Review principles, procedures, supplies and equipment used in **Preparing Tissue**, including

- Water bath temperature, correct temperature (42°C within correct range), result if too cold (wrinkles in tissue)
- Oven temperature, correct temperature 58° – 60°C.
- Need to dehydrate tissue before placing in paraffin
- Schedule for dehydrating, identify proper time for embedding based on time the process begins
- Eosin added with the first 95% alcohol
- Tissue hardens if placed in a high grade of alcohol for a prolonged period
- Absolute alcohol used to demonstrate urate crystals
- Percentage of formaldehyde in 10% formalin (4%)
- Simple fats preserved in 10% Neutral Buffered Formalin
- Acid solutions remove calcium salts from bone to soften bone
- Determining whether bone is decalcified, check with forceps daily for pliability
- Silver impregnation is the best way to visualize spirochetes in fixed tissue
- Shorter processing time for GI tissue

Review principles, procedures, supplies and equipment used in **Embedding**, including

- Purpose of embedding (provide support)
- Embed tubular structures on end
- Gallbladder tissue embedded on edge
- Skin sections correctly embedded on edge with epidermis aligned in the same direction
- Bone placed in mold diagonal to the mold
- Assure that all pieces are approximately the same size when embedding
- To place larger tissue in the mold, tamp down so that most tissue is at the bottom of the mold
- Specimen too large for correct embedding, notify supervisor

Review principles, procedures, supplies and equipment used in **Staining**, including

- Best mordant for Masson trichrome stain = Bouins
- Masson trichrome stain uses aniline blue to stain collagen
- Hemotoxlyin & Eosin (H&E) used for routine staining, correct result for control = hemotoxylin stains nuclei dark blue and eosin stains cytoplasm pink
- Periodic Acid Schiff (PAS) used to stain kidney tissue

Review principles, procedures, supplies and equipment used in **Cutting**, including

- Splitting vertically when cut may mean that the knife is defective on the edge
- Correct thickness for cutting brain tissue, 5 – 6 microns
• Determining that calcium deposits in breast tissue have been reached, shredding