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LESSON-3. The Circulatory System and The excretory system

Q1. Key words

- | | |
|----------------|---------------|
| a} vessels | f}pumping |
| b}veins | g}circulatory |
| c}capillaries | h}excretory |
| d}arteries | i}bladder |
| e}deoxygenated | j}urethra |

Q2. Pre - Activity:

1.List different organs present in circulatory system.

Q3.Name the following.

1. Name the pumping organ of the body.

Ans] Heart

2. Name the blood vessels with thick walls.

Ans] Arteries

3. Name the blood vessels that carry deoxygenated blood to the heart.

Ans] Veins

4. Name the organ from which urine is excreted.

Ans] Urethra

5. Name the organ which stores urine in it.

Ans] Bladder

6. Name the tubes which connect the kidney to the bladder.

Ans] Ureter

Q4.Short answers questions.

1. What are arteries? Describe.

Ans] The oxygenated (oxygen-rich) blood is carried to all parts of the body from the heart via the blood vessels called arteries. These arteries have thick walls that are strong enough to handle the pressure exerted by the blood as it moves along the body. Arteries appear to be red in colour because they carry blood, which is red. Blood appears red because of the red blood cells which carry oxygen.

2. What are capillaries? What are their functions?

Ans] Capillaries are the smallest of blood vessels connecting the bigger blood vessels to each tissue in our body. They distribute oxygenated blood from arteries to the tissues and collect deoxygenated blood from the tissues to give it to the veins

3. How much time does the kidney take to filter the blood?

Ans] It takes approximately 45 minutes for the kidney to purify blood and move wastes to the bladder.

4. What is function of the bladder?

Ans] The bladder stores waste in the form of urine. The urine produced by the kidney slowly fills up the bladder. Eventually, it becomes full. A person then urinates in order to remove this urine from their body.

Q5.Long answers questions.

1. Describe the process by which blood is transported in the body.

Ans] The oxygenated (oxygen-rich) blood is carried to all parts of the body from the heart via the blood vessels called arteries. These arteries have thick walls that are strong enough to handle the pressure exerted by the blood as it moves along the body. While arteries carry oxygenated blood to different parts of the body, the deoxygenated blood is carried back to the heart through the veins. The heart pumps this blood to the lungs, where it can get oxygenated. It is then carried back to the body parts by the arteries. Capillaries are the smallest of blood vessels connecting the bigger blood vessels to each tissue in our body. They distribute oxygenated blood from arteries to the tissues and collect deoxygenated blood from the tissues to give it to the veins.

2. Explain the function of kidneys.

Ans] Urea and other wastes slowly pollute the blood as it circulates in the body. The kidneys take in this impure blood. Kidneys are a pair of bean-shaped organs which purify and clean the blood. Kidneys remove wastes from the blood and send them to the bladder. Here it is stored as urine. It takes roughly 45 minutes for the kidneys to purify the blood and move wastes to the bladder

3. What would happen if the heart would stop functioning?

Ans] The heart is a muscle and hence is called a muscular organ. It is the most powerful organ of the circulatory system and of the body. As it pumps blood, the heart is called our

body's pumping organ. If the heart stops working, we will not be able to survive as the inflow and outflow of blood will stop.

HOTS

1. In case a person's kidneys stop/slow down functioning what effect would circulatory system?

Ans] Blood won't be purified. Impure blood will travel around the body causing serious health concerns.

2. Why are we asked to drink 8-10 glasses of water every day ?

Some water is lost from the body every day in the form of urine. Thus, to replenish that water and keep ourselves hydrated, we must drink 8-10 glasses of water

Post activity

1] Draw the flow chart to represent the Circulatory system.

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