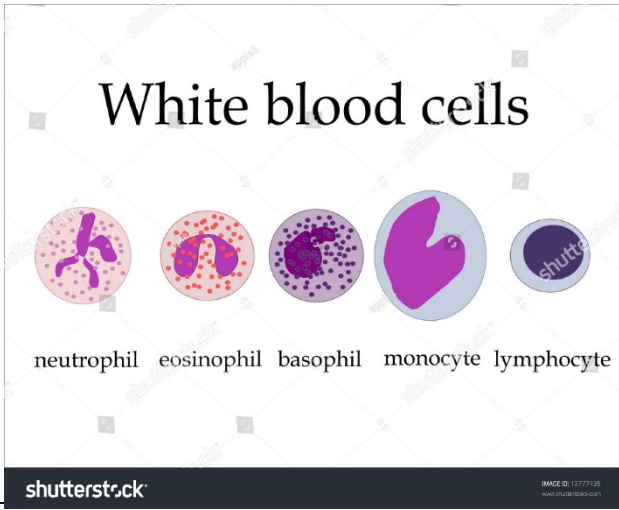
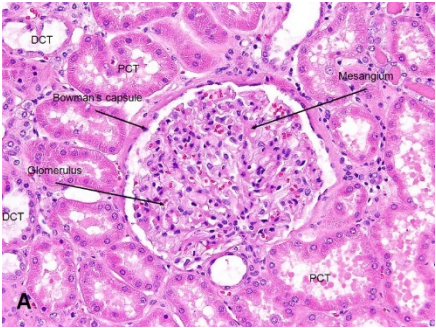
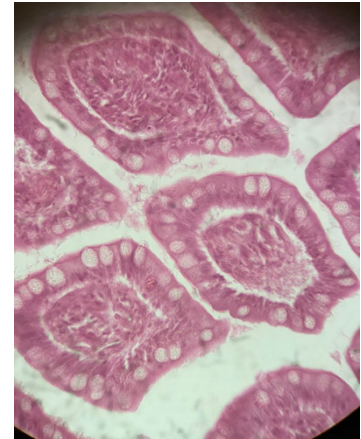


| Organ | Epithelium | Specialisations | Additional Features | Picture |
|--------------------|---|---|--|--|
| Blood Cells | | <ul style="list-style-type: none"> • Neutrophils (nucleus appears as 3 lobes) → Granulocyte. Have specific and azurophilic granules (specific= most prevalent). • Eosinophils (nucleus appears as 2 separated lobes) → Granulocyte • Basophils (nucleus appears as 2 slightly separated lobes) → Granulocyte • Erythrocytes (bi- concave shape) • Lymphocytes (nucleus dominates cell) → Agranulocyte • Monocytes (moon-shaped nucleus) → Agranulocyte • Platelets (granular dots- purple flecks). Have blood clotting factors. | |  |
| Kidney | <p>Bowman's capsule + glomerulus= simple squamous</p> <p>Proximal + distal tubules= simple cuboidal</p> | <p>Proximal tubules= long microvilli on apical surface</p> <p>Distal tubules= shorter and denser microvilli on apical surface and clearer lumen than proximal tubules.</p> <p>Podocytes are present in the Bowman's capsule and surround the glomerulus to form a filtration barrier and give support (stain lighter and larger than nuclei).</p> | <p>Dark purple circles in glomerulus= capillaries.</p> <p>Squamous epithelia= filter.</p> <p>Cuboidal epithelia= substrate exchange.</p> <p>Loop of Henle appear smaller with a much thinner wall containing fewer cells than tubules.</p> |  |

| | | | | |
|--------------|-----------------|--|--|--|
| | | <p>Macula densa line the wall of the distal tubule.</p> | <p>Cortex of kidney= Bowman's capsule, glomerulus and proximal and distal tubules.</p> <p>Medulla= loops of Henle and collecting ducts.</p> <p>Papillary ducts are contained in renal pyramids of medulla.</p> | |
| Ileum | Simple columnar | <p>Villi with goblet cells that produce mucous to protect the microvilli on the villi that create the brush border (intestinal lining)</p> | <p>Loose connective tissue and vasculature within centre of diamond structure (between vilus).</p> |  |