

Name _____ Date _____

1. Draw arrows to label the skeletal system and the muscular system.



trapezius
pectoral
skull
humerus
deltoid
abdominal
rib cage
quadriceps
radius
femur
tibia
ankle



2. Match the terms to the definitions.

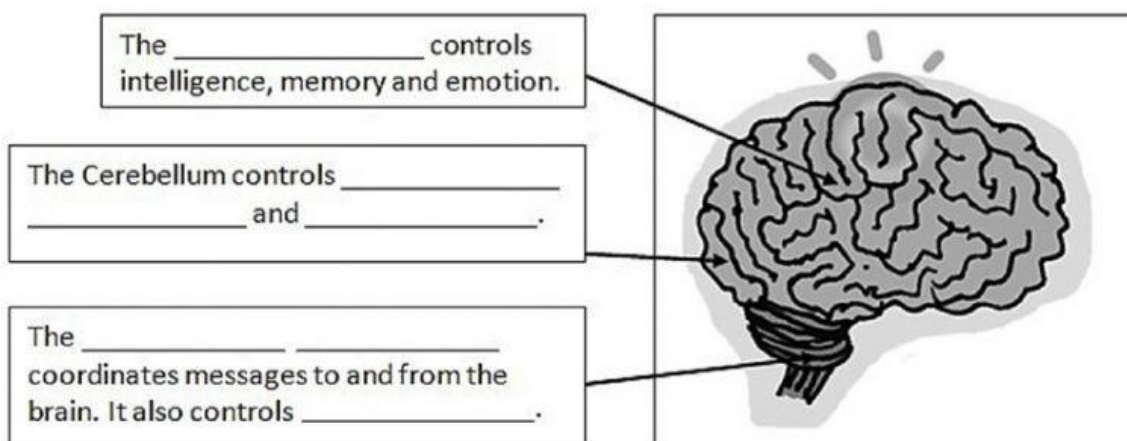
- | | |
|------------------|--|
| bones | · where two bones meet |
| joints | · tissue which is soft and flexible |
| ligaments | · involuntary muscles found in the heart |
| bone marrow | · hard, solid structures that make up the skeleton |
| muscles | · involuntary muscles |
| tendons | · they attach muscles to bones |
| skeletal muscles | · they join two bones together |
| smooth muscles | · muscles that we choose to move |
| cardiac muscles | · the interior part of a bone where blood cells are produced |

3. Name two involuntary actions your muscles perform.

1. Complete the sentences.

- a) The nervous system is made up of the brain, _____ and _____.
- b) _____ nerves receive messages from the skin, joints and muscles.
- c) The _____ connects the brain to the nerves.
- d) The _____ receives messages and then sends a message to a part of our body to react.

2. Complete the labels.



3. Order the sentences to describe how the nervous system works.

- The brain stem receives the message and processes it.
- If we touch a hot object, our sensory nerves send a message to our brain.
- The message travels along our spinal cord to the brain.
- When our motor nerves receive the message, we move our hand away.
- Then, it sends a message to our motor nerves.

4. True or false? Correct the false statements.

a) There are millions of cells called neurons in your brain. T / F

b) Neurons have a cell body, one long dendrite and three axons. T / F

c) Neurons send information by electrical signals called transmissions. T / F

d) These signals are created in the cell body and transmitted by the axon. T / F

e) The function of the dendrites is to receive nerve impulses from other neurons. T / F

5. Match the words to the definitions.

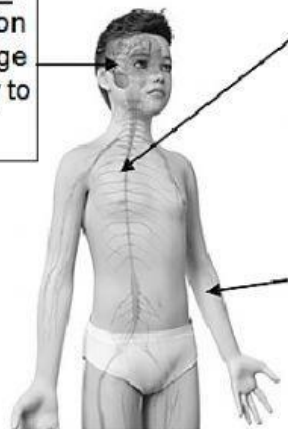
- | | |
|----------------|---|
| neuron | the exterior part of your skin |
| synapse | a long extension of a neuron that transmits nerve impulses |
| dendrites | a star-shaped cell that sends and receives messages |
| axon | the layer of your skin where the nerve endings are found |
| dermis | the space between two neurons |
| epidermis | electrical signals created by a neuron that transmit messages |
| nerve impulses | short, thin fibers of a neuron that receive nerve impulse |

6. Classify the words in activity 2.

Part of a neuron	Part of the skin

1. Complete the labels and say if the sentences are true or false. Correct the false ones.

The _____:
It receives information and sends a message to a part of the body to tell it how to react.



The _____:
It connects the brain to the rest of the body. It is made up of nerve tissue, forming a long, thick tube.

They connect the spinal cord to our muscles, joints and skin. Sensory _____ receive messages from the body and send them to the brain. Motor _____ transmit messages our brain sends to the rest of the body.

- a) The spinal cord receives information and tells the body how to react.
- b) The nerves connect the spinal cord to the rest of the body.
- c) The brain is a thick tube made up of nerve tissue.

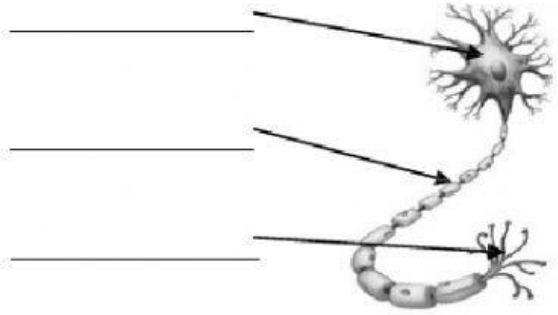
2. Complete these sentences with the words from the box.

brainstem - cerebellum - cerebrum

- a) The _____ controls intelligence, memory and emotion.
- b) The _____ controls balance, movement and coordination.
- c) The _____ coordinates messages to and from the brain. It also controls involuntary movements.

3. Answer the questions and label the cell.

- a) What kind of cell is it?
It is a _____.
- b) Is it circular or star-shaped?
It is _____.
- c) In which system can we find it?
It makes up the _____ system.



4. Complete these sentences with the words from the box.

impulses – receives – epidermis – nerve impulses
nerve endings – neurons – dendrites

- a) The _____ is the exterior part of your skin.
- b) The axon is a long extension of a neuron that transmits _____.
- c) A neuron is a star-shaped cell that sends and _____ messages.
- d) The dermis is the layer of your skin where the _____ are found.
- e) A synapse is the space between two _____.
- f) Nerve _____ are electrical signals created by a neuron that transmit messages.
- g) _____ are short, thin fibres of a neuron that receive nerve impulses.

5. Copy the correct sentence.

- a) Nerve impulses travel along the axon and leave through the dendrites.
 - b) Nerve impulses travel along the axon and leave through the cell body.
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SIGHT

1. Circle the odd one out. Explain why.

- e) iris eardrum pupil retina: *because it's* _____.
- f) lens light pupil cochlea: _____.
- g) hearing touch nerve sight: _____.
- h) optic nerve eardrum cochlea sound: _____.

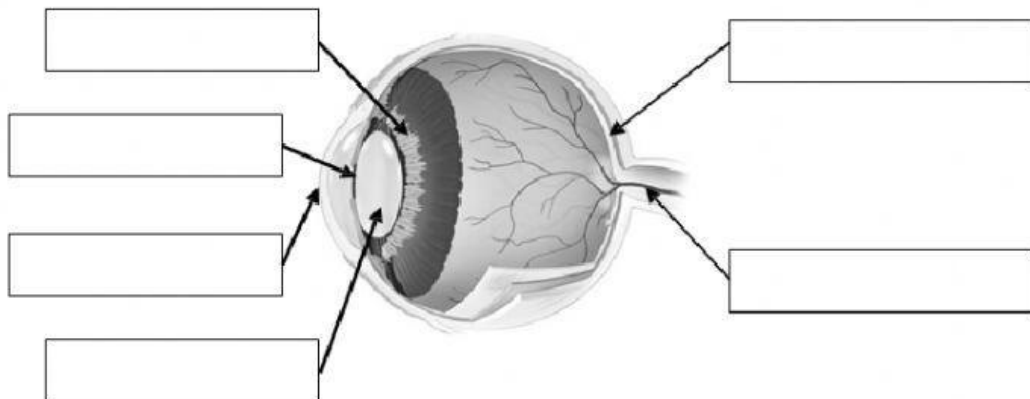
2. Complete the sentences.

- a) Light enters our eye through _____.
- b) It goes through the _____, which projects _____ onto the retina.
- c) The image is transmitted to the brain by _____.

3. Circle the correct answer.

1. What is the coloured part of the eye called?
- a) the iris b) the pupil
2. What shape is the lens?
- a) star-shaped b) oval
3. What part of the eye is made of layers of nerve tissue?
- a) the cornea b) the retina

1. Label this eye and ear.



2. Choose the correct word.

- a) Light enters our eye through the *pupil* / *retina*.
- b) It goes through the *iris* / *lens*, which projects an upside down image onto the retina.
- c) The image is transmitted to the brain by the *optic* / *auditory* nerve.

SMELL AND TASTE

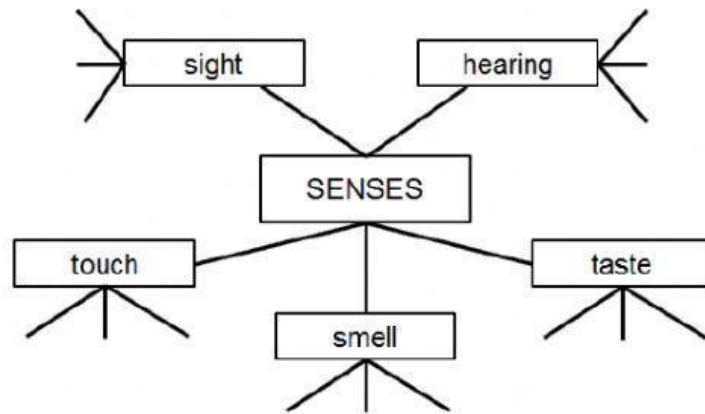
1. Complete the table.

Sense of smell	Sense of taste
nasal _ a _ _ a _ e _	_ o u _ _
o _ _ a _ _ o _ _ nerve	_ a _ _ e buds
o _ _ a _ _ o _ _ _ e _ _ _	_ u _ _ a _ o _ _ nerves
_ o _ e	_ a _ i _ a
	_ o _ _ u e

2. Order the sentences to describe the sense of smell and taste.

- Olfactory cells detect the particles.
- Tiny particles in the air enter the nasal passages.
- Finally, the olfactory nerve transmits the information to the brain.
- Then, they send nerve impulses to the olfactory nerve.
- They produce nerve impulses and transmit them to the gustatory nerves.
- Chemicals in the food we eat mix with saliva.
- The taste buds detect chemicals in the food we eat.
- The gustatory nerves transmit the information to the brain

3. Make a senses mind map. Include three things for each sense.



1. Choose the correct option for each sentence.

- f) We use our nose to *taste / smell* and our *tongue / eye* to taste.
- g) Smells are made up of *liquids / gases* in the air.
- h) When air goes into your nose, the gases go into your *nasal passages / taste buds*.
- i) The olfactory *nerve / cells* detect the gases and send nerve impulses to the olfactory *nerve / cells*.
- j) The olfactory nerve transmits the impulses to the *mouth / brain*.
- k) The tiny, pink bumps on your tongue are called gustatory *nerve / taste buds*.
- l) The chemicals in food mix with *water / saliva* and then the taste buds detect them.
- m) The taste buds produce nerve impulses and transmit them to the *olfactory / gustatory* nerves.
- n) These nerves then transmit the impulses to the *brain / nose*.

2. Write *sweet, salty, sour or bitter*.



3. Match.

eyes

nose

tongue

ears

hands

smell

touch

sight

hearing

taste