

## **Histology Checklist for the Anato-Bee**

## Key:

- Words in (parentheses) are structures that you must be able to differentiate between.
- Words following a slash are additional acceptable ways to phrase or name the structure.
- Information in [brackets and italicized] is included to aide in your studying.

TOPIC	TAGGABLE STRUCTURES
Epithelium and Glands	<ul> <li>Types of epithelia:         <ul> <li>Simple squamous epithelium</li> <li>Stratified squamous epithelium (distinguish keratinized vs. non-keratinized)</li> <li>Simple cuboidal epithelium</li> <li>Simple columnar epithelium</li> <li>Pseudostratified ciliated columnar epithelium</li> <li>Transitional epithelium/Urothelium</li> </ul> </li> <li>Basement membrane [with PAS staining]</li> </ul>
	Examples of exocrine glands:  • Sudoriferous sweat gland  • Mammary gland  Examples of endocrine glands:  • Pituitary gland
Connective Tissue Proper	<ul> <li>Thyroid gland</li> <li>Lamina propria</li> <li>Fiber types: <ul> <li>Collagen [focus on type I collagen]</li> <li>Elastic</li> <li>Reticular [composed of type III collagen]</li> </ul> </li> <li>Identify types of collagenous tissue: <ul> <li>Loose/Areolar</li> <li>Dense Regular</li> <li>Dense Irregular</li> </ul> </li> <li>Cell types in peripheral blood smear: <ul> <li>Red blood cells</li> <li>White blood cells</li> </ul> </li> </ul>
Cartilage and Bone	<ul> <li>Platelets</li> <li>Types of cartilage: <ul> <li>Hyaline</li> <li>Fibrocartilage</li> <li>Elastic</li> </ul> </li> <li>Types of bone:</li> </ul>



TOPIC	TAGGABLE STRUCTURES
	Compact bone/Cortical bone
	Spongy bone/Trabecular bone
	Osteon/Haversian system
	Connective tissue of bone:
	Periosteum
	Endosteum
	Types of muscle:
	Skeletal
	Cardiac
	Smooth
	Bands/lines and zones of a sarcomere [Illustration; Light
	micrograph and TEM]
Muscle Tissue	Organization of skeletal muscle:
	Myofibril
iviuscie rissue	Myofilament
	Myofiber
	Fascicle
	Muscle
	Connective tissue of muscle:
	Endomysium
	Perimysium
	Epimysium
	Parts of a nerve:
	Neuron
	<ul> <li>Dendrites</li> </ul>
	o Cell body
	o Axon
	Axon terminal bulb
	Types of neurons:
	Pseudounipolar
Nervous Tissue	Bipolar
	Multipolar
	Myelin-producing cell types:
	Schwann cells [found in the PNS]
	Oligodendrocytes [found in the CNS]
	Connective tissue of nerves:
	Endoneurium [covers an axon]
	Perineurium [covers a nerve fascicle]  -
	Epineurium [covers a nerve]
	Layers/tunics of a typical blood vessel:
	Tunica intima



TOPIC	TAGGABLE STRUCTURES
Cardiac and Circulatory System	Tunica media
	Tunica externa
	Layers of the heart:
	Endocardium
	Myocardium
	Epicardium/Visceral layer of the pericardium
	Layers of skin:
Integumentary	Epidermis (distinguish thick vs. thin skin)
System	Dermis (distinguish thick vs. thin skin)
Jysteili	Hypodermis/Subcutaneous layer
	Superficial fascia
	Layers of conducting airways:
	Mucosa
	Submucosa
<b>.</b> .	Muscularis [with cartilage rings/plate]
Respiratory	Adventitia
	Cells of the respiratory zone:
	Type I pneumocytes     Type I pneumocytes
	Type II pneumocytes
	Dust cell/Alveolar macrophages
Accossory Organs	Major salivary glands:
Accessory Organs	Parotid [mostly serous]     Submandibular [mixed]
of Digestion	<ul><li>Submandibular [mixed]</li><li>Sublingual [mostly mucous-producing]</li></ul>
	Layers of the GI tract:  • Mucosa
	Submucosa
Gastrointestinal	Muscularis
(GI) Tract	Adventitia/Serosa
(GI) Hact	Nervous tissue of the GI tract:
	Myenteric plexus/Auerbach's plexus
	Submucosal/Meissner's plexus
	Layers of the bladder and ureters:
	Transitional Epithelium
11	Submucosa
Urinary and	Muscularis/Detrusor muscle [Bladder]
Reproductive Systems	Adventitia/Serosa
	Tissue layers/structures of the ovary:
	Germinal Epithelium
	Capsule



TOPIC	TAGGABLE STRUCTURES
	Cortex
	Medulla
	Follicles/Oocyte
	Layers of the uterus:
	Endometrium
	Myometrium
	Perimetrium
	Structures and cell types of the testis:
	Seminiferous Tubules
	<ul> <li>Spermatogonia</li> </ul>
	<ul> <li>Spermatids/Spermatozoa</li> </ul>
	o Sertoli cells
	Leydig Cells
	Diffuse lymphoid tissue
	Lymph nodes [tonsils (general), appendix, and thymus]
Lymphoid Organs	Lymphoid follicles:
	<ul> <li>Peyer's Patches [of the small intestine]</li> </ul>
	<ul> <li>Periarterial lymphoid sheath [of the spleen]</li> </ul>