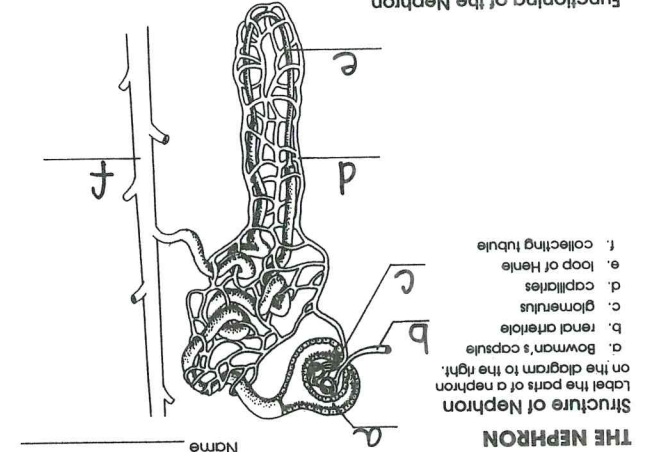


The diagram indicates that the nephrons remove wastes from the blood by the process of filtration and reabsorption. Filtration takes place in the glomerulus; reabsorption takes place in the loop of Henle.



Structure of Nephron
Label the parts of a nephron on the diagram to the right.

THE NEPHRON

Name _____

Fill in the blanks with the correct answers.

Epithelium makes up the skin of the body and the lining of the respiratory and digestive tracts.

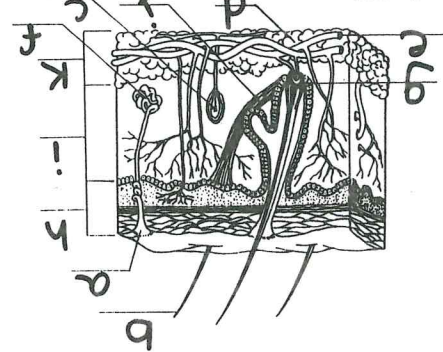
_____ is the largest organ of the vertebrate body.

comprising 15% of the actual weight in an adult. Vertebrate skin is composed of two layers: the outer **epidermis** and the lower **dermis**. There is a protective underlying layer, or **subcutaneous**. Cells are constantly lost from the **epidermis** and replaced by new cells produced deep within the epidermis. It takes about 27 days for all of the outer skin cells to be replaced.

Specialized cells called melanocytes within the epidermis produce a brownish pigment called **melanin**. People of all races have about the same number of melanocytes but differ in the amount of **melanin** produced, thus giving a vast range of skin tones. The dermis is composed mainly of **connective** tissue.

Most range of skin tones. The dermis is composed mainly of **connective** tissue.

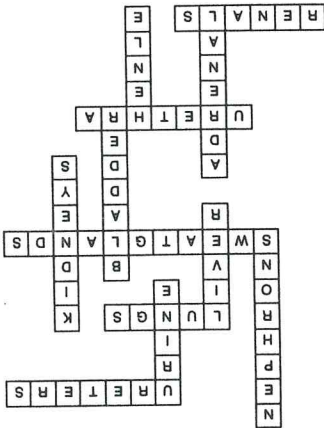
which gives the skin its strength and elasticity. Among the structures in the dermis are **vessels**, nerves, hair **roots**, oil **glands** and **sweat** glands. Wrinkling of the skin occurs in the **dermis** layer. Leather goods are made of animal **dermis**.



HUMAN SKIN
Label the following parts of human skin on the diagram below.

Name _____

- Across**
- Microscopic units that filter the blood in the kidneys
 - Tubes connecting the kidneys to the urinary bladder
 - Carbon dioxide and water are excreted here during exhalation
 - Removes toxic substances from the blood and converts excess amino acids to urea
 - Organs that filter wastes and other dissolved substances out of the blood
 - The urinary _____ stores the urine until it can be excreted by the body.
 - Endocrine gland at the top of each kidney
 - Loop of _____ at the bottom of nephron

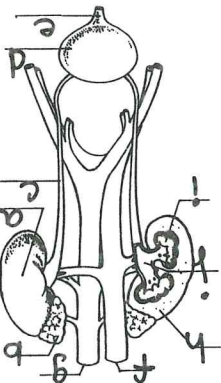


HUMAN EXCRETORY SYSTEM

Name _____

Fill in the blanks below with the correct answers.

Kidneys are the "filters" of the **excretory** system. They control essential balance between body salts and **water**. They remove from the blood nitrogenous wastes, water, urea, nonviable foreign substances, excess salt and excess water. The kidney is enclosed by a connective tissue **capsule** and is divided into an outer **cortex** and an inner **medulla**. The **loop of Henle** functions chiefly for water reabsorption. The liquid waste, **urine**, collected by the kidneys passes through the **ureter** to the **urinary bladder**. The **urethra** is a strong muscular organ that stores the urine until it can be excreted via the **urethra**.



HUMAN URINARY TRACT AND KIDNEY
Label the parts of the human urinary system, including the human kidney, in the diagram below. Give the function/purpose of each part.

- kidneys—remove liquids and other substances from blood
- adrenal glands—produce hormones
- ureter—joins kidney to bladder
- urinary bladder—stores urine until released from the body
- urethra—neck of bladder
- renal artery—artery leading to the kidneys
- renal vein—vein going away from the kidneys
- cortex—outer portion of kidney
- medulla—inner portion of kidney
- renal pelvis—central area of kidney

Name _____