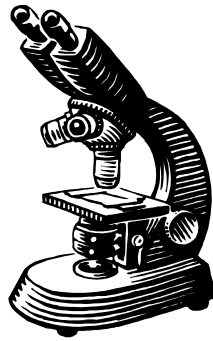


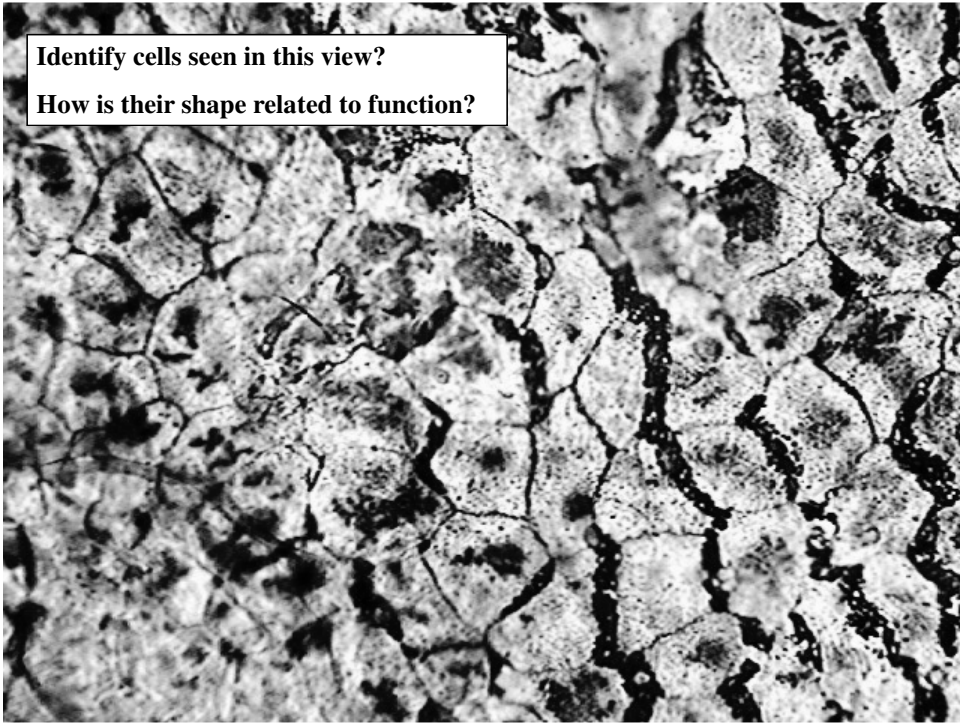
Bio & 241 A&P

Unit 1Lab 2

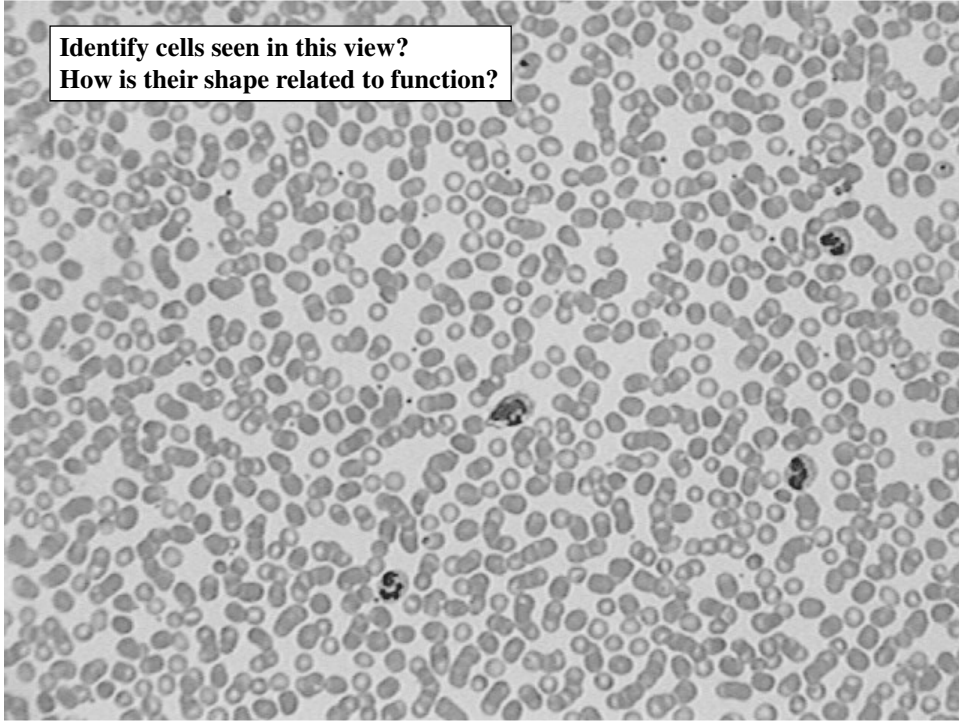


Histology Slides for the Epithelial, Connective, and Integumentary Tissues

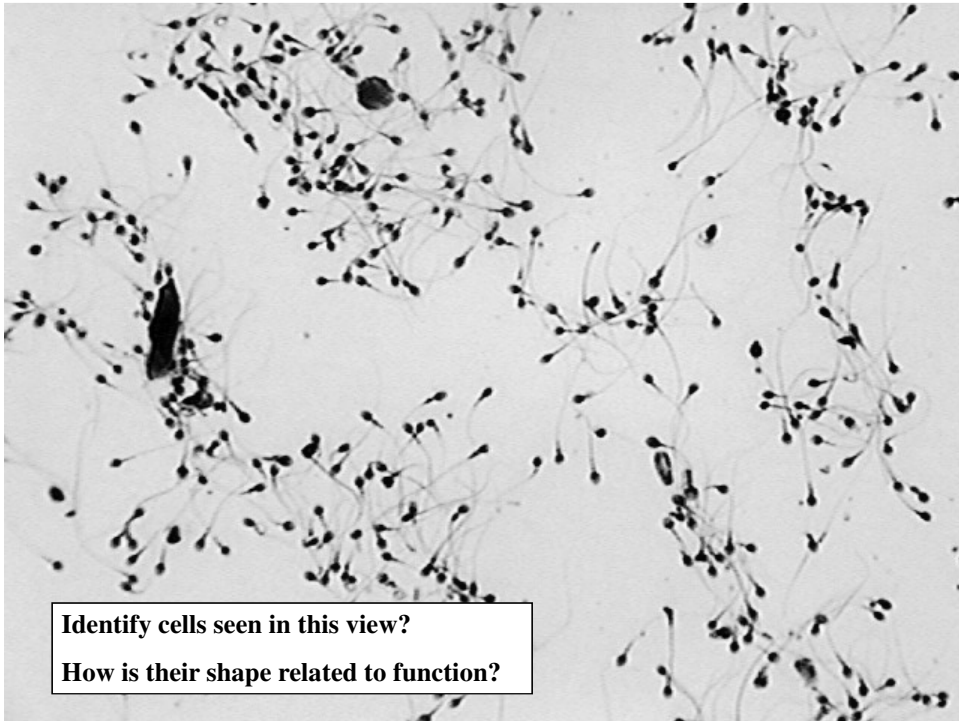
- **Slides are presented in order of magnification**
- **As you view the following slides make sure you can accomplish these goals:**
 - 1. Can you identify the tissue layers observable on the slides?**
 - 2. Can you identify the specific structures or layers indicated by the numbered arrows or brackets?**
- **At the end of a sequence you will find the answers to the above for each vessel and layer.**

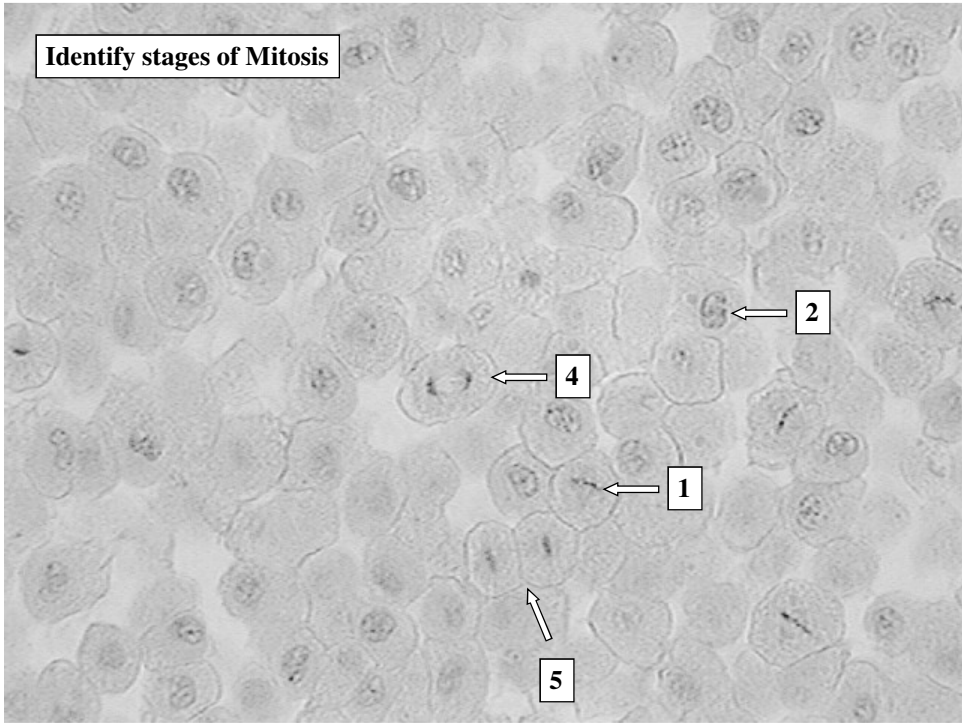
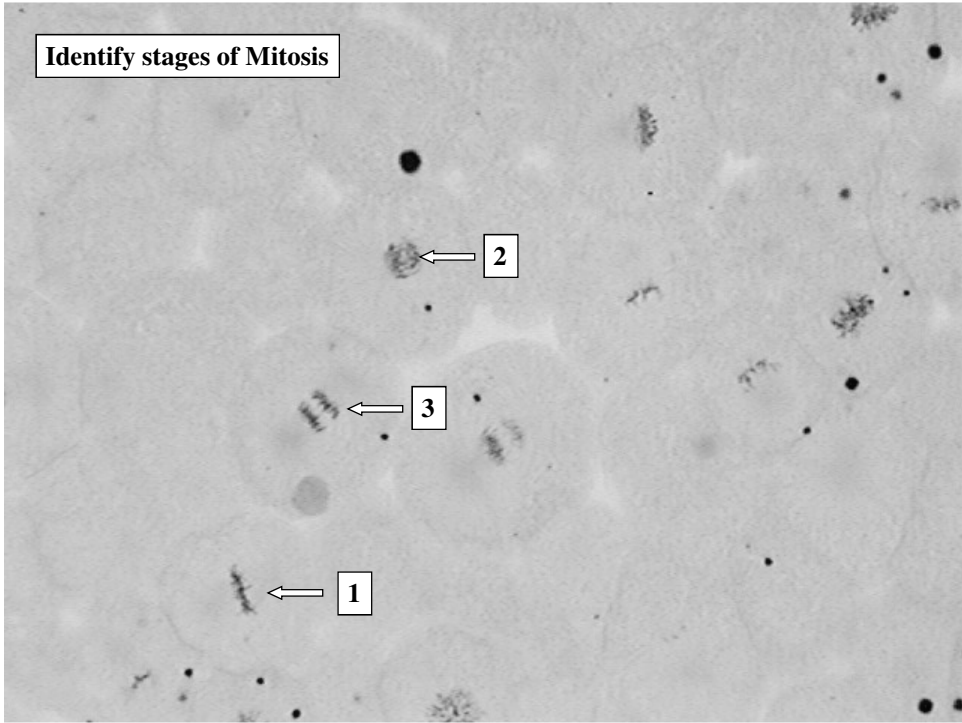


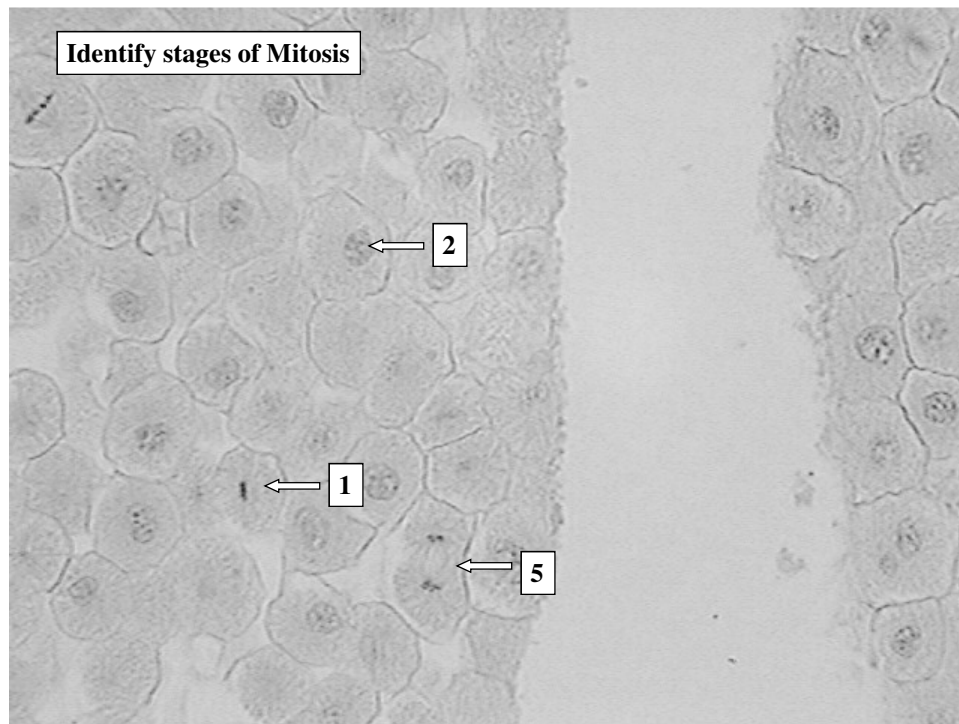
**Identify cells seen in this view?
How is their shape related to function?**



**Identify cells seen in this view?
How is their shape related to function?**

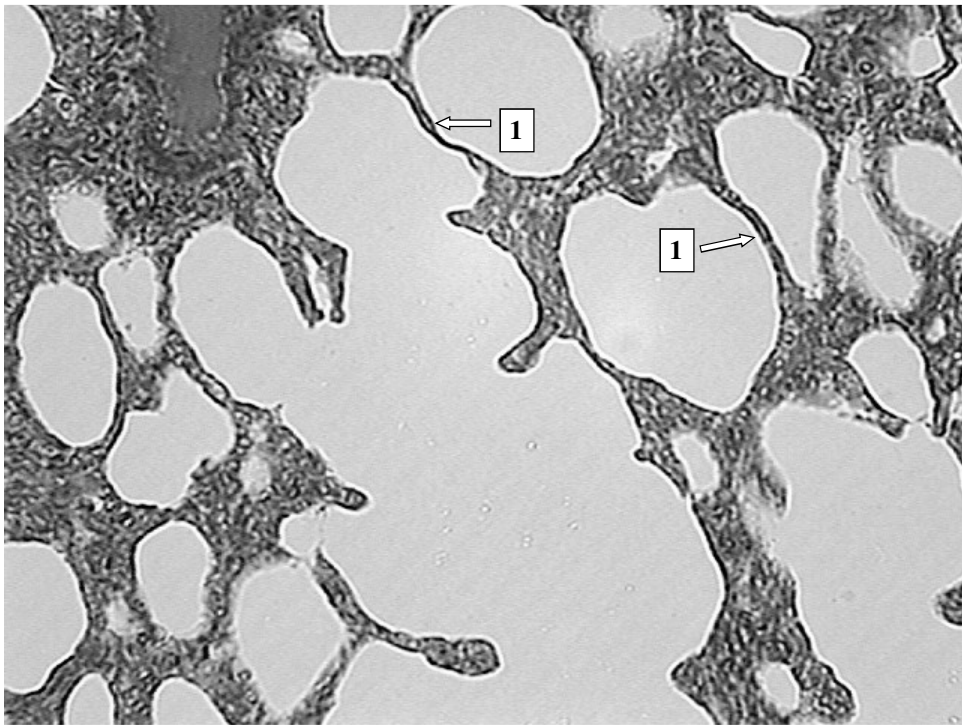
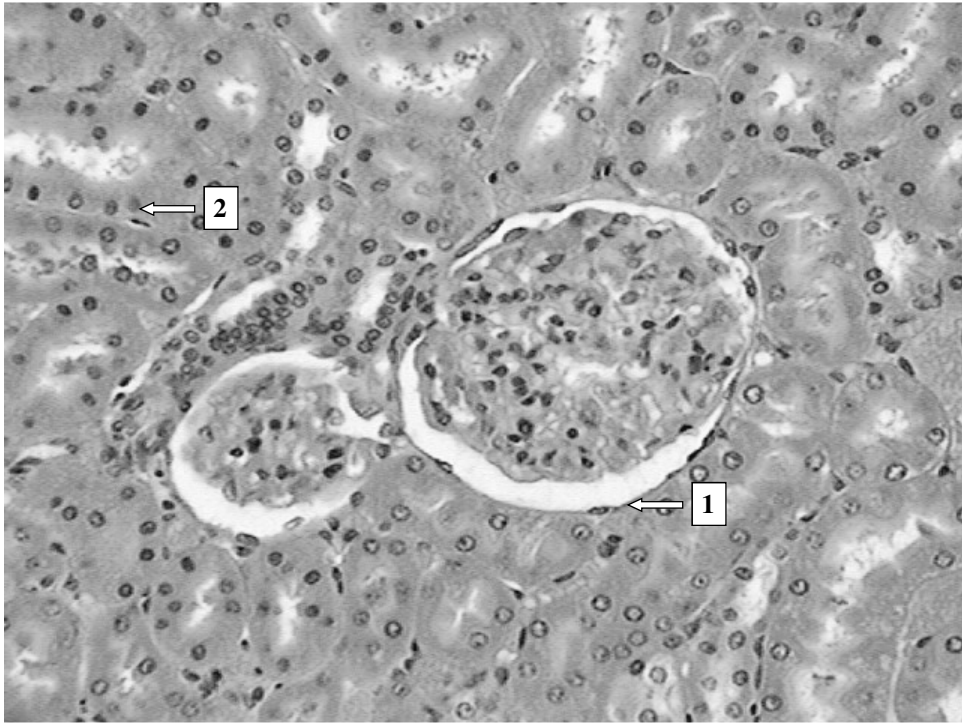


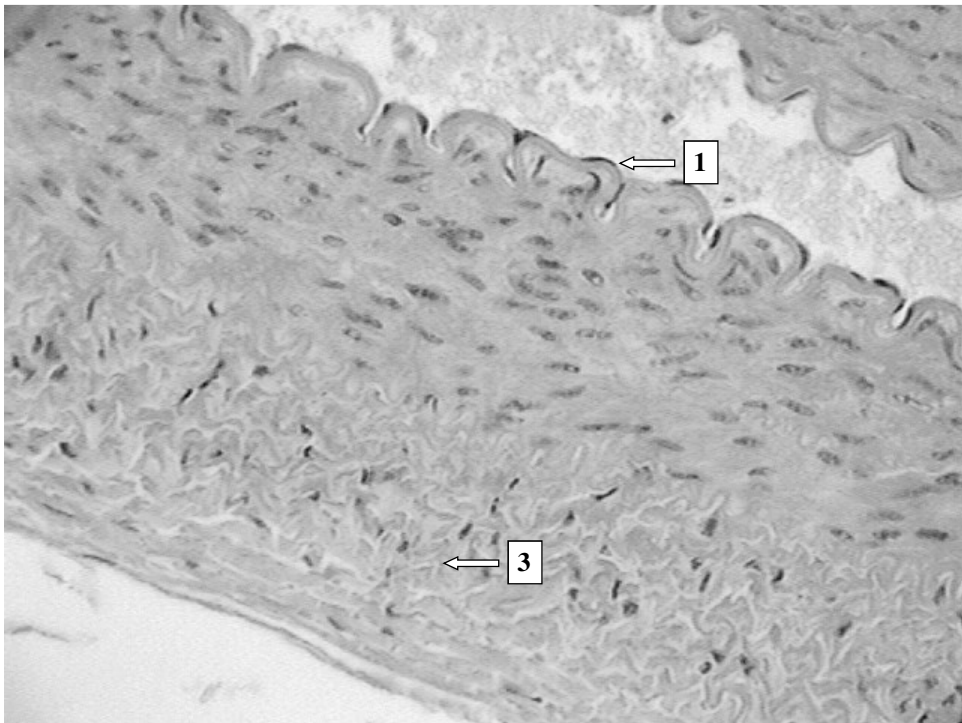
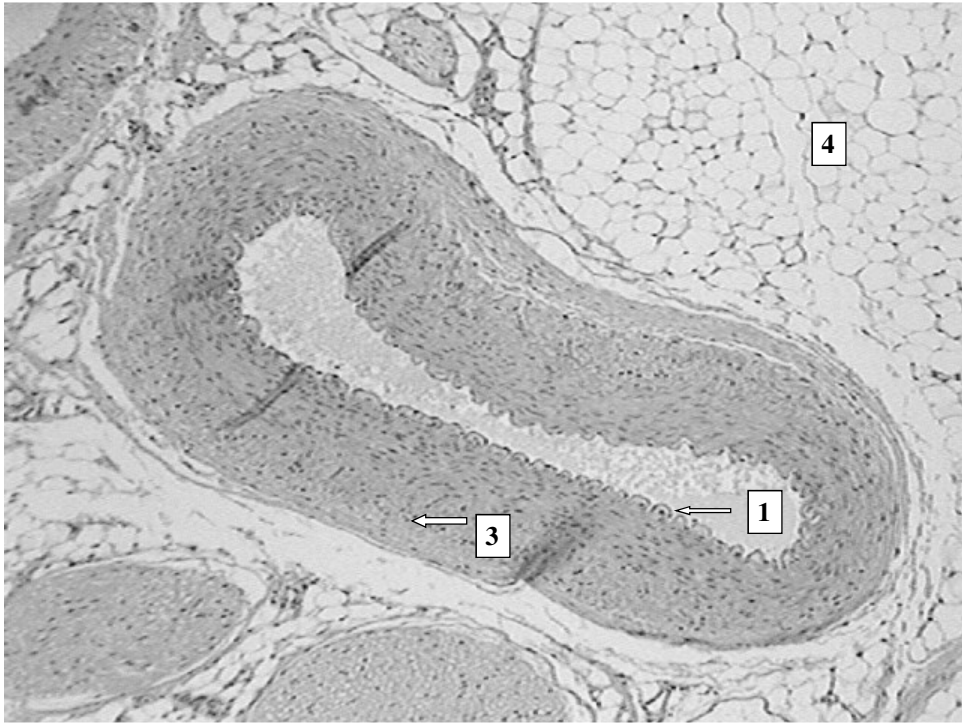




Answers to Slides 3-9

- Slide 3: Surface view of simple Squamous epithelial**
Cells designed to cover surfaces, have large surface area on surface plane and are thin in side view.
- Slide 4: Smooth muscle cells**
Cell spindle-shaped to contract and elongate on a single plane
- Slide 5: Red blood cells with a few white blood cells**
Biconcave to increase surface area to volume for diffusion and non-nucleated to increase hemoglobin capacity.
- Slide 6: Human sperm cells**
Small flagellated cells for swimming. Small size to increase the number of cells that can be placed in a small amount of solution
- Slide 7-9: Mitosis of a fish egg**
- | | |
|--------------|--------------------|
| 1. Metaphase | 4. Early telophase |
| 2. Prophase | 5. Late telophase |
| 3. Anaphase | |





Answers to Slides 11-14

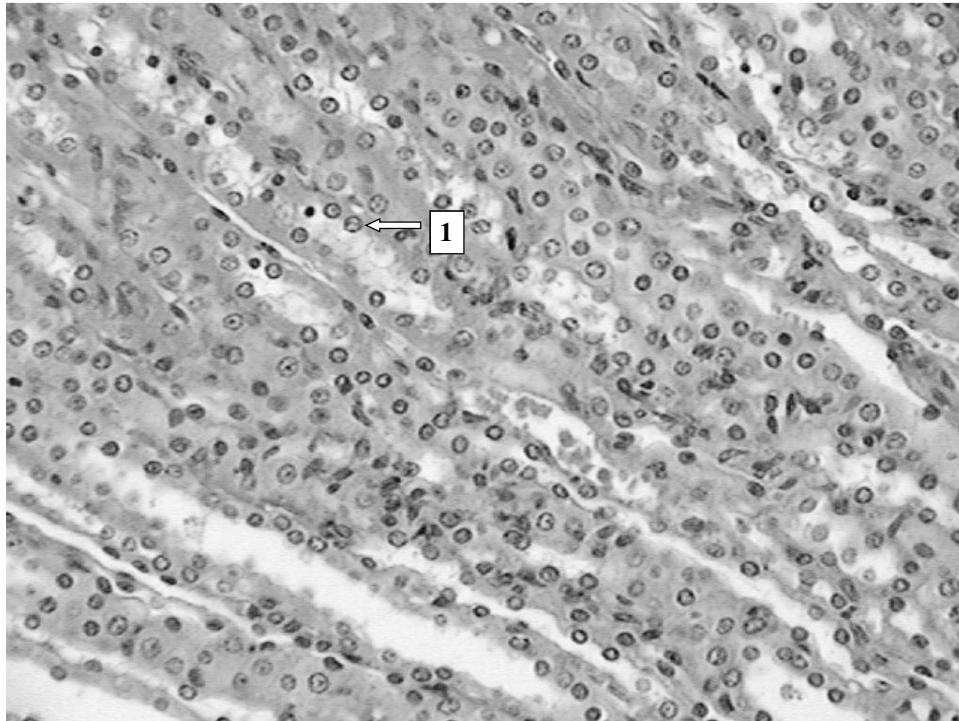
Slide 11: Kidney showing a renal corpuscle

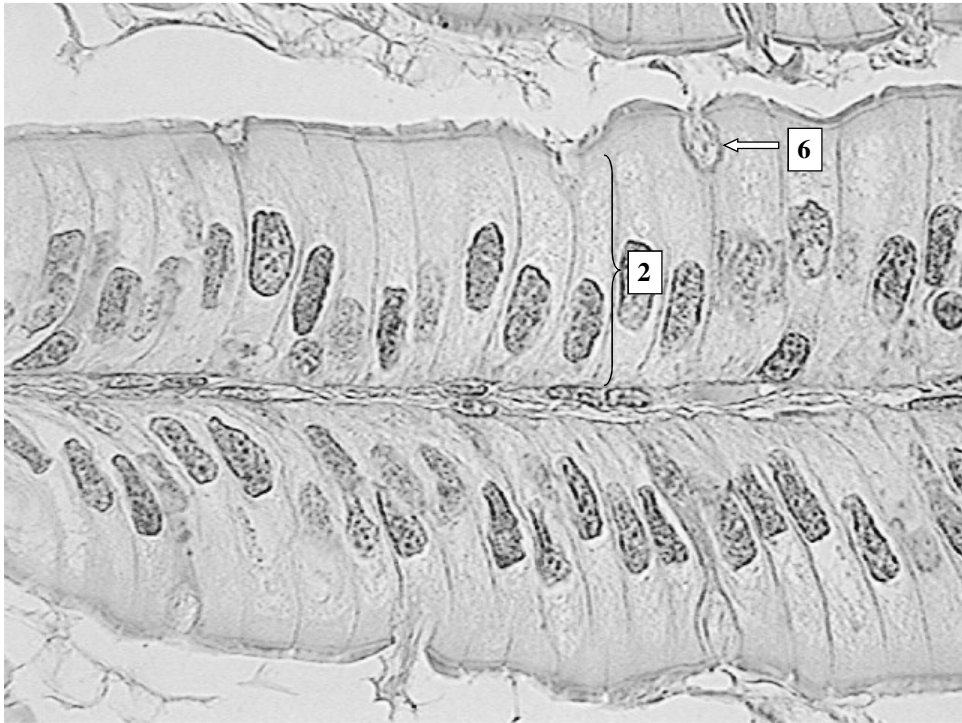
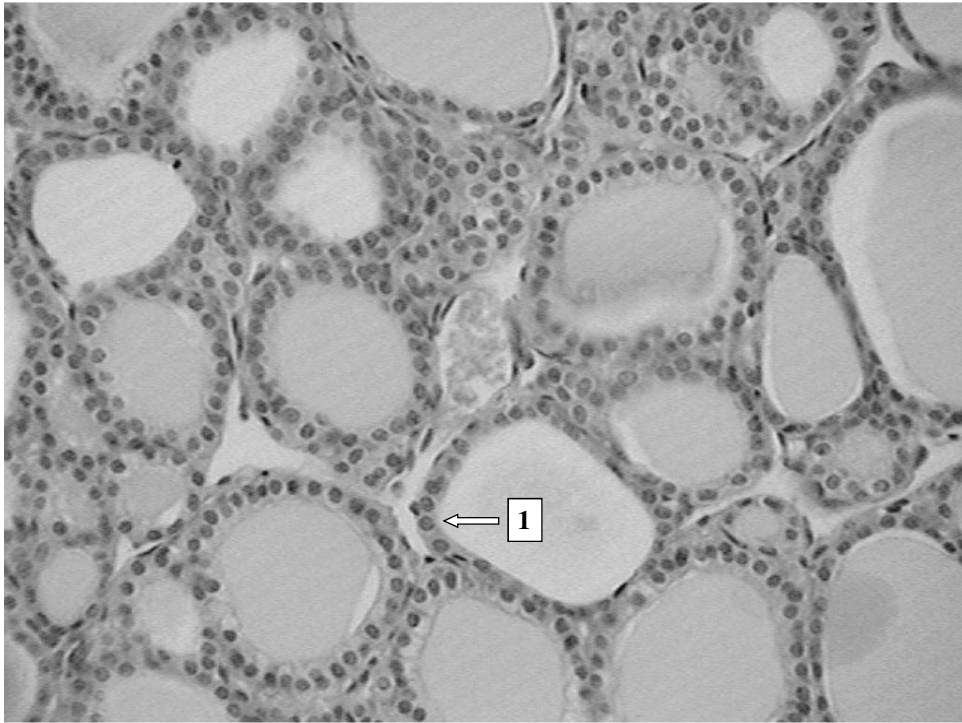
Slide 12: View of lung tissue

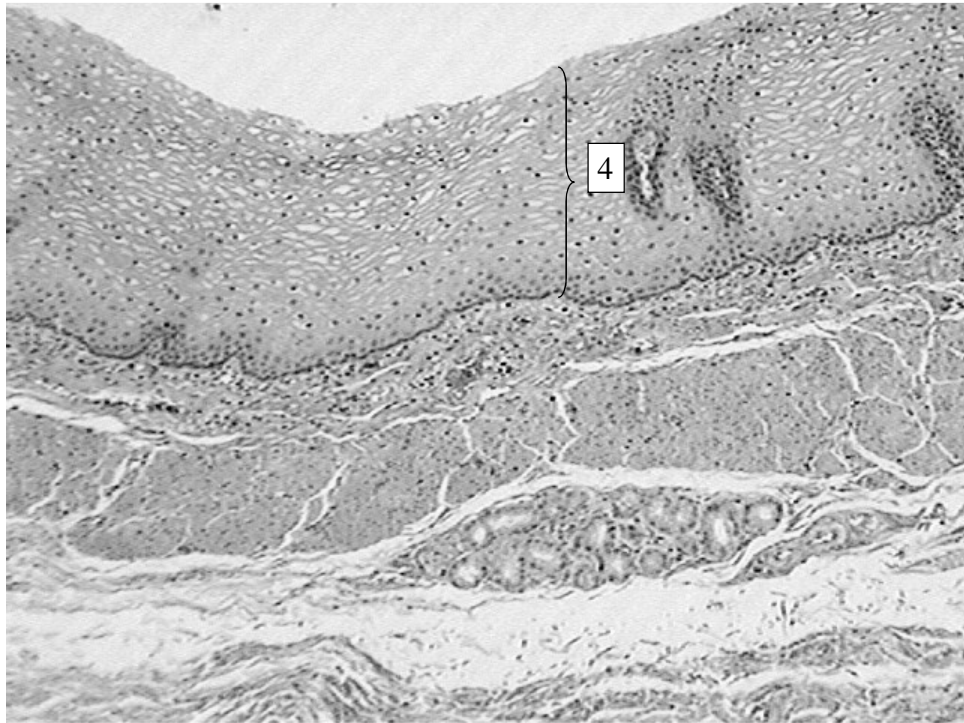
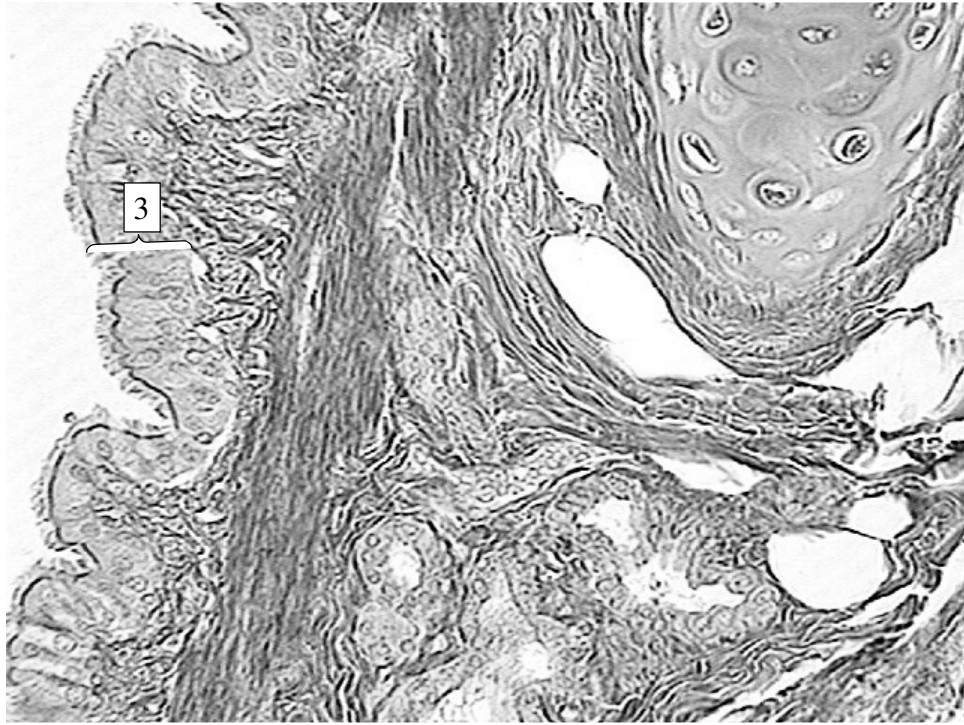
Slide 13: Artery low power

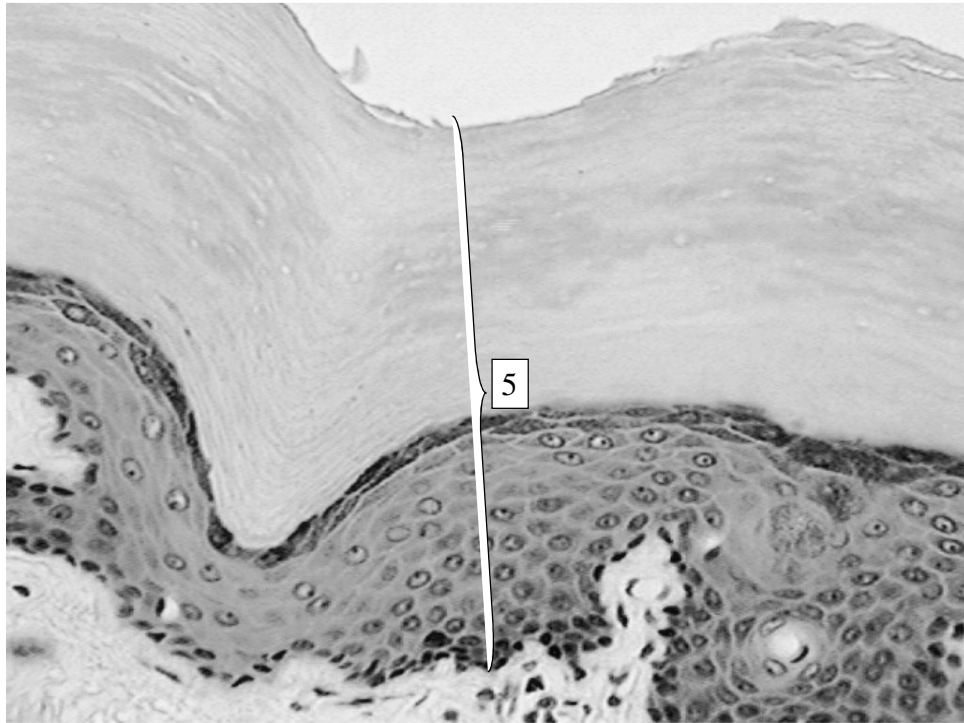
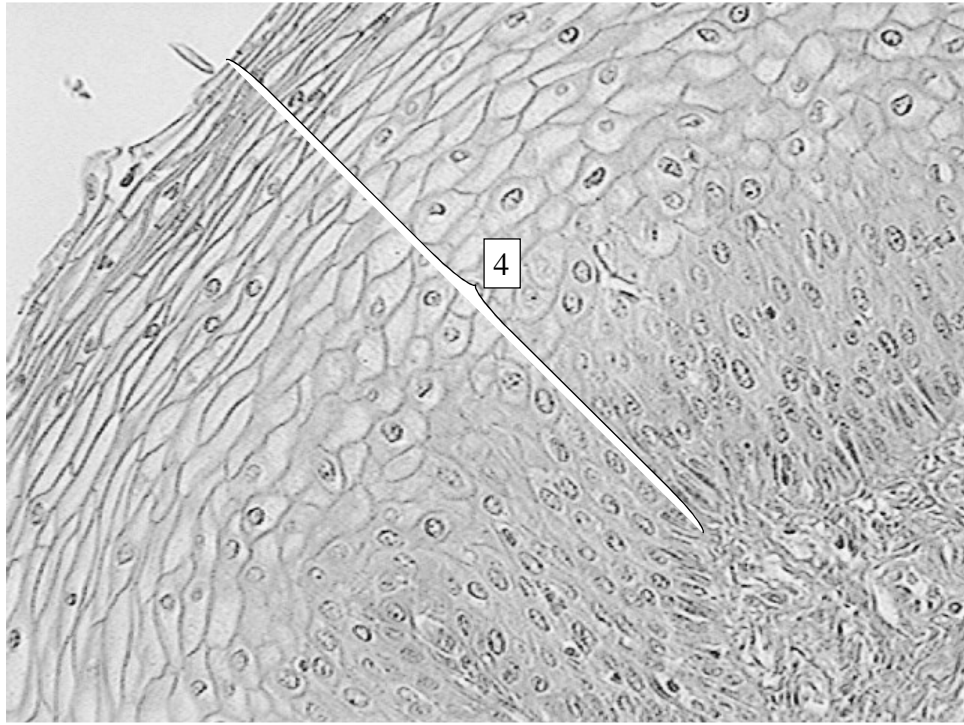
Slide 14: Artery high power

1. Side view of simple squamous tissue
2. View of simple cuboidal
3. Dense irregular Connective Tissue
4. Adipose tissue









Answers to Slides 16-22

Slide 16: View showing kidney tubules

Slide 17: View of thyroid gland

Slide 18: View of small intestine villus

Slide 19: X-section through a bronchiole

Slide 20: Esophageal epithelium

Slide 21: Vaginal epithelium

Slide 22: Epidermis of non-hairy skin

- 1. View of simple cuboidal epithelium**
- 2. Simple columnar epithelium**
- 3. Pseudostratified columnar epithelium**
- 4. Nonkeratinized stratified squamous epithelium**
- 5. Keratinized stratified squamous epithelium**
- 6. Goblet Cell with a mucous excretory vesicle**