



ACROSS

- 7 The _____ apparatus is a microscopic structure in the kidney which regulates the function of each nephron.
- 11 The _____s are organs that filter wastes, such as urea, from the blood and excrete them, along with water, as urine.
- 13 _____ is increased production of urine by the kidney.
- 15 The glomerular _____ rate is the volume of fluid filtered from the renal glomerular capillaries into the Bowman's capsule per unit time.
- 16 The _____ tubule is the portion of the duct system of the nephron leading from Bowman's capsule to the loop of Henle.
- 17 The _____ buffering system is the most important buffer solution for maintaining a relatively constant pH in the plasma.
- 18 A _____ is a capillary tuft surrounded by Bowman's capsule in nephrons of the vertebrate kidney which

receives its blood supply from an afferent arteriole of the renal circulation.

- 20 _____, known by physiologists as micturition of voiding, is the process of disposing urine from the urinary bladder through the urethra.
- 21 The _____s are the ducts that carry urine from the kidneys to the urinary bladder.
- 22 _____'s capsule is a cup like sac at the beginning of the tubular component of a nephron in the kidney. A glomerulus is enclosed in the sac.
- 23 _____ is a liquid produced through the kidney, and is collected in the bladder and excreted through the urethra.
- 24 _____ exchange is a mechanism used to transfer some property of a fluid to another across a semipermeable membrane.

DOWN

- 1 The renal _____ is the outer portion of the kidney

between the renal capsule and the renal medulla.

- 2 In the kidney, the loop of _____ is the portion of the nephron that leads from the proximal convoluted tubule to the distal convoluted tubule. The main function of this structure is to reabsorb water and ions from the urine.
- 3 The urinary _____ is a hollow, muscular, and distensible organ that collects urine excreted by the kidneys prior to disposal by urination.
- 4 The _____ duct system of the kidney consists of a series of tubules and ducts that connect the nephrons to the ureter.
- 5 Renal _____ is a mechanism by which the kidneys can regulate the plasma pH.
- 6 The _____ cells are cells that synthesize, store, and secrete the enzyme renin.
- 8 _____ occurs at the barrier between the blood and the filtrate in the renal corpuscle or Bowman's capsule in the kidneys.

9 The renal _____ is the innermost part of the kidney.

- 10 Renal _____ are cone-shaped tissues of the kidney within the renal medulla, which is made up of 8 to 18 of these conical subdivisions.
- 12 The distal _____ tubule is a portion of kidney nephron between the loop of Henle and the collecting duct system.
- 14 A _____ is the basic structural and functional unit of the kidney.
- 19 The _____ is a tube which connects the urinary bladder to the outside of the body.
- 21 The _____ system is the organ system that produces, stores, and eliminates urine. In humans it includes two kidneys, two ureters, the bladder, and the urethra.