	Mucosa (inner most layer)			Sub-mucosa	Muscularis externa			Adventitia OR serosa (outer most layer)
	Epithelial lining	**Lamina propria**	**Muscularis mucosa**					
esophagus	**Non-keratinized stratified squamous cells**	Loose C.T with mucosal <u>esophageal glands</u> (in upper and lower end)	Few layers of smooth ms fibers	Loose C.T containing blood vessels, nerves **submucosal esophageal glands** and **meissner's plexus**	Inner circular layer		Outer longitudinal	Adventitia. And serosa in the abdominal part of the esophagus.
					<u>Upper 1/3:</u> both layers are skeletal muscles	<u>Middle 1/3:</u> Inner layer is smooth ms. Outer layer is skeletal ms.	<u>Lower1/3:</u> both layers are smooth ms.	
					Auerbach's (myenteric) plexus between the 2 layers			
stomach	Mucosa has folds known as **RUGAE** (disappears in the distended stomach)							
1-Fundus and body of stomach	**Simple columnar mucus <u>secreting cells</u>.**	C.T invaded by **FUNDIC GLANDS** with lymphoid elements.	2 layers of smooth muscles.	C.T containing blood vessels, nerves and **meissner's Plexus** <u>NO GLANDS</u>!!	Inner oblique	Middle circular	Outer longitudinal	Serosa: C.T covered by mesothelium (simple sqamous epitheliu m)
FUNDIC GLANDS	Have <u>short</u> pits (**1/4 of mucosa**). And composed of <u>5 cell types</u>: 1-parietal. **2-peptic (predominant)** 3-mucous neck. 4-EE. 5-stem cells.				**Auerbach's (myenteric) plexus**			
2-pylorus of stomach	**Simple columnar mucus <u>secreting cells</u>.**	Invaded by **PYLORIC GLANDS.**	-		Inner circular layer		Outer longitudinal	
PYLORIC GLANDS.	Have <u>deep</u> pits (1/2 of mucosa) and they are branched and convoluted. Composed of: <u>1-mucus neck cells(predominant)</u> 2-EE cells. 3-stem cells. 4-parietal (few) <u>5-NO peptic cells</u>.				**Auerbach's (myenteric) plexus**			

	Parietal (oxyntic) cells	Peptic (chief) cells	Serous cells	Mucous cells	Pancreatic acinar cells
Shape:	Pyramidal or polyglonal	Columnar	Pyramidal	Pyramidal or cuboidal	Pyramidal
nucleus	Central and round	Basal and round	Round and basal	Flattened and basal	basal
cytoplasm	Deeply **acidophilic**, rich in SER and mitochondria	**Basophilic** with apical secretory granules	Deeply **basophilic** (due to RER) with apical secretory granules	Pale **basophilic** and vacuolated (foamy)	-Basal part is **basophilic** (RER). And -Apical part is **acidophilic** (due to secretory granules)
function	Secrets **HCL** and **gastric intrinsic factor** (helps in vit B12 absorption)	Secretes **pepsinogen**	Secretes **salivary amylase**	Secrets **mucus**	Secret **digestive pancreatic enzymes**

Done by: Raghda Alqassim.
Good luck!