**Key features to help you find tissues on slides:**

**ET**:

-Always on a surface or lining a lumen

- typically stains blue/ purple or dark pink (whereas the connective tissue below it is light pink)

**s. sq**. – flat nuclei and flat cells; usually a side view

**st. sq**. – usually a skin slide with a keratinized layer of dead flaking cells; some cells are round near the basement membrane and others are flat near the surface (focus on the shape of the nuclei to tell flatness)

**s. cub**. – usually lines lumen, looks like a beaded necklace; round centrally located nuclei

**s. col**. – usually from the intestines so looks like a “maze”; cells make up the wall surfaces of the maze; cells are elongated and nuclei are near the basement membrane and cells contain mucus secreting goblet cells that look like bubbles in the ET

**ps. (ciliated) col**. – usually found lining the trachea, looks more blue in the stain and ciliar are long like hair; contains goblet cells; nuclei are at different levels (not all near the basement membrane)

**trans**- slide is of a bladder and the cells line the inside of the bladder; cells are all shapes

**CT:**

**Adipose** – stains light pink; center of cells are clear because the fat is oily and the water based stain doesn’t mix with it; nuclei squished to the outside by the fat, looks like air bubbles; slide is usually of deep layers of skin where fat is stored

**Bone** (compact) - looks like growth rings

**Cartilage** (hyaline)- has cell “nests” where they are found in pairs surrounded by a fuzzy purple matrix of cartilage

**Blood** – mix of red blood cells and white blood cells; WBC’s have purple nuclei

**MT:**

**Skeletal** – each cell has many nuclei squished to the outside of the cell; cells are long like thread and have wavy lines called striations along each cell (kinda looks like a TV not in focus)

**Cardiac** – similar to skeletal but cells only have 1 nuclei per cell and there is a dark band between each cell called the intercalated disc that separates each cell. Nuclei not squished

**Smooth** – looks like a river of pink with purple flat nuclei swimming along in hordes. Located in the middle of whatever tissue being observed (not on a surface like ET)

**NT**: obvious, looks like a typical neuron, very easy to see