**Items to Identify: Introduction to Microscopy**

**Slides to Identify**

* Slide HISTO01: Plant Cell
  + Nuclei
  + Cytoplasm
  + Cell cycles phases
* Slides 110 & 113: Human Blood Smear
  + Red blood cells
  + Granules in cells (neutrophils)
* Slide 145: Fundic Stomach
  + Structures of fundic stomach with H&E stain
* Slide 156: Pancreas (toluidine blue)
  + Observe the toluidine blue stain
  + Distinguish features based on stain intensity, shape, and size
  + Mitochondria
* Slide 158: Pancreas
  + Observe acidophilic and basophilic structures
    - Nucleus= basophilic (blue color)
    - Cytoplasm- acidophilic (pink color)
  + Observe cytoplasm and granules
* Slide 165: Testis
  + H&E preparation of testis
* Slide 244: Fundic Stomach (toluidine blue)
  + Structures of fundic stomach with toluidine blue stain
* Slide 19680: Human testis (toluidine blue)
  + Nuclei, and observe various intensities of staining
  + Large lipid droplets
* Slide 19709: Human testis (toluidine blue)
  + Unstained sections of tissue
  + Mast cells with dark red granules in both stained and unstained sections

**EM’s to Identify**

* EM 2b: Liver (60,000x)
  + Compare sizes of membranes, ribosomes, and mitochondria
  + Conventional transmission electron microscopy
* EM 4a: Intestines – Occludens junction (carbon replica, TEM)
  + Carbon replica transmission electron microscopy
* EM 4c: Intestinal absorption cell (60,000x)
  + Compare sizes of membranes, ribosomes, and mitochondria
* EM 6: Lymphocyte (carbon replica, TEM)
  + Carbon replica transmission electron microscopy
* EM 6a: Centriole - Microtubules (200,000x)
  + Compare sizes of membranes, ribosomes, and mitochondria
* EM 7: Ascites fluid; Golgi (80,000x)
  + Compare sizes of membranes, ribosomes, and mitochondria
  + Conventional transmission electron microscopy
* EM 8: Trachea – Cilia (SEM)
  + Scanning electron microscopy
* EM 8f: Peripheral blood cells (9,000x)
  + Compare sizes of membranes, ribosomes, and mitochondria
* EM 12a: Bone marrow (13,200x)
  + Compare sizes of membranes, ribosomes, and mitochondria
* EM 18b: Kidney (SEM)
  + Scanning electron microscopy