert the light into signals



4) The optic nerve transmits the signals to the brain



5) The brain interprets the image, enabling us to see the object

SL2.5 The Nervous System

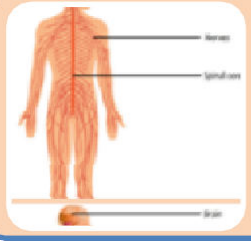
In this module, you will learn about:

- **The various parts of the nervous system**
- **How conscious actions are controlled by the nervous system**
- **How automatic actions are controlled by the nervous system**

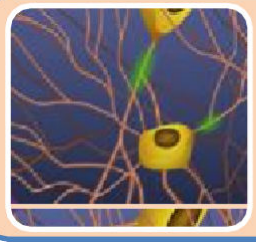
Summary

1. **The nervous system consists of:**
    1) **Brain**
    2) **Spinal cord**
    3) **Nerves**
2. **The nervous system is made up of millions of neurons connected together**
3. **The nervous system can be divided into:**
    1) **The central nervous system with brain and spinal cord**
    2) **The peripheral nervous system with nerves**
4. **The parts of the brain are:**
    1) **Cerebrum, which controls the sense organs, movement, speech, learning, imagination, intelligence, and memory**
    2) **Cerebellum, which controls the movements of the muscles**
    3) **Brain stem, which controls the autonomic actions**
5. **The brain is connected to the spinal cord and cranial nerves**
6. **The spinal cord is attached to the brain and 31 spinal nerves**
7. **The peripheral nervous system can be divided into:**
    1) **The somatic nervous system involved in conscious actions**
    2) **The autonomic nervous system involved in autonomic actions**
8. **Brain controls and coordinates all the conscious actions in the body**
9. **Spinal cord controls and coordinates some of the autonomic actions**

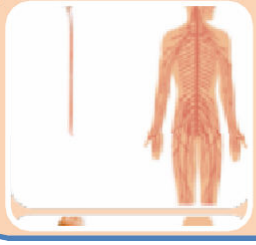
SL2.5 The Nervous System



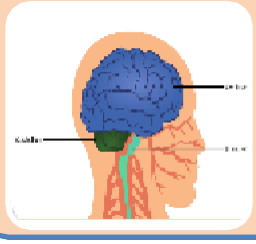
The nervous system consists of: 1) Brain 2) Spinal cord 3) Nerves



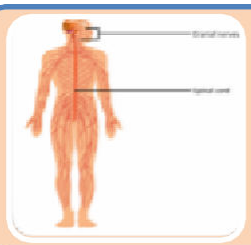
The nervous system is made up of millions of neurons connected together



The nervous system can be divided into: 1) The central nervous system with brain and spinal cord 2) The peripheral nervous system with nerves

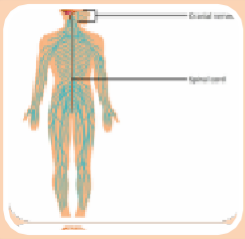


The parts of the brain are: 1) Cerebrum, which controls the sense organs, movement, speech, learning, imagination, intelligence, and memory 2) Cerebellum, which controls the movements of the muscles 3) Brain stem, which controls the autonomic actions

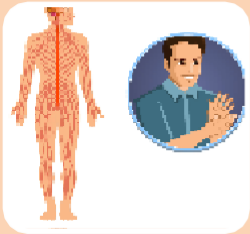


The brain is connected to the spinal cord and cranial nerves

SL2.5 The Nervous System

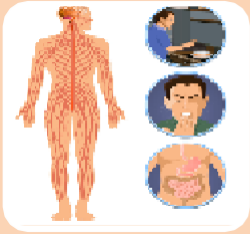


The spinal cord is attached to the brain and 31 spinal nerves



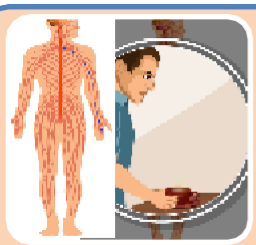
The peripheral nervous system can be divided into:

1) The somatic nervous system involved in conscious actions



2) The autonomic nervous system involved in autonomic actions

Brain controls and coordinates all the conscious actions in the body



Spinal cord controls and coordinates some of the autonomic actions


Thank you!

Quiz Test Day 2

UJUZI FURSA AFRICA

SKILLS FOR OPPORTUNITIES

SL 2.1 Mouth – Teeth and Tongue

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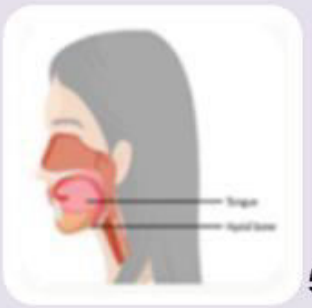
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SL2.2 The Ear and Hearing


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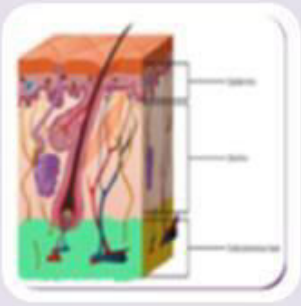
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SL2.3 The Ear and Hearing

Label the Pictures:


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SL2.4 The Eyes and Vision

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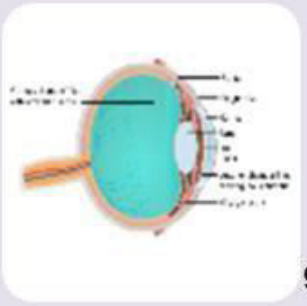
SL2.4 The Eyes and Vision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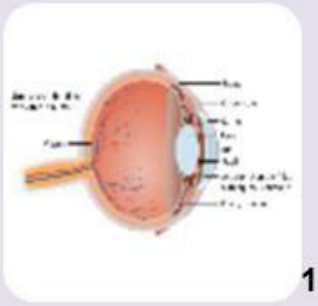
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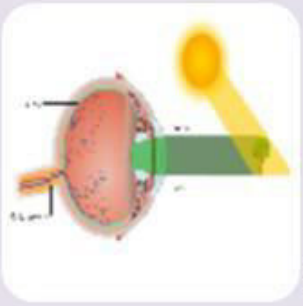
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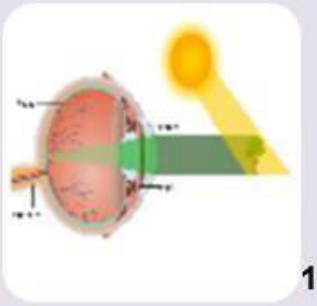
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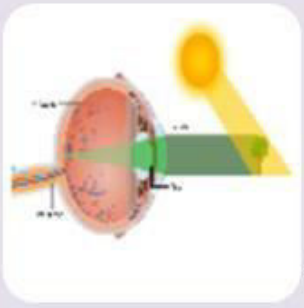
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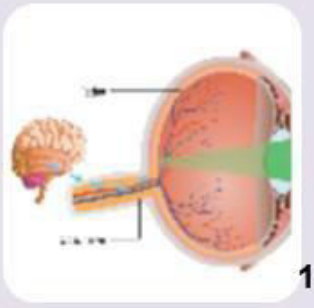
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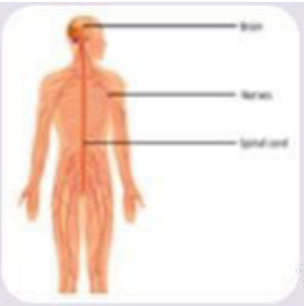
SL2.5 The Nervous System

Label the Pictures: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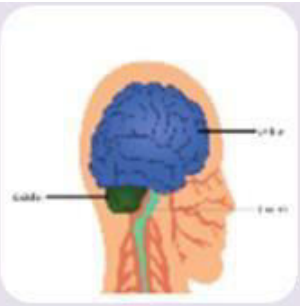
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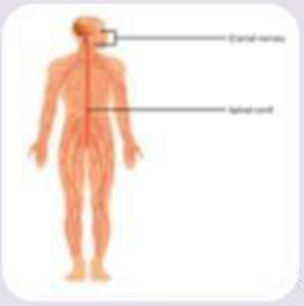
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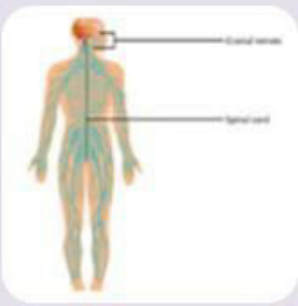
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Thank you!