

Figure 9.8 Diagram of a mammalian kidney. The kidney contains a large number, up to several million, of single nephrons. Only one nephron is indicated in this diagram and is shown enlarged to the right. The outer layer of the kidney, the *cortex*, contains the *Malpighian bodies* and the proximal and the distal convoluted tubules. The capillary network within the Malpighian body is known as the *glomerulus*. The inner portion, the *medulla*, contains

Henle's loops and *collecting ducts*.

The urine is initially formed by ultrafiltration in the Malpighian bodies. The filtered fluid is modified and greatly reduced in volume as it passes down the renal tubule and into the collecting ducts. These empty the urine into the renal *pelvis*, from where it is conveyed via the *ureter* to the bladder.