

# EXAM: UNIT 1

NAME: \_\_\_\_\_

## NATURAL SCIENCE

TOTAL SCORE: \_\_\_\_\_ / 100

1. Complete the sentences about sight with a word from the box. Some words can be used more than once (10 points).

brain cornea fovea iris lens optic nerve pupil retina

- a. Light passes through the ..... and enters the eye through the ..... .
- b. The coloured part of the eye is the ..... .
- c. The ..... focuses the light on the ..... at the back of the eye.
- d. Nerve receptors in the ..... detect light and send electrical signals to the ..... , and from there to the ..... .
- e. The ..... is where the optic nerve meets the ..... . It cannot detect light.

2. Are the sentences below true (T) or false (F)? (6 points)

- a) Light waves cause the eardrum to vibrate. \_\_\_\_
- b) The eardrum transmits electrical signals to the auditory nerve. \_\_\_\_
- c) Chemicals are detected by receptors inside the nose. \_\_\_\_
- d) Taste buds have receptor cells which detect taste. \_\_\_\_
- e) The skin can detect temperature, pressure and texture. \_\_\_\_
- f) The outer layer of skin contains nerves and blood cells. \_\_\_\_

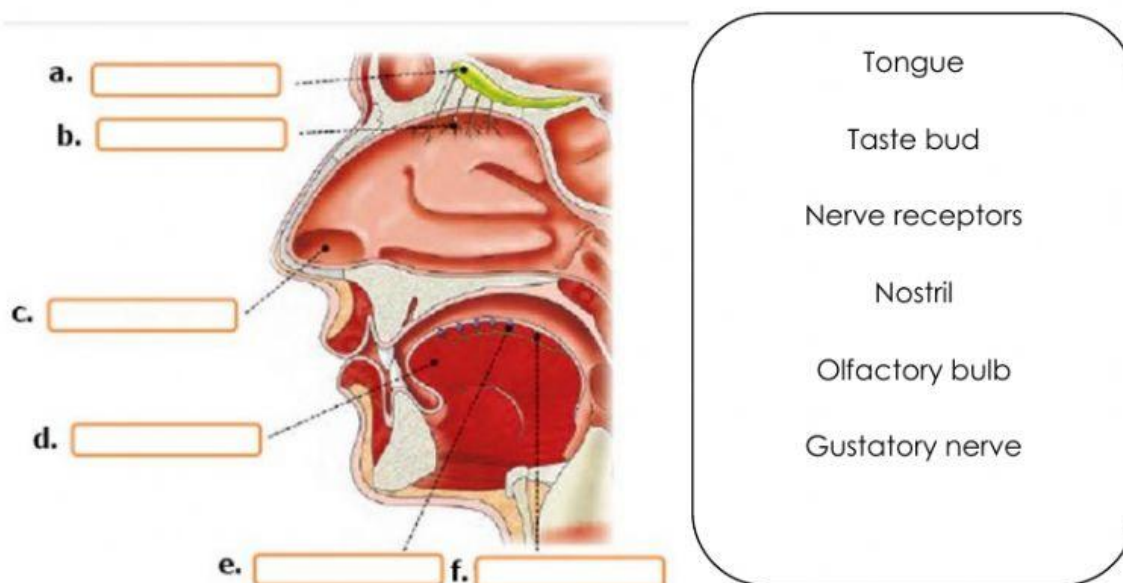
3. Complete the text about the peripheral nervous system with a word from the box. (6 points)

axons cells transmit electrical nerves receive

The (a)..... in the peripheral nervous system are made up of tiny (b)..... called neurons that transmit (c)..... signals.

Neurons have dendrites that (d)..... signals and (e)..... that (f) ..... signals to other neurons.

4. Complete the labels for the diagram about smell and taste. (6 points)

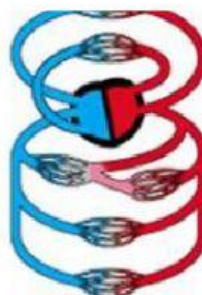
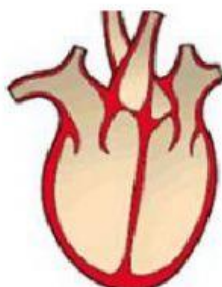


5. Classify the words according to the sense they are part of. (18 points)

auditory canal auditory nerve cochlea ~~cornea~~ dermis  
 eardrum epidermis fovea gustatory nerve iris lens  
 nostril olfactory bulb optic nerve ossicles pupil ~~blood~~  
~~vessels~~ retina taste bud tongue

SIGHT	HEARING	TASTE	SMELL	TOUCH
cornea				Blood vessels

6. How can you classify these drawings? Write the correct words. (5 points)



7. Which part of the central nervous system is each sentence describing? Write cerebrum, cerebellum, brain stem or spinal cord. (8 points)

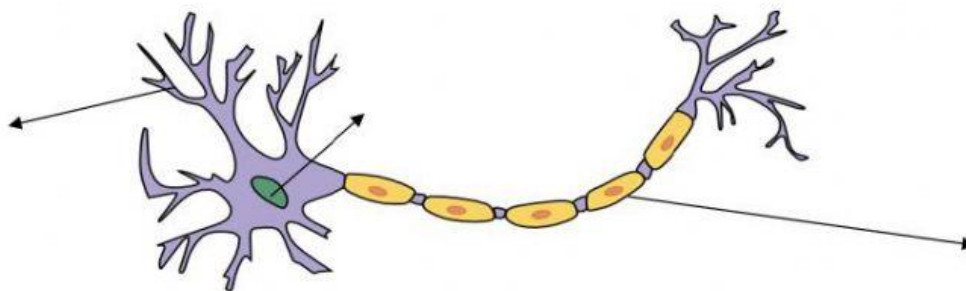
- a. processes information from the senses. \_\_\_\_\_
- b. controls movement, balance and coordination. \_\_\_\_\_
- c. connects the rest of the brain to the spinal cord. \_\_\_\_\_
- d. controls involuntary actions, such as breathing. \_\_\_\_\_
- e. is where thinking happens. \_\_\_\_\_
- f. controls voluntary actions. \_\_\_\_\_
- g. controls reflex actions, such as blinking. \_\_\_\_\_
- h. is the biggest part. \_\_\_\_\_

8. Order the following sentences. (3 points)

- ☐ Sensory neurons collect information from our sense organs.
- ☐ Motor neurons send messages from the brain to our locomotor system.
- ☐ The brain interprets the information and send signals to the rest of the body.



9. Name the parts of the neuron. (3 points)



10. Complete the sentences about muscles. (5 points)

Skeletal muscles	Voluntary muscles	Smooth muscles	Involuntary muscles	Cardiac muscles
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are found in organs like the stomach and the intestines.

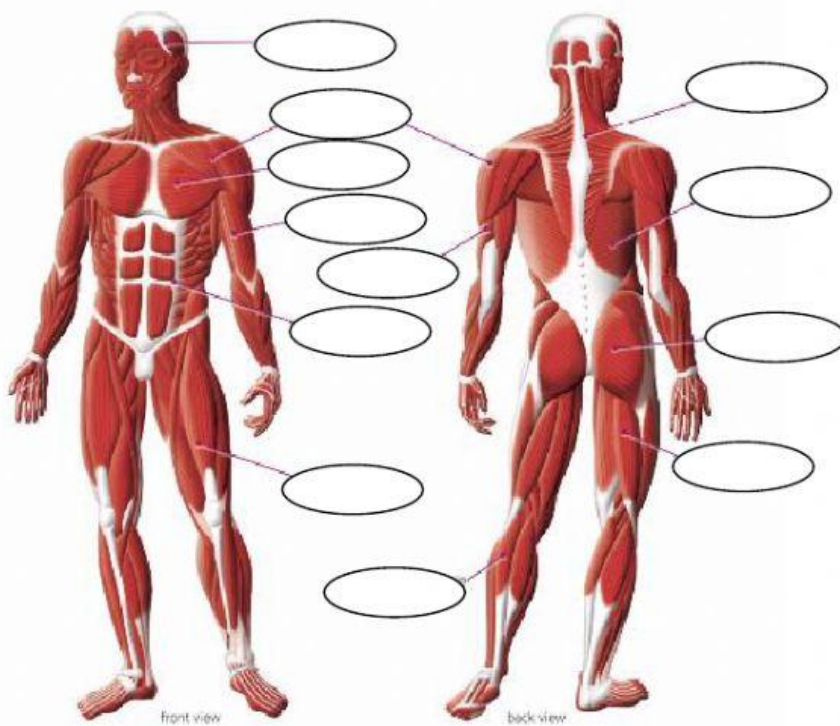
are joined to bones by tendons.

are muscles that we can control and move when we want.

make the heart move and beat.

work automatically – we cannot control them.

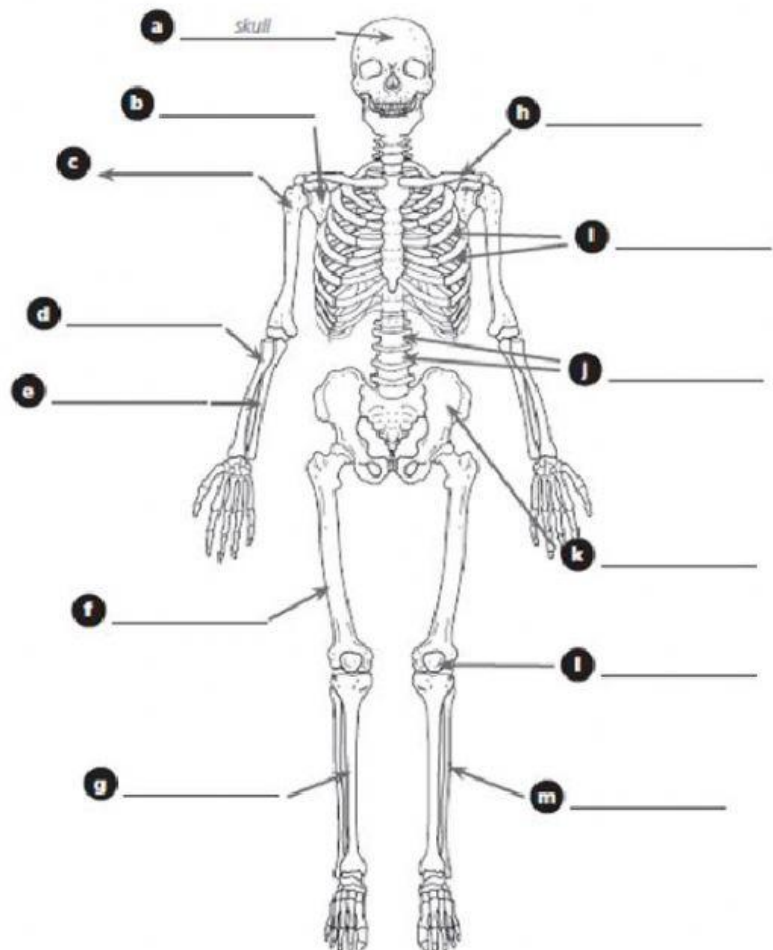
11. Label the muscles. (12 points)



dorsal muscle  
gluteus  
calf muscle  
quadriceps  
deltoid  
frontal muscle  
triceps  
trapezius  
pectoral muscle  
biceps femoris  
biceps  
abdominal muscles

12. Label the bones. (12 points)

Patella  
Femur  
Radius  
Pelvis  
Clavicle  
Ulna  
Vertebrae  
Scapula  
Ribs  
Fibula  
Humerus  
Tibia



**13. Complete the information about bones. (6 points)**

provide support  
are used for movement  
protect internal organs

Vertebrae  
Ribs  
Femur

Flat bones \_\_\_\_\_

Example: \_\_\_\_\_

Short bones \_\_\_\_\_

Example: \_\_\_\_\_

Long bones \_\_\_\_\_

Example: \_\_\_\_\_