## What is the primary function of a nephron

- A. Production of red blood cells
- B. Regulation of blood pressure
- C. Filtration of blood and formation of urine
- D. Digestion of food

## Where are nephrons located in the body

- A. Brain
- B. Heart
- C. Kidneys
- D. Stomach

## How many nephrons are there in each kidney

- A. Hundreds
- B. 1000
- C. Millions
- D. 50

## What are the two main parts of a nephron

- A. Glomerulus and collecting duct
- B. Kidney and bladder
- C. Renal corpuscle and renal tubule
- D. Bowman's capsule and loop of Henle

## What is the role of the glomerulus in the nephron

- A. Transport of nutrients

- B. Regulation of blood pressure
- C. Production of urine
- D. Filtration of blood

### What is the purpose of the proximal convoluted tubule in the nephron

- A. Secretion of waste products
- B. Filtration of blood
- C. Production of urine
- D. Reabsorption of water and solutes

### What is the loop of Henle responsible for in the nephron

- A. Filtration of blood
- B. Reabsorption of water and electrolytes
- C. Secretion of waste products
- D. Production of urine

### What is the function of the distal convoluted tubule in the nephron

- A. Filtration of waste products
- B. Reabsorption of sodium and water
- C. Production of urine
- D. Secretion of nutrients

### What is the collecting duct in the nephron responsible for

- A. Filtering blood
- B. Producing urine
- C. Reabsorbing water and concentrating urine
- D. Regulating blood pressure

## How do nephrons help regulate blood pressure

- A. By secreting hormones
- B. By filtering blood and regulating fluid balance
- C. By controlling heart rate
- D. By producing insulin

## What is the mechanism by which nephrons filter waste from the blood

- A. Blood transfusion
- B. Glomerular filtration
- C. Kidney digestion
- D. Urine secretion

## How do nephrons help maintain proper electrolyte balance in the body

- A. By producing more electrolytes in the body
- B. By eliminating all electrolytes from the body
- C. By secreting excess electrolytes into the urine
- D. By filtering and reabsorbing electrolytes in the blood

## What role do nephrons play in the production of urine

- A. Digesting food
- B. Regulating body temperature
- C. Producing hormones
- D. Filtering blood and reabsorbing essential substances

## How do nephrons help regulate pH levels in the body

- A. By filtering and reabsorbing bicarbonate ions

- B. By regulating sodium levels
- C. By secreting excess bicarbonate ions
- D. By producing excess hydrogen ions

## What is the impact of kidney disease on nephron function

- A. No impact on nephron function
- B. Improved nephron function
- C. Increased nephron function
- D. Decreased nephron function

## How do nephrons help regulate water balance in the body

- A. By filtering and reabsorbing water from the blood
- B. By controlling blood pressure
- C. By producing urine
- D. By regulating electrolyte levels

## What is the significance of the juxtaglomerular apparatus in the nephron

- A. Produces urine
- B. Stores waste products
- C. Controls body temperature
- D. Regulates blood pressure

## How do nephrons help regulate blood volume in the body

- A. By controlling muscle contractions
- B. By regulating body temperature
- C. By producing red blood cells
- D. By filtering blood and reabsorbing or excreting water and ions

## What is the role of the macula densa in the nephron

- A. Produces urine
- B. Filters blood
- C. Controls blood pressure
- D. Regulates renin secretion

## How do nephrons contribute to the body's overall homeostasis

- A. By regulating body temperature
- B. By producing insulin
- C. By filtering blood and regulating water balance
- D. By controlling muscle movement