

Girls' High School & College, Prayagraj.

Worksheet No. - 7

Session - 2020-2021

Class - 5 (A – F)

Subject - Science

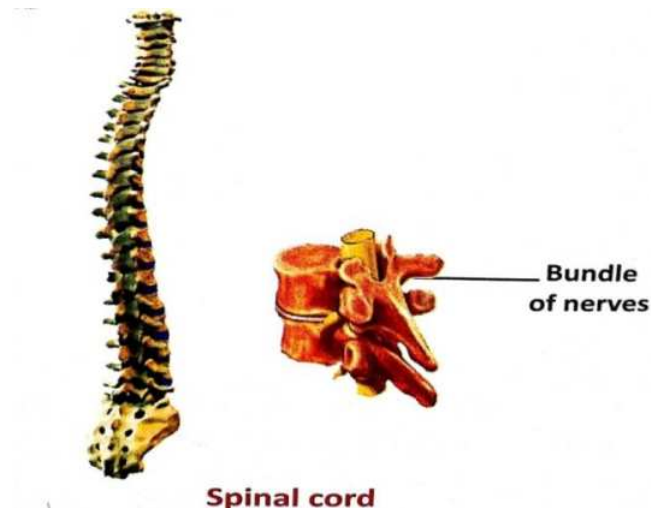
Lesson - The Circulatory and Nervous System

Topic – Nervous System

Instruction - Parents please ensure that the child reads the matter for two days, understands and then answers the questions given below.

Nervous System

The brain, the spinal cord and the nerves form the nervous system. Our nervous system controls our sense organs and all the other systems of our body.



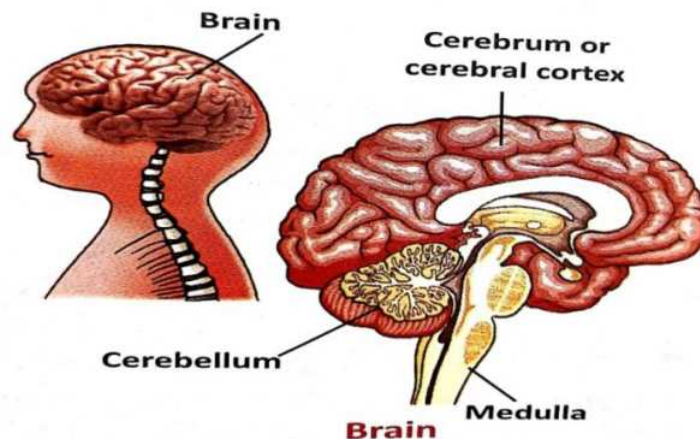
Brain

The brain is the control centre of our body. It is protected by a hard skull. The brain has three main parts-cerebrum, cerebellum and medulla.

.. The **cerebrum** is the thinking part of our brain. It controls our voluntary muscles. It helps us to see, hear, learn, think and remember. Cerebrum also controls our feelings such as sadness, happiness and fear.

.. The **cerebellum** is responsible for our posture, balance, movement and coordination of muscles.

.. The **medulla or brain stem** controls activities such as heartbeat, breathing swallowing and sneezing.

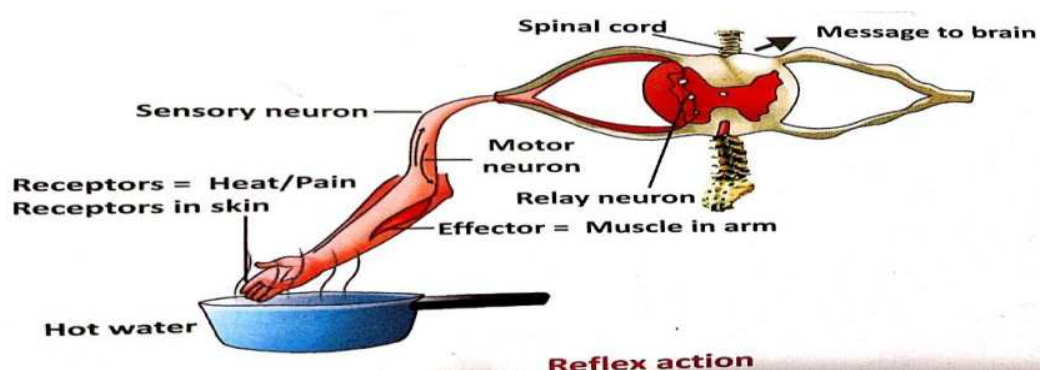


Spinal cord

The spinal cord is a thick cord of nerve tissues that extends down from the medulla. It is surrounded and protected by the backbone. The spinal cord is responsible for the transfer of information between the brain and the rest of the body. It also controls reflex actions.

Reflex action

The automatic response of the body to an event is called a reflex action. Sometimes, our body needs to act very quickly for its safety. For example if we touch a hot object, our hand immediately moves away from it, without realising what happened. In such cases, there is not enough time for a message to reach the brain. So, as soon as the spinal cord receives the message, it sends the order directly to the hand.



Nerves

There are mainly three types of nerves in our body that carry messages to and from the brain and the spinal cord.

..**Sensory nerves** carry messages from different parts of the body to the brain or the spinal cord.

..**Motor nerves** carry messages from the brain or the spinal cord to the different parts of the body.

..**Mixed nerves** carry messages both ways –from the brain or spinal cord to the different parts and from the different parts of the body to the brain or the spinal cord.

Exercise

(A). Fill in the blanks.

1. The _____ is the thinking part of our body.
2. The _____ is the control centre of our body.
3. The _____ controls our reflex action.
4. The _____ is also called the brain stem.
5. _____ carry messages from different parts of the body to the brain.

(B). Give one- word answers.

1. The nerves that carry messages from the brain to the different parts of the body. _____
2. The actions controlled by the spinal cord. _____
3. The system that controls all other systems of our body. _____
4. The part of the brain that controls our feelings. _____
5. The part of the brain that controls our heartbeat and breathing.

(C). State true or false.

1. The heart, the spinal cord and the nerves form the nervous system.
2. The motor nerves bring messages from the sense organs to the brain or the spinal cord.
3. The cerebrum is responsible for our posture and movement.
4. The cerebellum is the thinking part of our brain.
5. The spinal cord is surrounded and protected by the back bone.

(D). Revise and learn the following short question answers:-

1. What does the nervous system consist of?

Ans. The nervous system consists of the brain, the spinal cord and the nerves.

2. What is the control centre of the body?

Ans. The brain is the control centre of the body.

3. What are the parts of the brain?

Ans. The three main parts of the brain are the cerebrum, the cerebellum and the medulla.

4. Name the different kinds of nerves in the body.

Ans. The different kinds of nerves in the body are sensory nerves, motor nerves and mixed nerves.

(E) Revise and learn the following detailed question answers :-

Q1. What are the functions carried out by the different parts of the brain?

Ans. The brain has three main parts – cerebrum, cerebellum and medulla.

Cerebrum:- It is the thinking part of our brain. It controls our voluntary muscles. It helps us to see, hear, learn, think and remember. It controls our feelings such as sadness, happiness and fear.

Cerebellum:- It is responsible for our posture, balance, movement and coordination of muscles.

Medulla or brain stem:- It controls activities such as heartbeat, breathing, swallowing and sneezing.

Q2. What are nerves? How do they function?

Ans. Nerves are long thread- like structures that carry messages between the brain and the other parts of the body. There are three types of nerves.

1. **Sensory nerves** carry messages from different parts of the body to the brain or the spinal cord.
2. **Motor nerves** carry messages from the brain or the spinal cord to the different parts of the body.
3. **Mixed nerves** carry messages both ways from the brain or spinal cord to the different parts and from the different parts of the body to the brain or the spinal cord.

Q3. What is reflex action? Explain with an example.

Ans. The automatic response of the body to an event is called a reflex action. For example, if we touch a hot object, our hand immediately moves away from it, without realising what happened. In such cases, there is not enough time for a message to reach the brain. So, as soon as the spinal cord receives the message, it sends the order directly to the hand.

END
