

UNIT 3. INTERACTION - REVIEW

INTERACTION

1. Look at the pictures. Copy the phrases in the correct order to describe what is happening.



- ___ a. The information from the skin arrives at the brain.
- ___ b. The order to open the umbrella arrives at the muscles.
- ___ c. The skin senses falling raindrops.
- ___ d. The brain receives the information, realises that it's raining and decides to open the umbrella.
- ___ e. The brain sends the order to open the umbrella to the muscles.
- ___ f. The necessary muscles are put into action.

2. Look at these examples of sensitivity at work. What is the stimulus and what is the response in each case?

1. You feel hot in the Sun and you move into the shade.

Stimulus	
Response	

2. You cover your ears when a loud bell rings.

Stimulus	
Response	

3. You cross the street at a zebra crossing when the light turns green.

Stimulus	
Response	

4. You eat a meal and digest the food.

Stimulus	
Response	

3. Explain what internal co-ordination is.

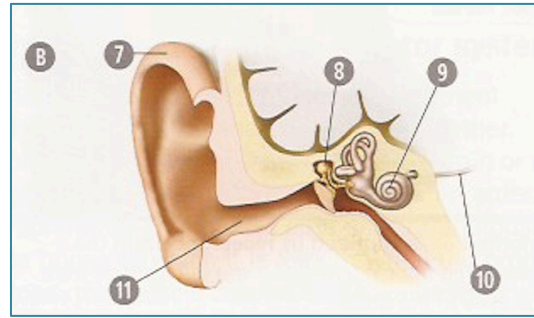
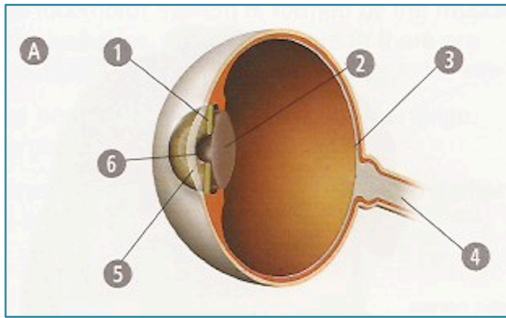
4. Explain what hormones are. Where are hormones produced and how do they work?

5. Which endocrine glands are different in men and women?

SENSE ORGANS

6. Explain how you use your senses to help you cross the street.

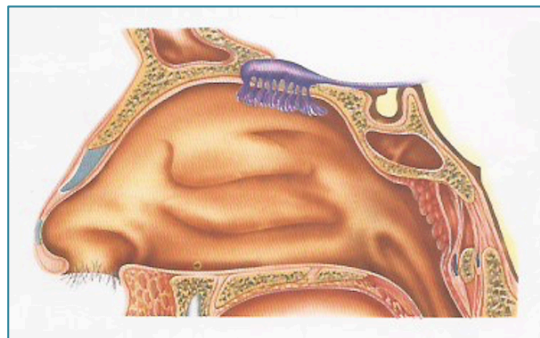
7. Look at the diagrams below. Identify the organs and label the parts 1 to 11.



- 1.- _____
- 2.- _____
- 3.- _____
- 4.- _____
- 5.- _____
- 6.- _____

- 7.- _____
- 8.- _____
- 9.- _____
- 10.- _____
- 11.- _____

8. Label the parts that you know.



9. Explain what is it that we can feel thanks to our skin and how does it happen.

10. Name three types of stimuli that the skin can detect.

- 1.- _____
- 2.- _____
- 3.- _____

11. Write three things that you could not do if your sense of smell didn't work.

1.- _____

2.- _____

3.- _____

12. Classify the words.

ossicles - hair cells - lens - nostril - outer ear - iris - pore -
 eardrum - taste buds - optic nerve - lens - nostril - cornea -
 cochlea - dermis - olfactory epithelium - taste nerves

eyes	ears	skin	tongue	nose

13. Explain the function of the receptor cells in the sense organs. _____

14. Complete the table for all the senses

		Sense organ	Location of receptors
S	sight	eyes	retina
E			
N			
S			
E			
S			

15. Read the definition and identify the sense.

- This sense can detect temperature, texture, pressure and pain _____

Now write the definitions for the other four senses.

- _____
- _____
- _____
- _____

16. How do we see? Order the sentences.

- ___ a. Information goes along the optic nerve to the brain.
- ___ b. The lens bends the light.
- ___ c. Light makes an image on the retina.
- ___ d. Light enters through the cornea and the pupil.

17. How do we hear? Write four sentences to describe the process.

- 1st _____
- 2nd _____
- 3rd _____
- 4th _____

18. Answer the following questions:

What are the three main parts of the ear? _____

What are the functions of the epidermis? _____

What is the sense of smell? How do we perceive smells? _____

What is the function of taste buds? _____

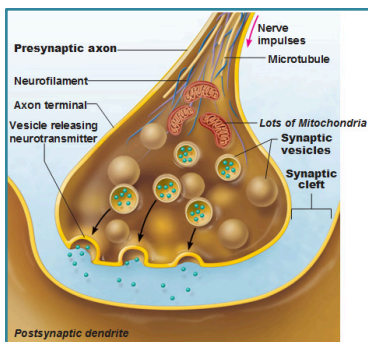
THE NERVOUS SYSTEM

19. Explain what neurons are. Draw a diagram and label the parts.



20. What's the difference between the dendrites and the axon? _____

21. Look at the illustration and explain how a nerve impulse is transmitted.



22. Name the part of the brain that is working when you

a. Digest food → _____

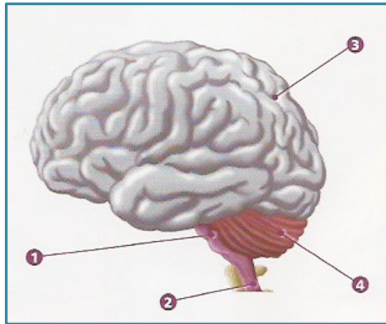
b. Do homework → _____

c. Stand on one foot. → _____

d. Read a book → _____

23. Label the parts of the brain using the words in the box. There are some extra words

brain stem - cerebellum - cerebrum - dermis - tendon - spinal cord



- 1- _____
- 2.- _____
- 3.- _____
- 4.- _____

24. Answer the following questions.

What are the two parts of the nervous system? _____

What are the two main areas of the central nervous system? _____

What are the three main parts of the brain? _____

Why are the injuries to the brain stem especially dangerous? _____

What is the spinal cord? _____

What do you think would happen to a person that damages their spinal cord? _____

25. Choose words related to the nervous system and write sentences.

cerebrum - bones - sensory nerves - brainstem - muscles - spinal cord

1. _____
2. _____
3. _____
4. _____

26. Explain the difference between sensory nerves and motor nerves.

27. Classify the words about the nervous system.

Spinal cord - brain stem - nerves - cerebellum - cerebrum - neurons

Central nervous system	Peripheral nervous system

28. What would happen if we did not have a peripheral nervous system? _____

LOCOMOTOR SYSTEM

29. Match the halves.

- | | |
|------------------|-----------------------------------|
| a. Joints ... | ___ ... hold bones together. |
| b. Cartilage ... | ___ ... covers the ends of bones. |
| c. Ligaments ... | ___ ... Are where the bones meet. |

30. How do muscles produce movement? _____

31. Look at the picture and answer the questions.

a. Which muscle is contracting? _____

b. Which muscle must contract to straighten the

arm? _____



MOVEMENT

32. Use the words to complete the flow diagram about reflex movements.

muscles - sense organs - motor nerves - sensory nerves



Make a flow diagram about voluntary muscles.



33. Decide if the following movements are voluntary (V) or involuntary (I).

a. breathing ____

c. blinking ____

b. playing the guitar ____

d. reading ____

34. Can the eyelids make reflex movements and voluntary movements? Explain and give your reasons.

35. Describe two examples of each type of movement that you have experiences.

voluntary movements	1.
	2.

involuntary movements	1.
	2.

36. Are the voluntary and the involuntary movements controlled by the same part of the brain? Explain.

SUMMARY

37. Why is it important to be able to sense our environment? How does this keep us safe?

38. Why is it useful to have involuntary movements? Why do you think the spinal cord deals with them without the brain?

39. Complete the test using these words.

brainstem - neurons - spinal cord - receptors - sensitivity
- cerebellum - nervous tissue - messages - peripheral -
stimuli - cerebrum - dendrites

Through _____, we respond to changes in the environment, called _____. _____ in the sense organs detect these stimuli. The nervous system is formed by _____, made up of _____. These cells have three parts: the body _____, the axon and the _____.

The central nervous system consists of the brain and the _____. The brain has three parts: the _____, the _____ and the _____.

The _____ nervous system consists of nerves all over the body. These nerves carry _____ to and from the sense organs and the central nervous system.

40. Complete the definitions.

- The nerves _____

- The cerebrum _____

- The cerebellum _____

- The brain stem _____

- The spinal cord _____

41. What functions do these parts of the body have? Classify them.

bones - brain - eyes - neurons - skin - muscles - skeleton -
taste buds - joints - spinal cord - nerves - nostrils - tongue

receiving information	processing information	giving a response

42. True or false? Make the necessary changes to make the false ones true.

- ___ a. The spinal cord is the control centre for the nervous system.
- ___ b. The cerebrum is the biggest part of the brain.
- ___ c. The cerebellum helps keep your balance so you do not fall.
- ___ d. The brain creates connections through blood cells.