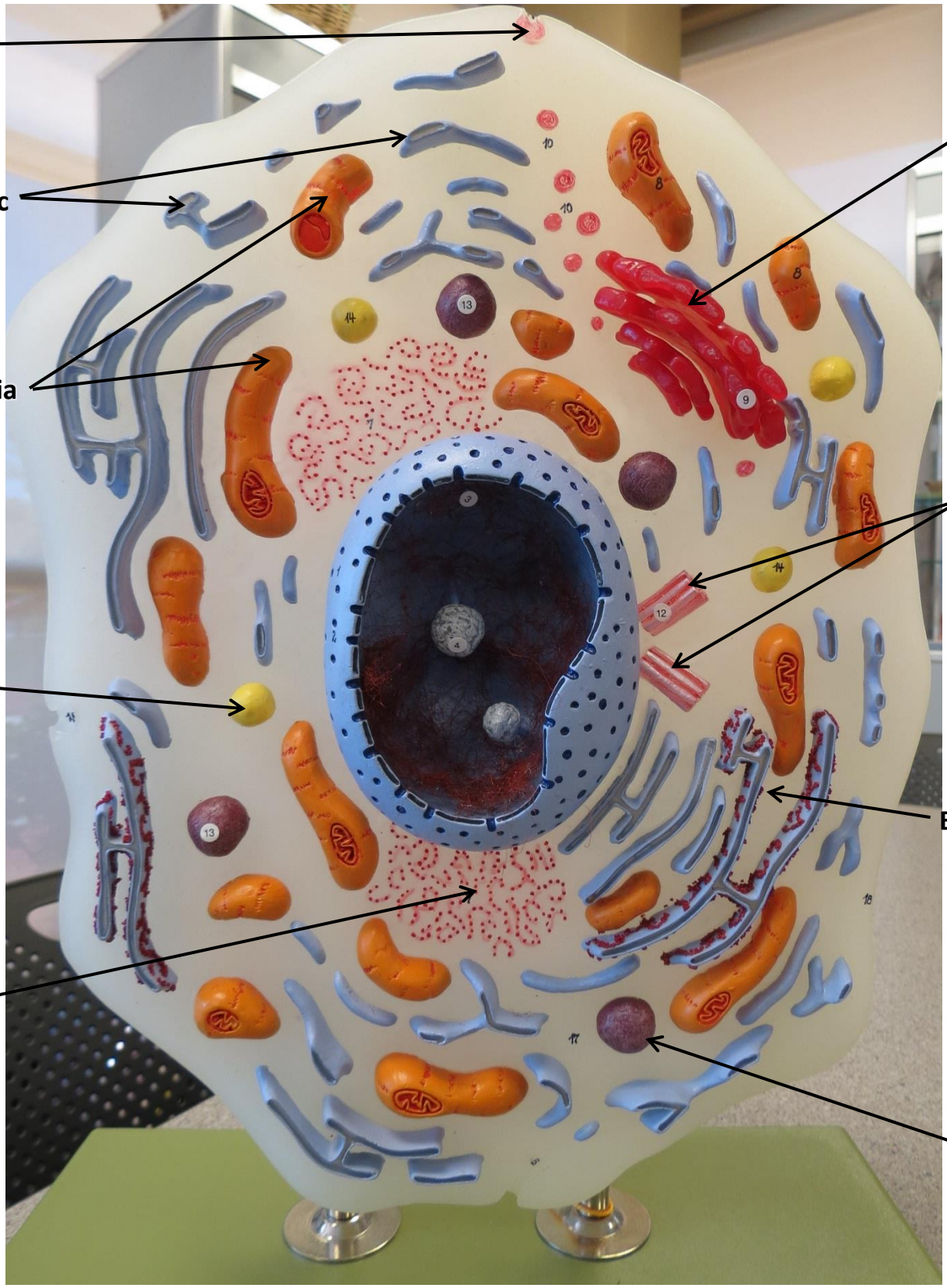
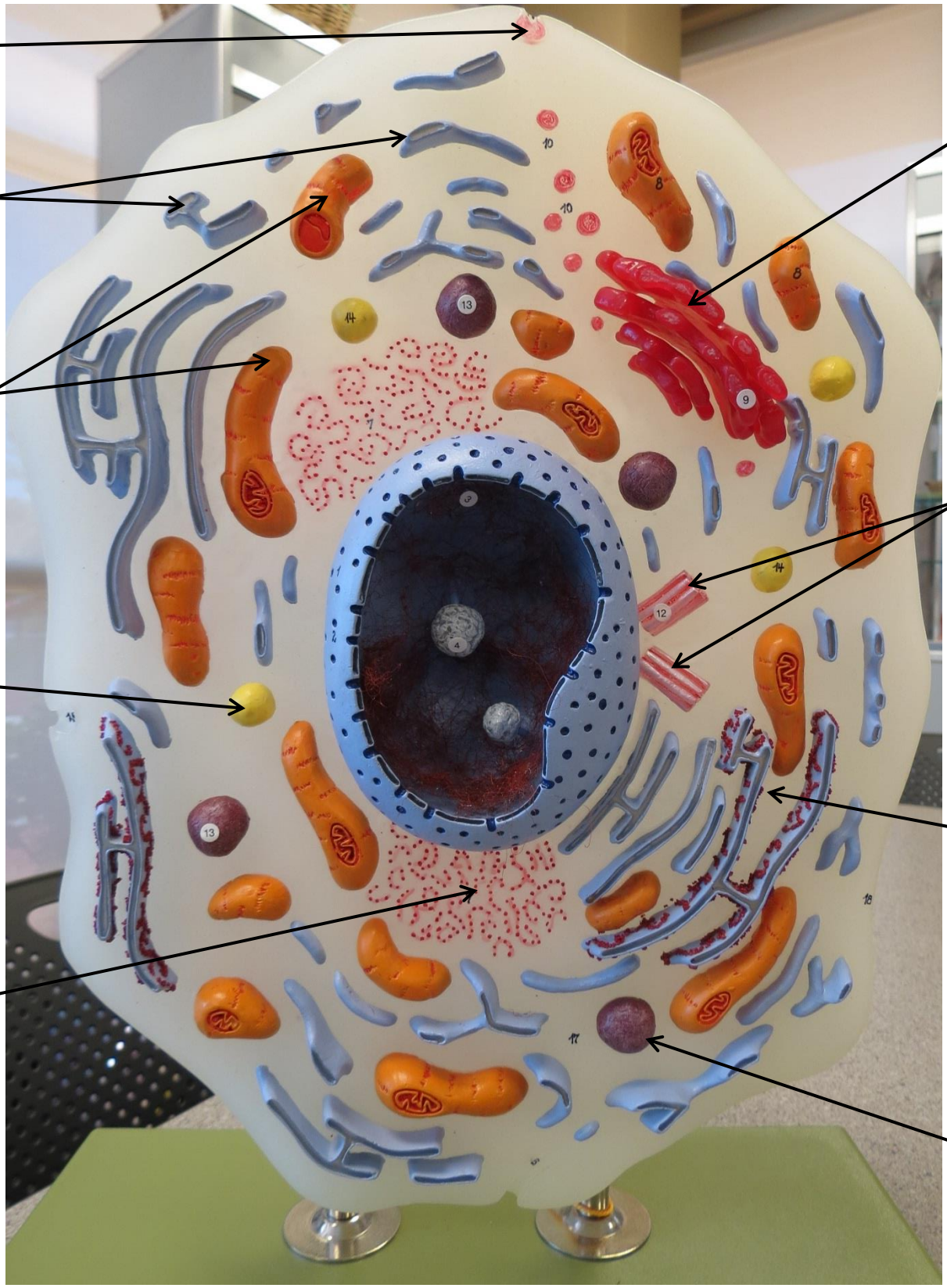
Cell Model

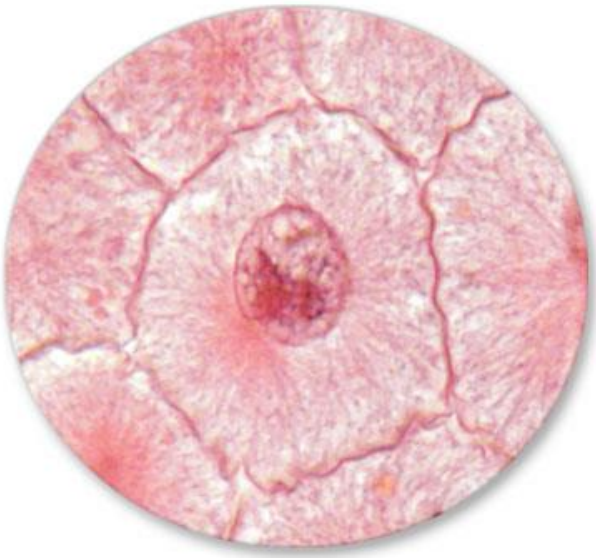

Secretory Vesicle
Golgi Apparatus
Smooth Endoplasmic Reticulum
Mitochondria
Centrioles
Fat Vacuole
Rough Endoplasmic Reticulum (Note Ribosomes)
Ribosomes
Lysosome

Cell Model



MITOSIS SLIDES

INTERPHASE



EARLY PROPHASE

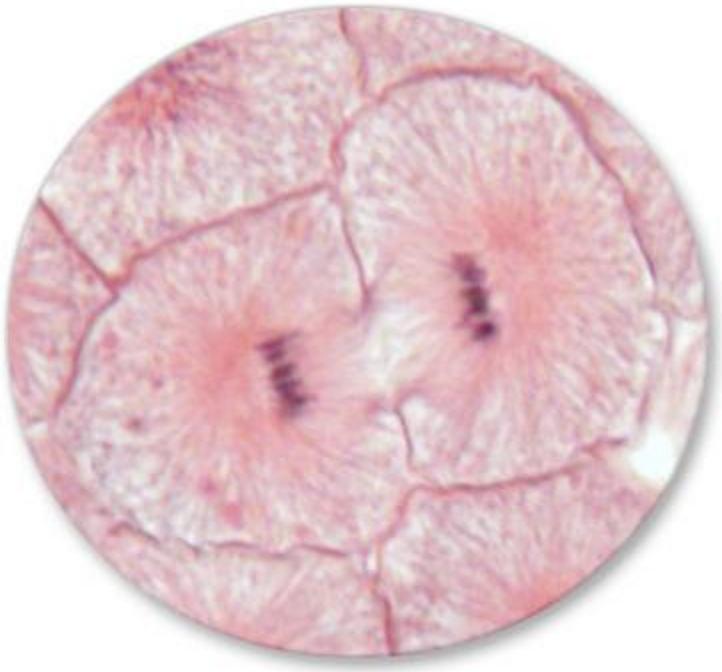
LATE PROPHASE

MITOSIS SLIDES

METAPHASE

ANAPHASE

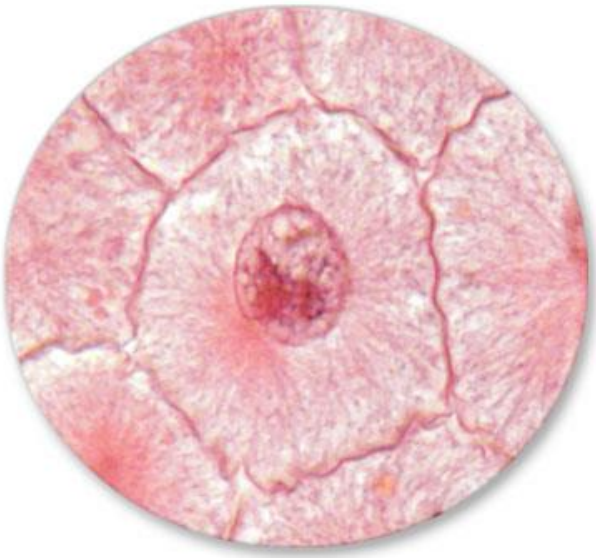
MITOSIS SLIDES



TELOPHASE

MITOSIS SLIDES

_____



_____ _____

MITOSIS SLIDES

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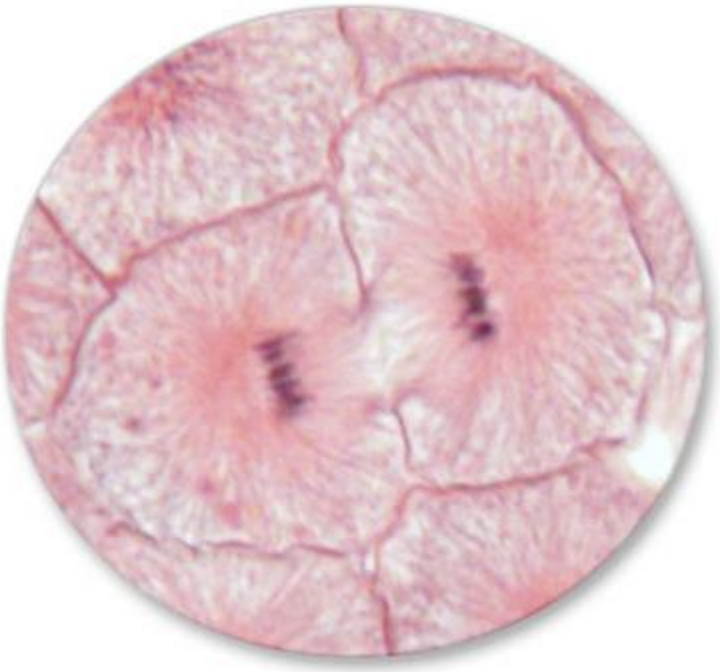
MITOSIS SLIDES



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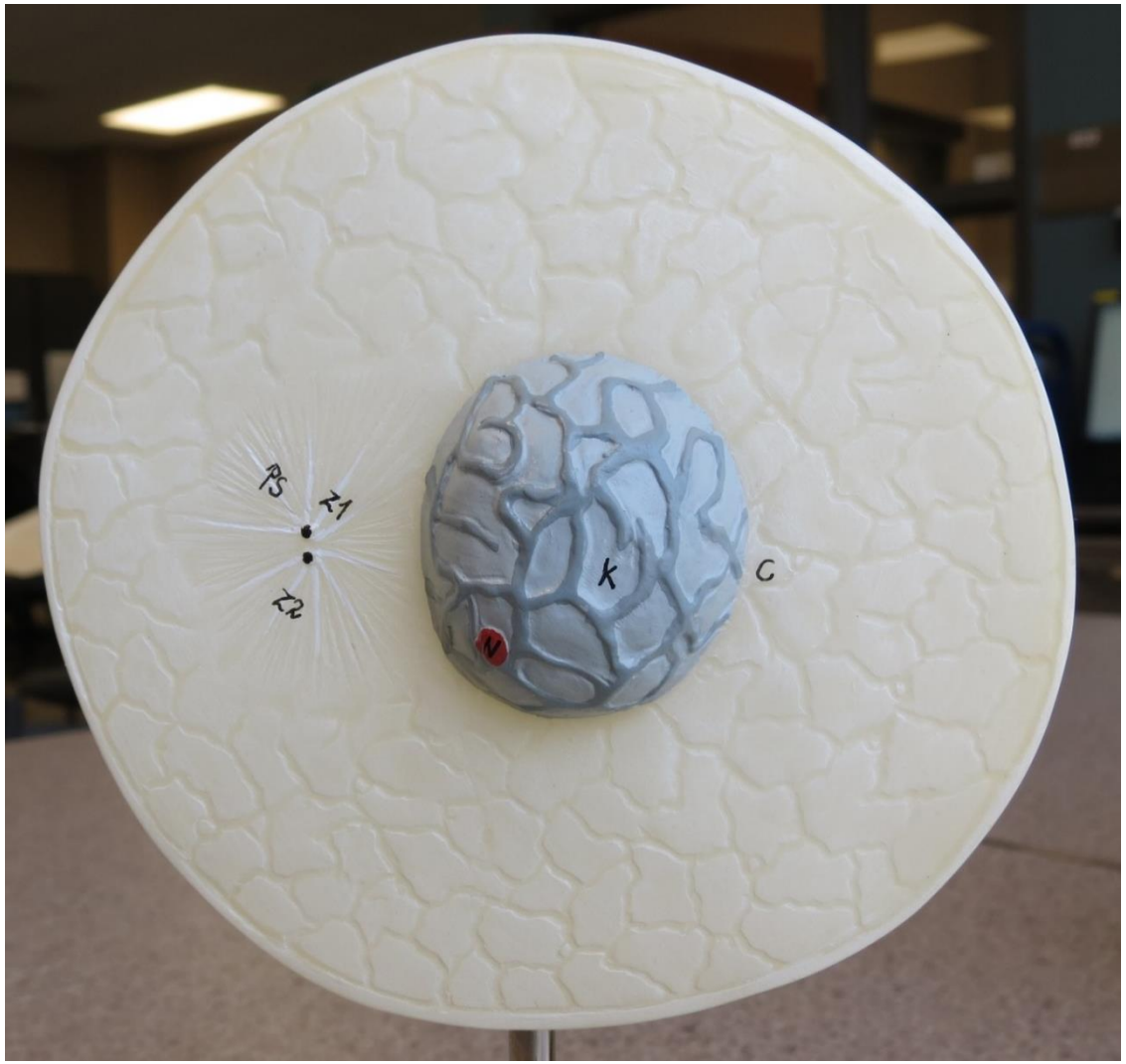
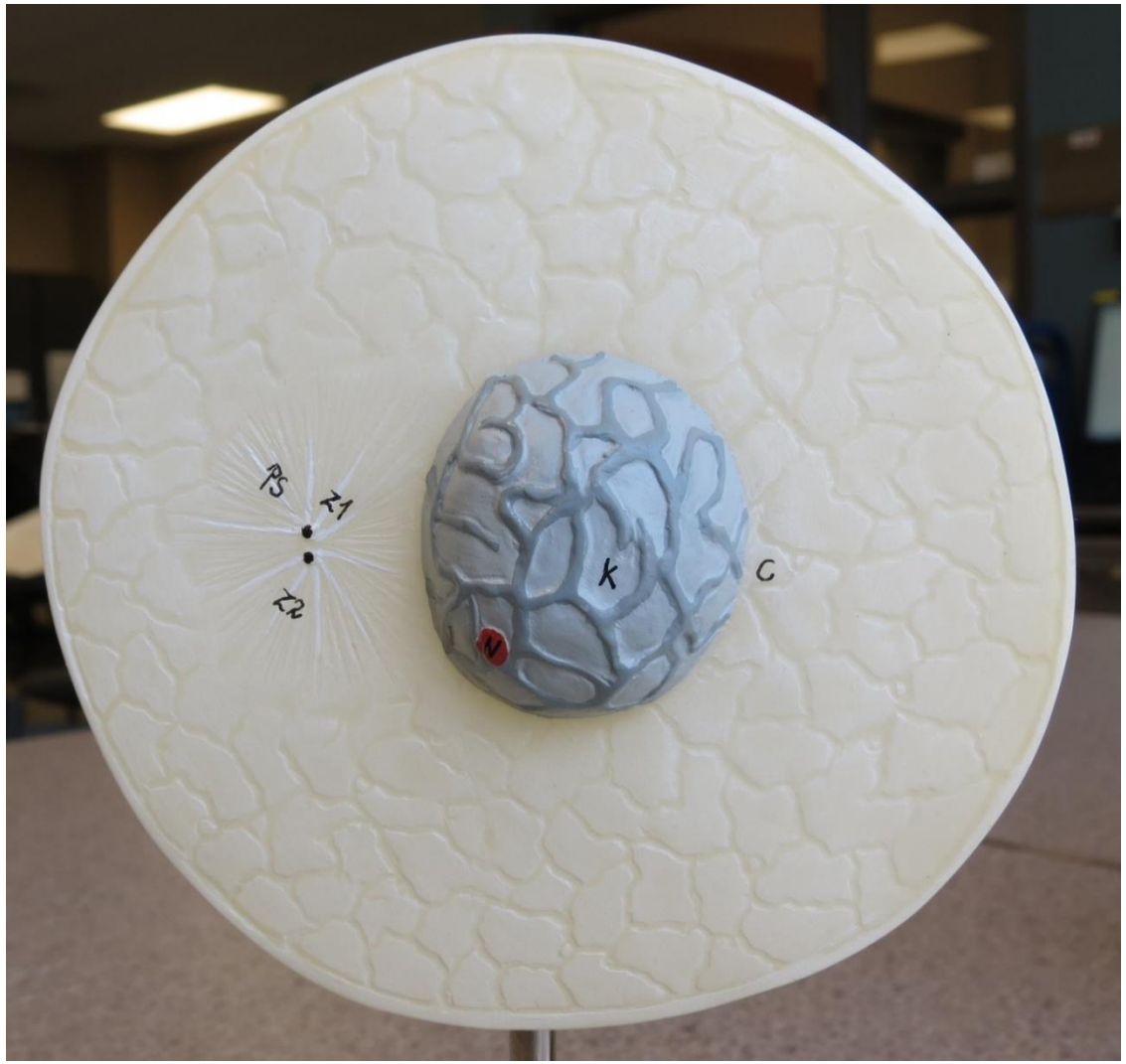
MITOSIS MODEL



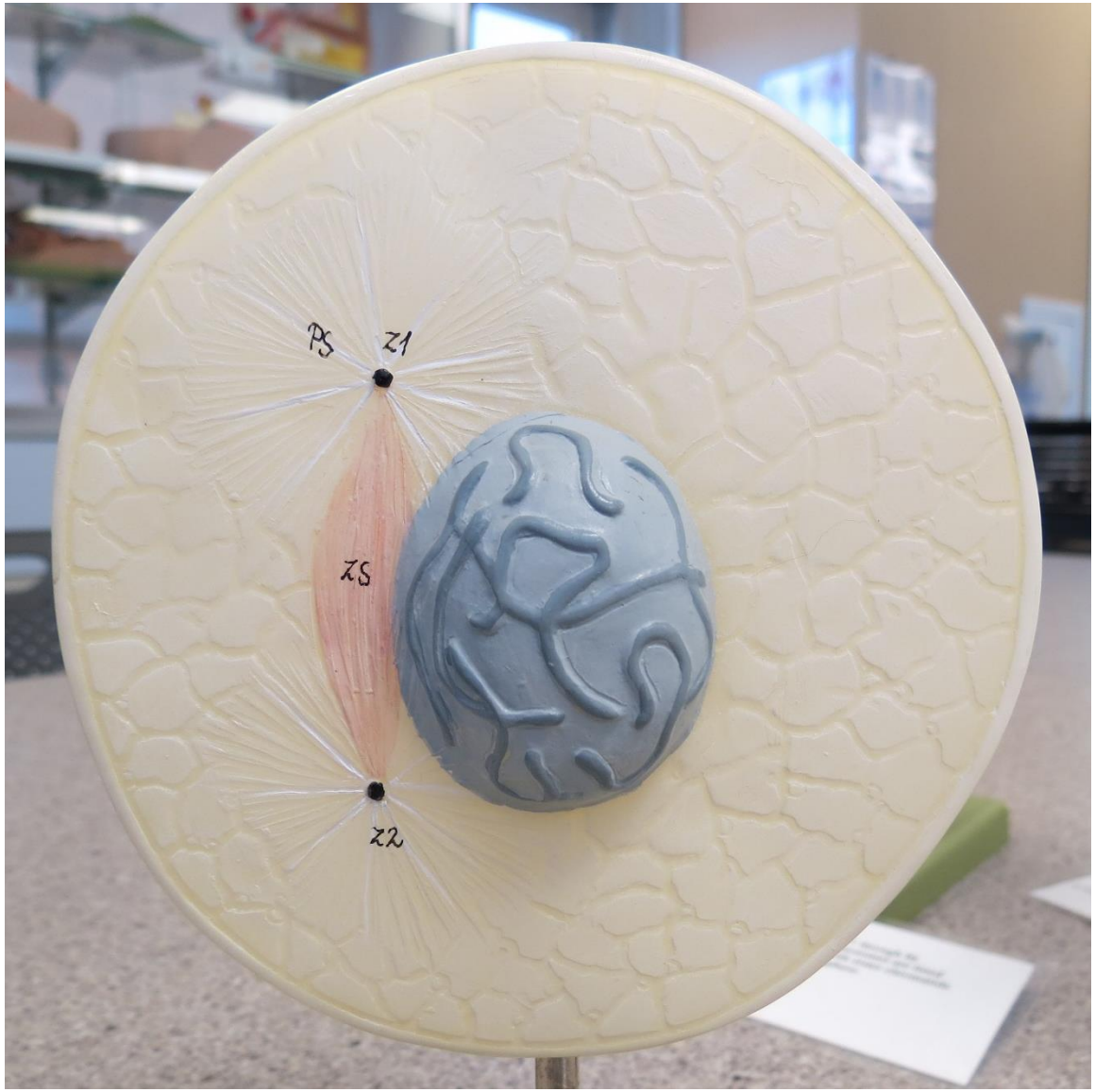
Nucleus is intact. Centrioles are close together

Interphase

MITOSIS MODEL



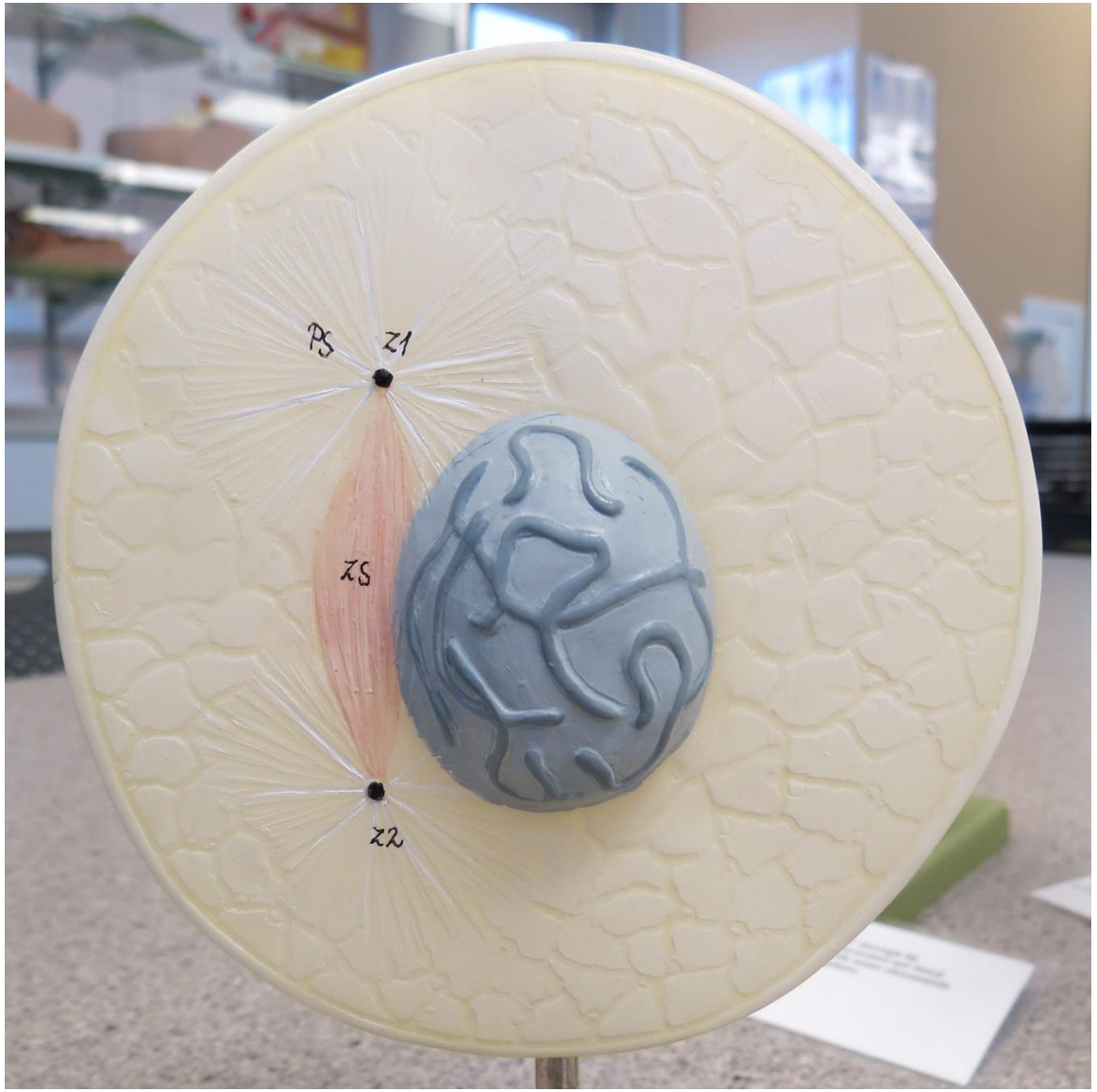
MITOSIS MODEL



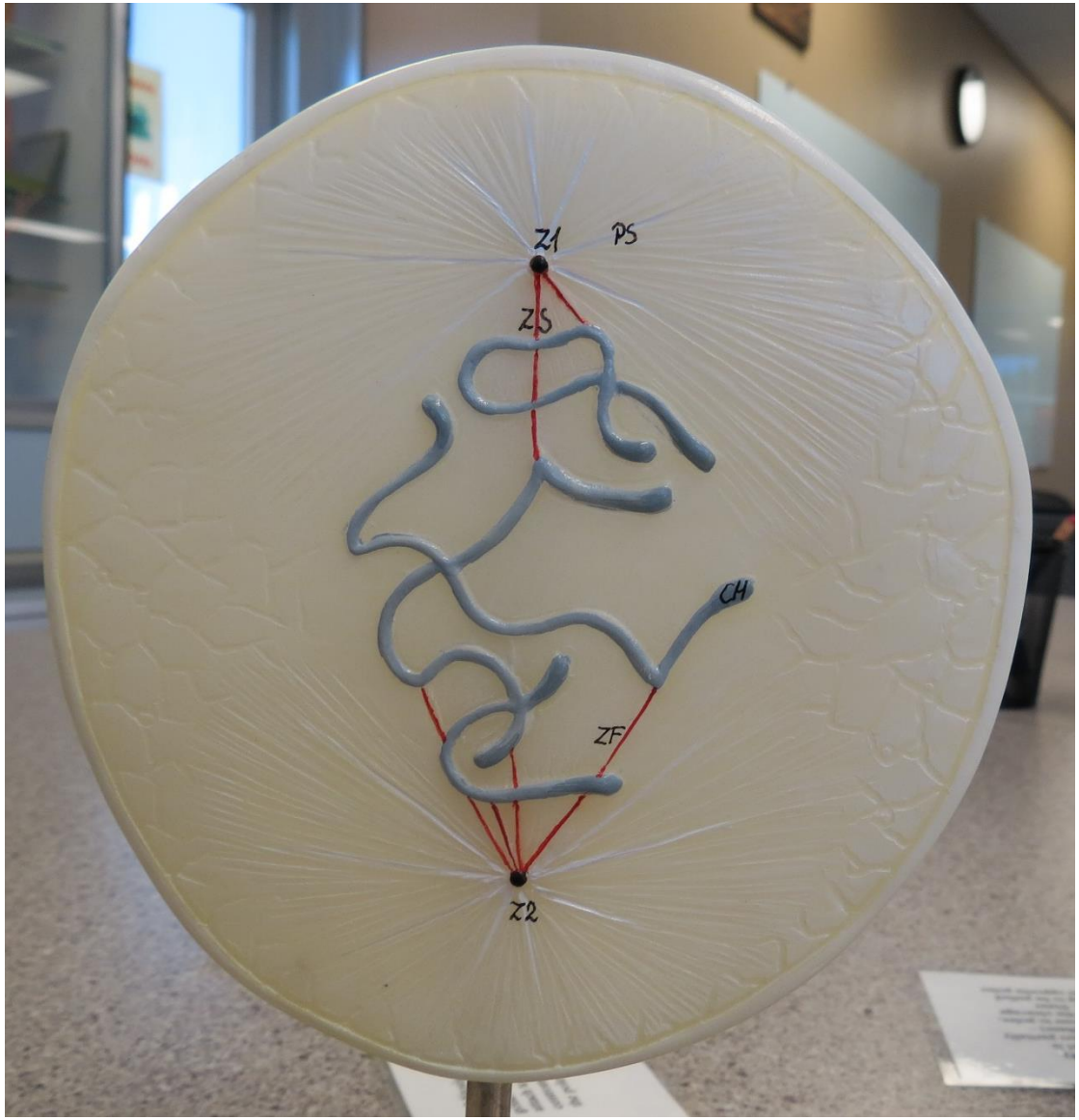
Centrioles are moving apart. Nucleus (with chromatin) is still intact.

Early Prophase

MITOSIS MODEL



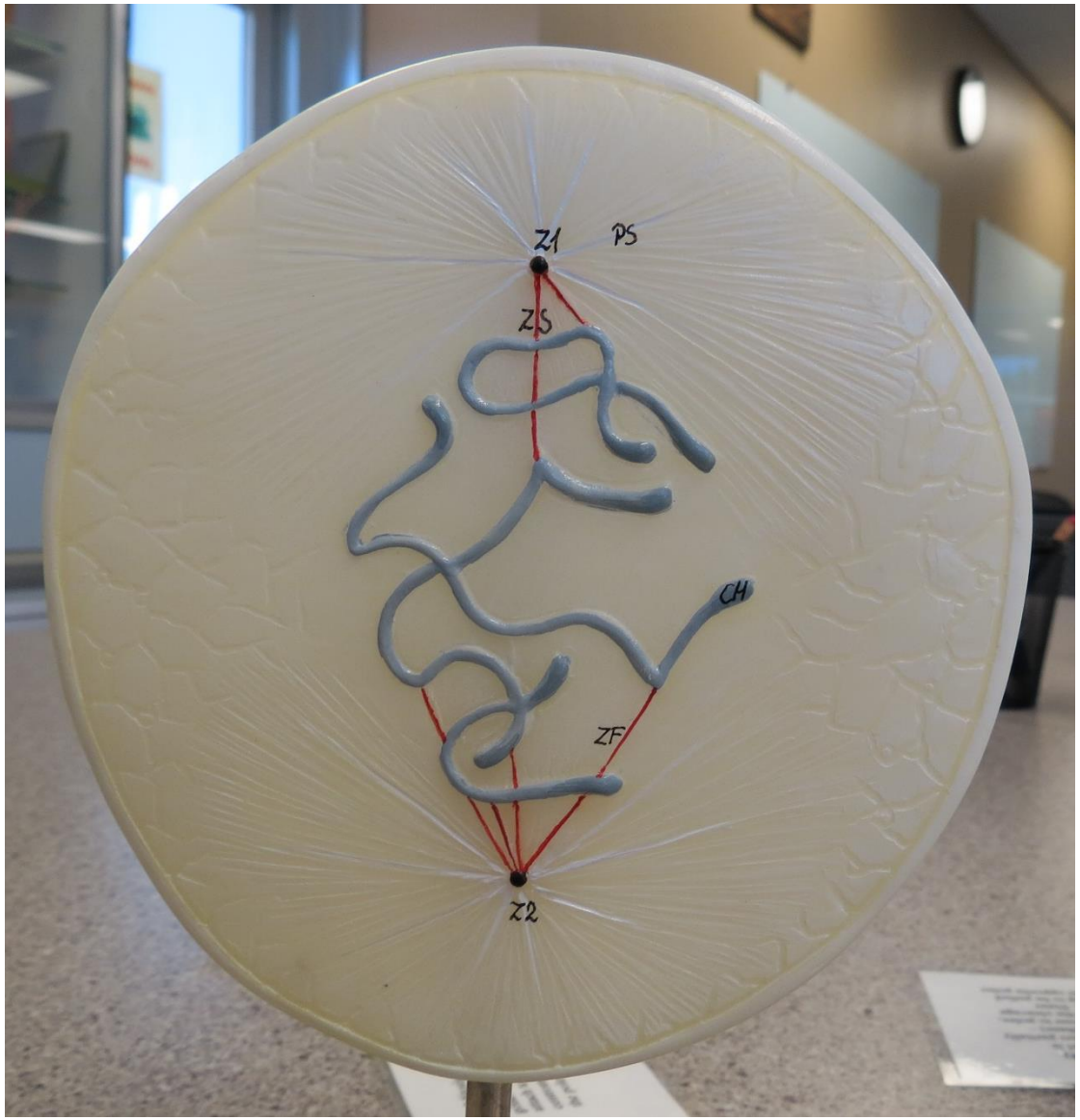
MITOSIS MODEL



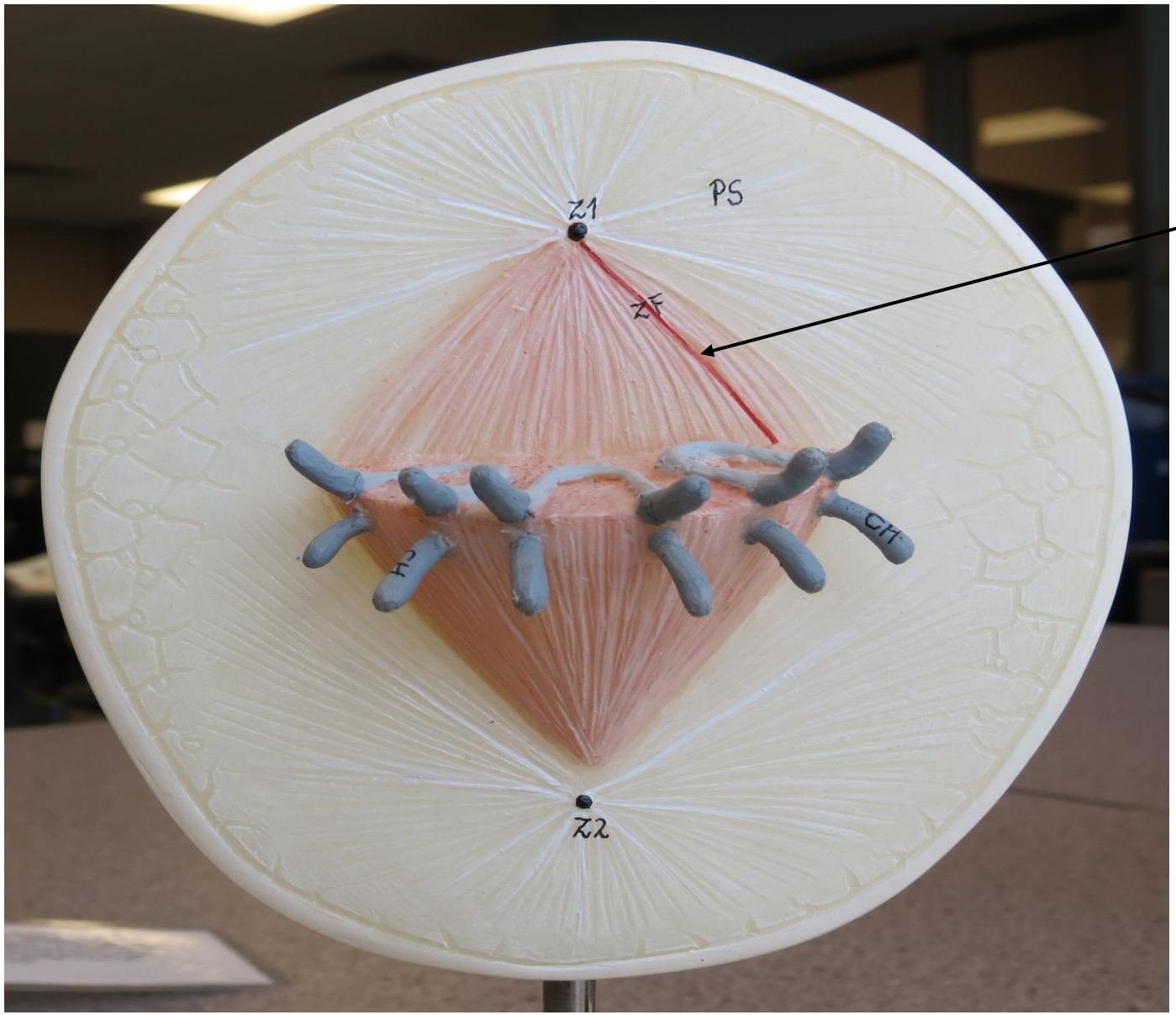
Centrioles are at opposite ends. Nucleus breaks apart, forming chromosomes.

Late Prophase

MITOSIS MODEL



MITOSIS MODEL

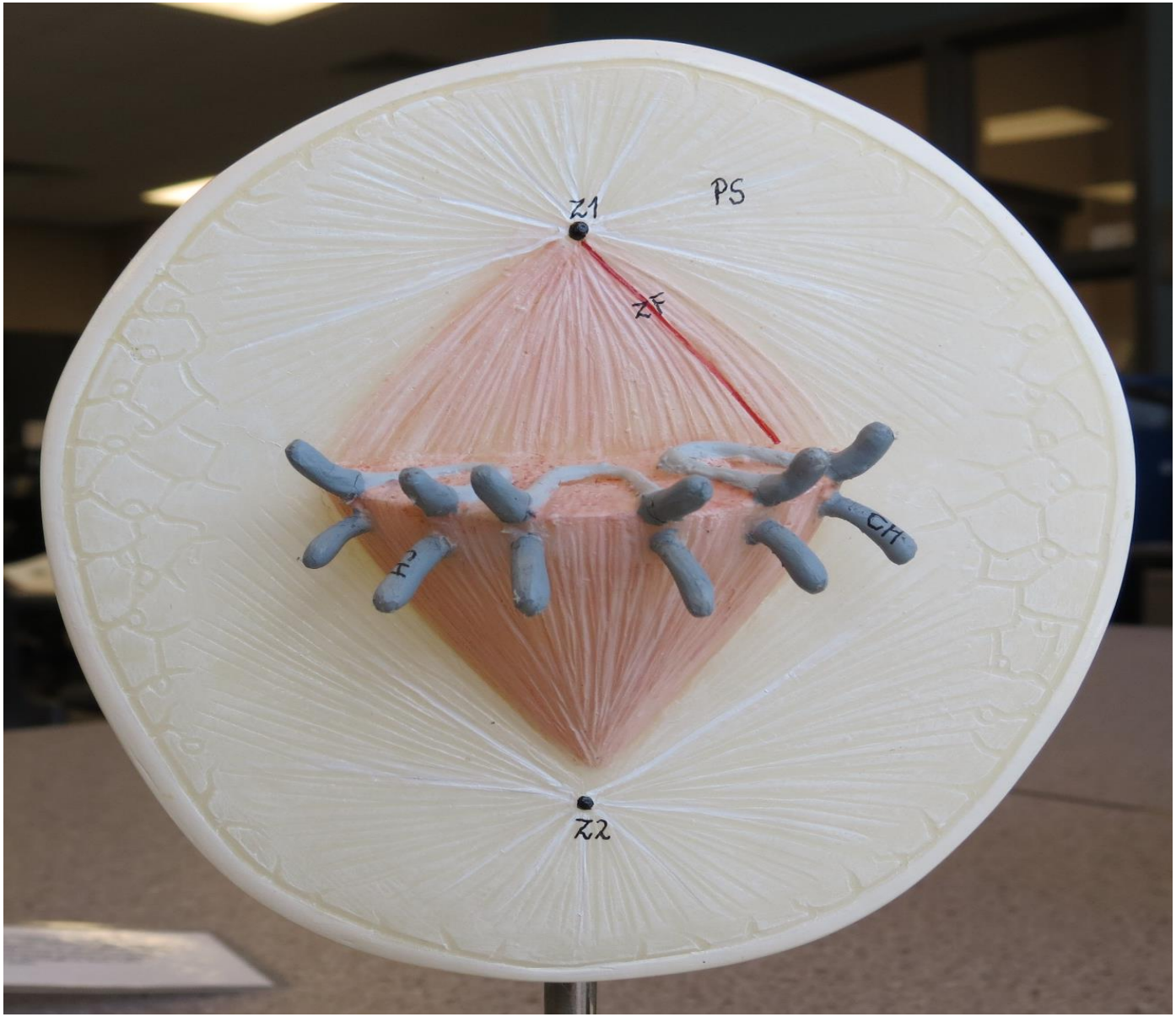


Spindle Fiber

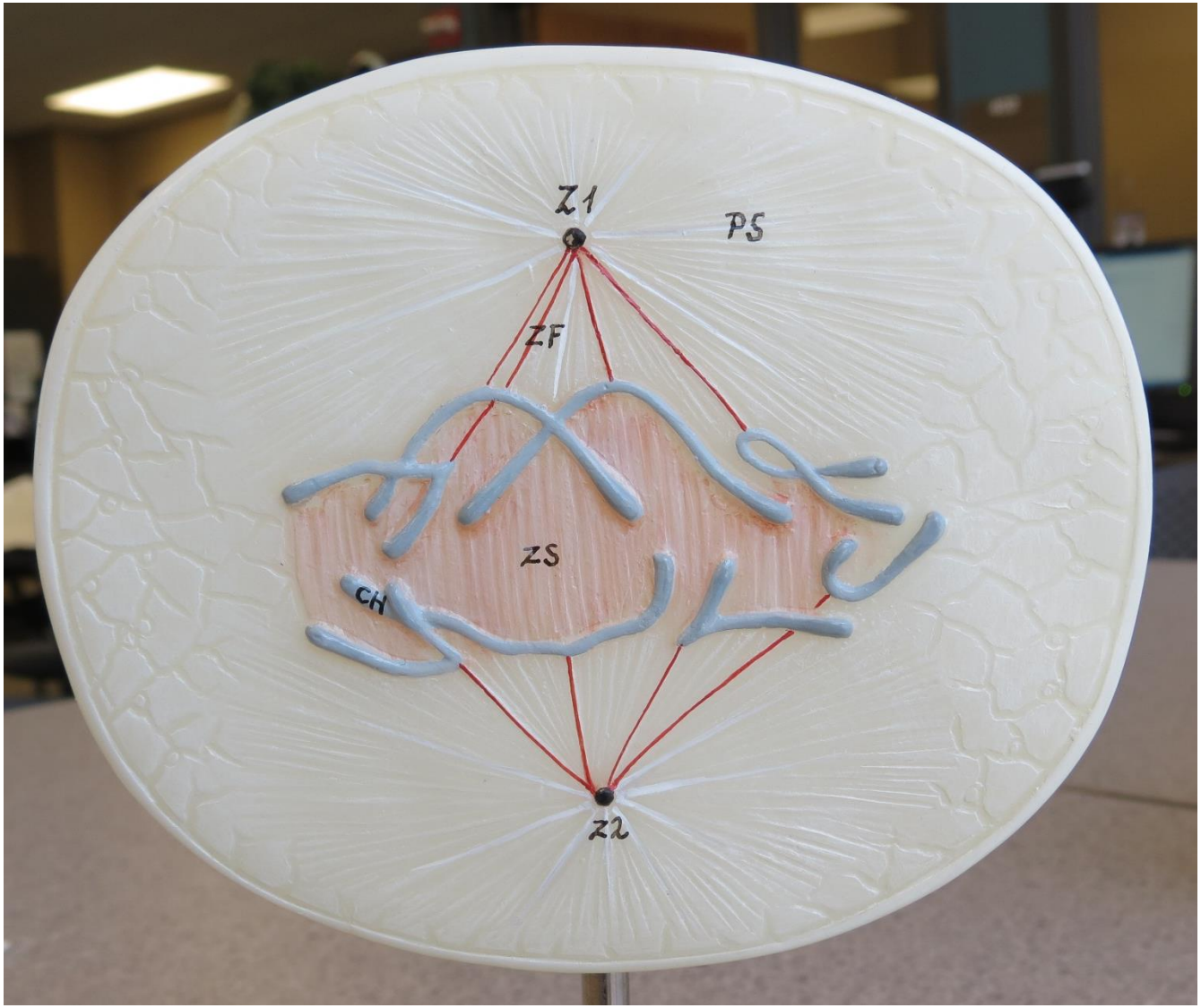
Chromosomes are aligned in the middle of the cell forming sister chromatids.

Metaphase

MITOSIS MODEL



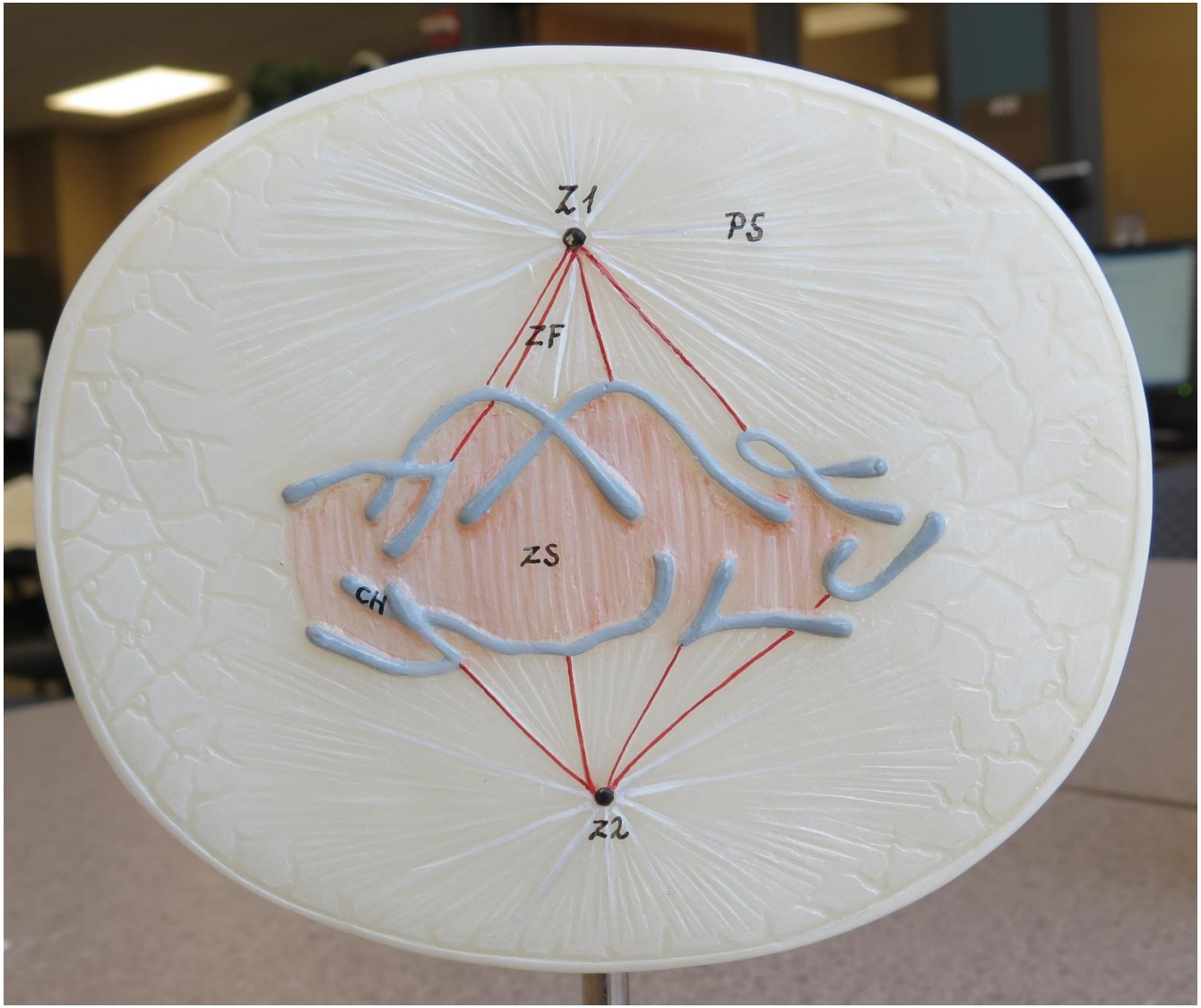
MITOSIS MODEL



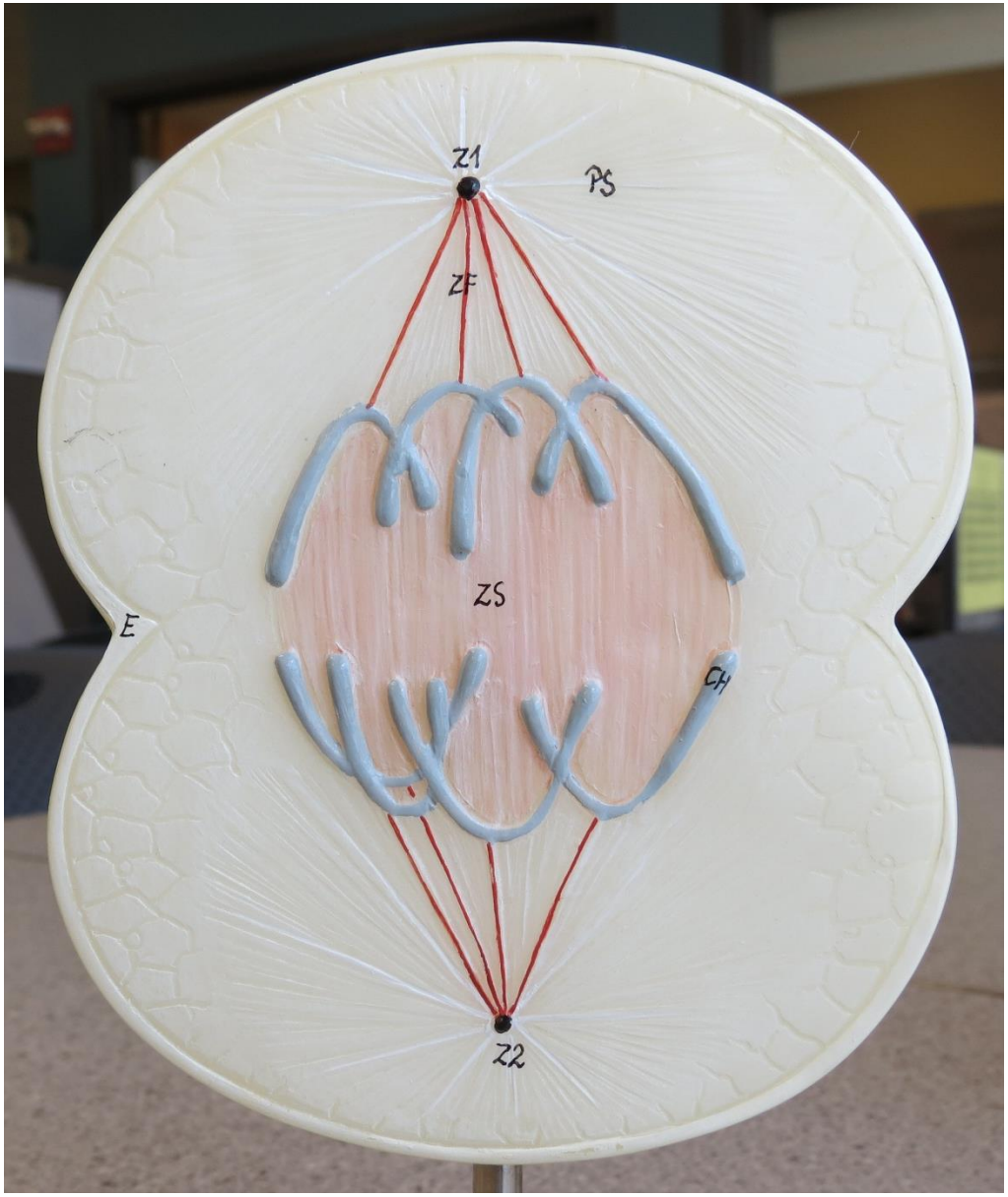
Sister chromatids separate forming daughter chromosomes.

Anaphase

MITOSIS MODEL



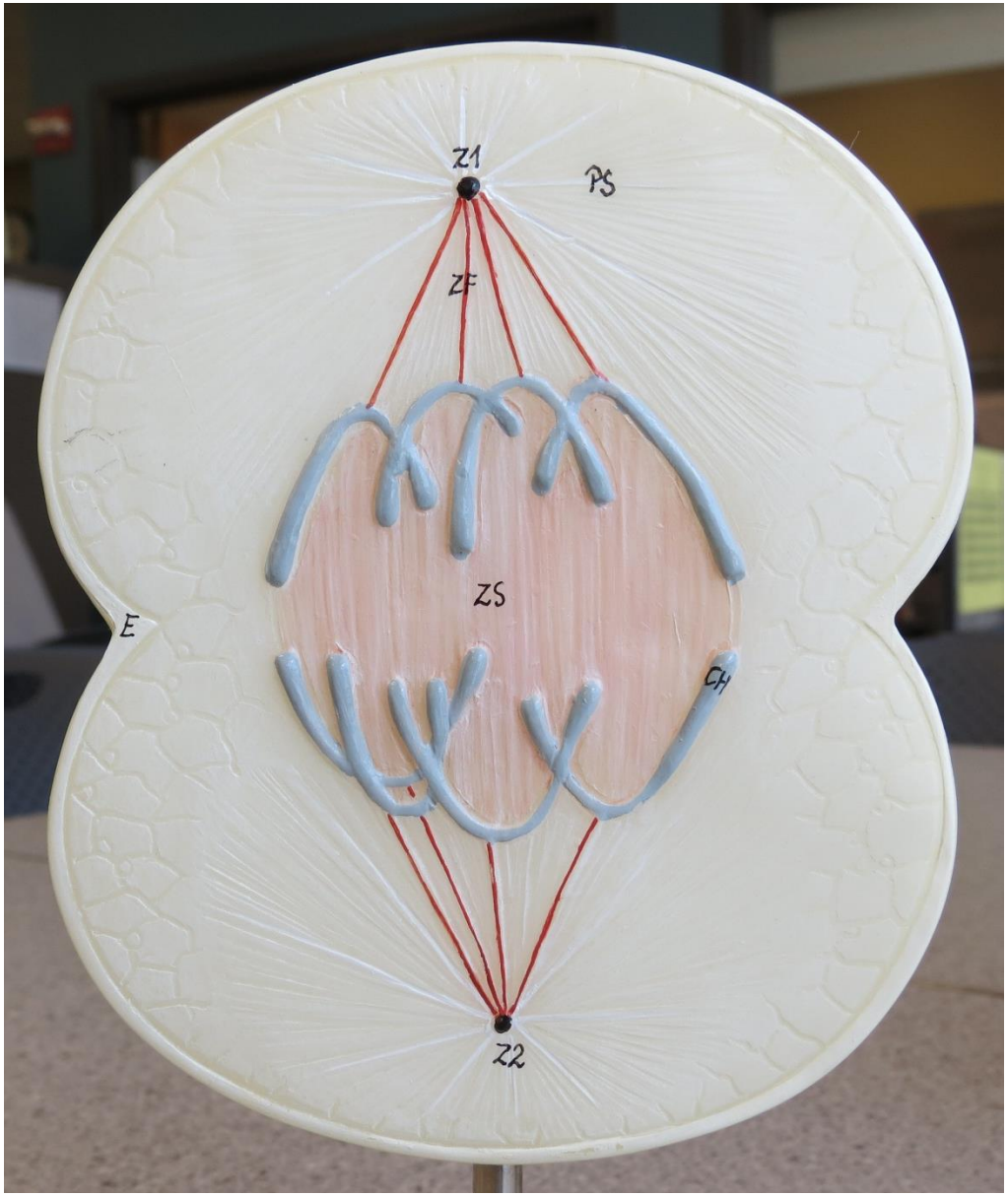
MITOSIS MODEL



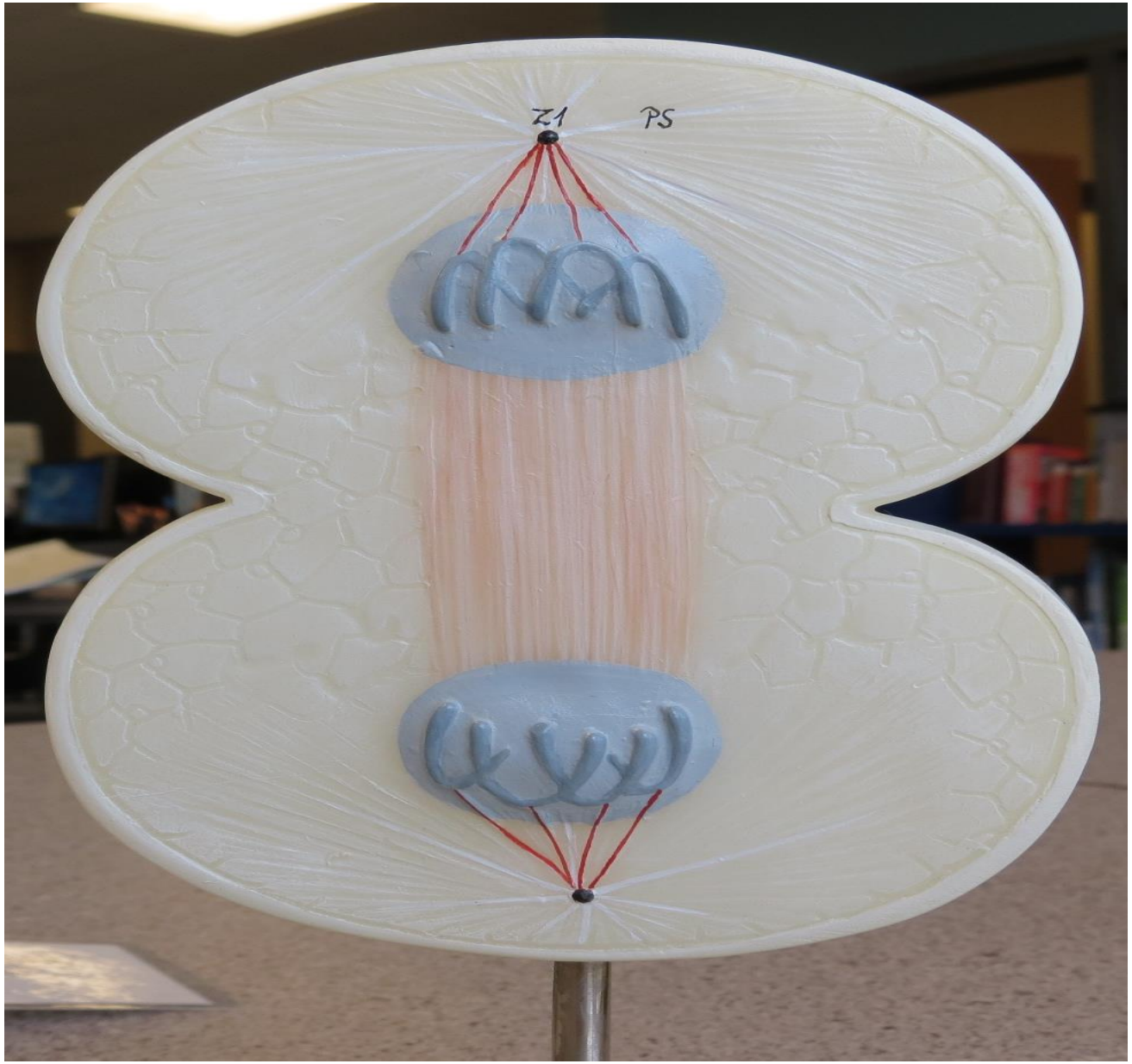
Daughter chromosomes become further separated.

Late Anaphase

MITOSIS MODEL



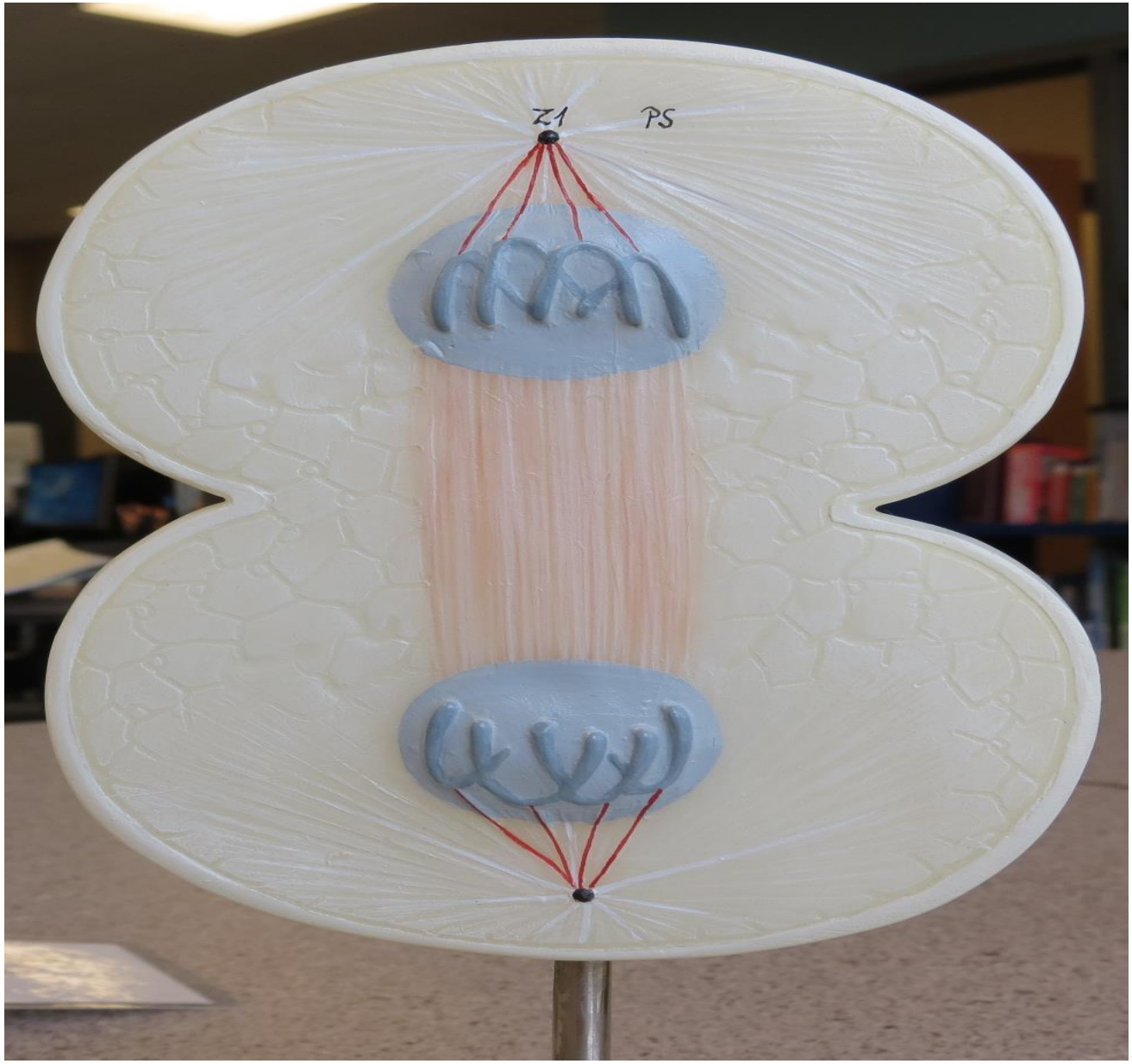
MITOSIS MODEL



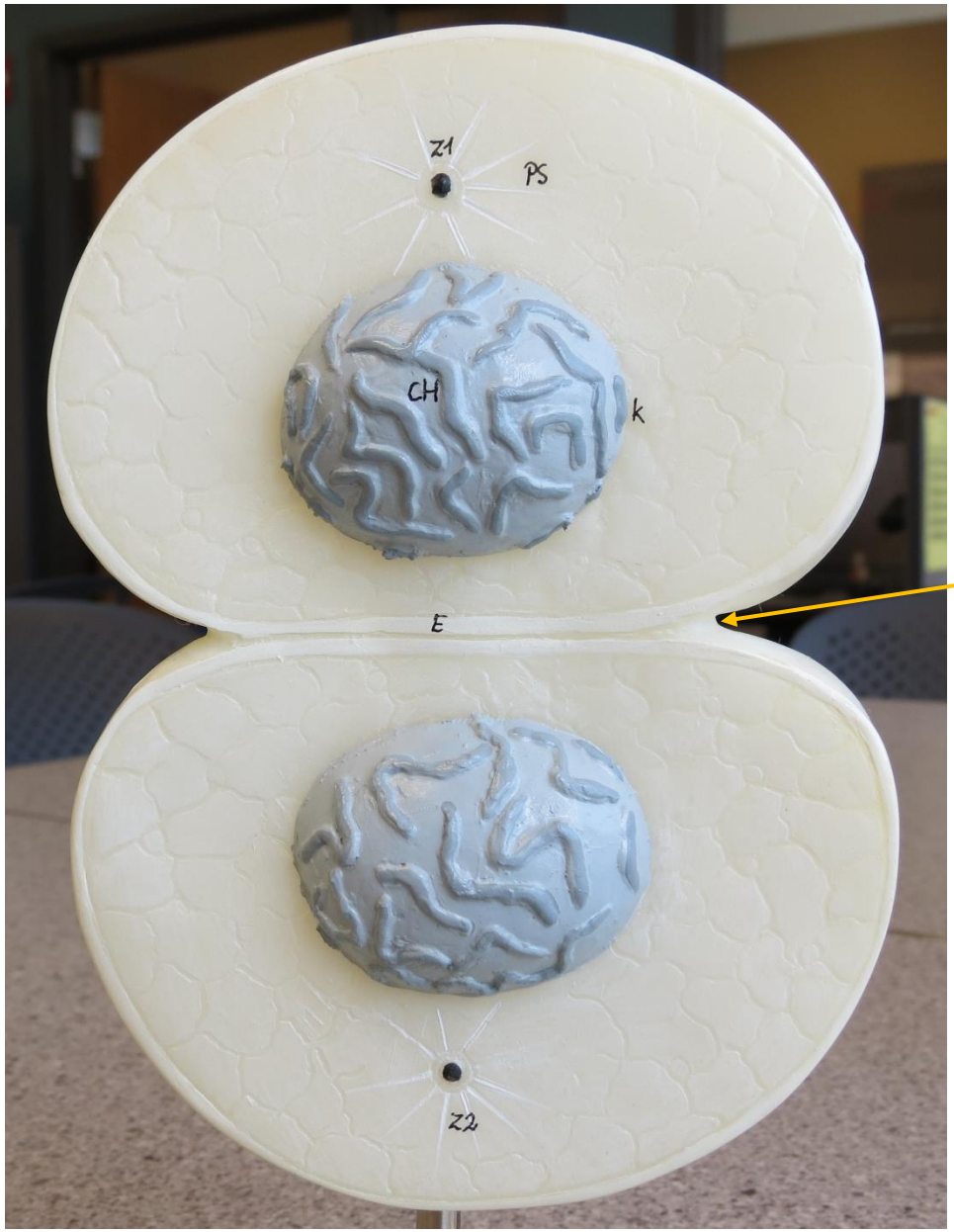
Chromosomes have completed their separation forming new nuclei. Cytokinesis causes cleavage furrow.

Telophase

MITOSIS MODEL



MITOSIS MODEL

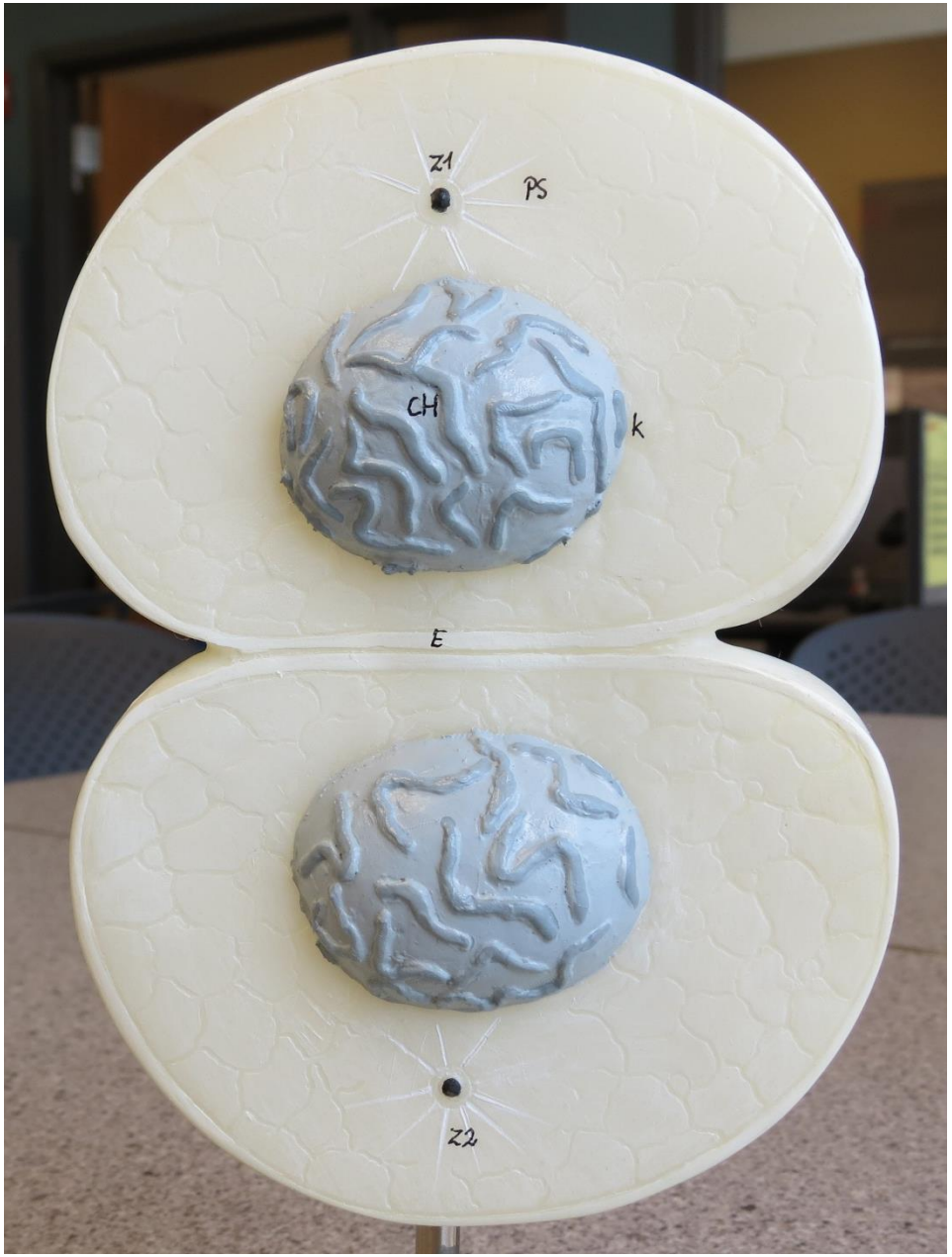


(Note cell boundary between cells.)

Cytokinesis has been completed. We now have 2 individual cells.

Daughter Cells/ Interphase

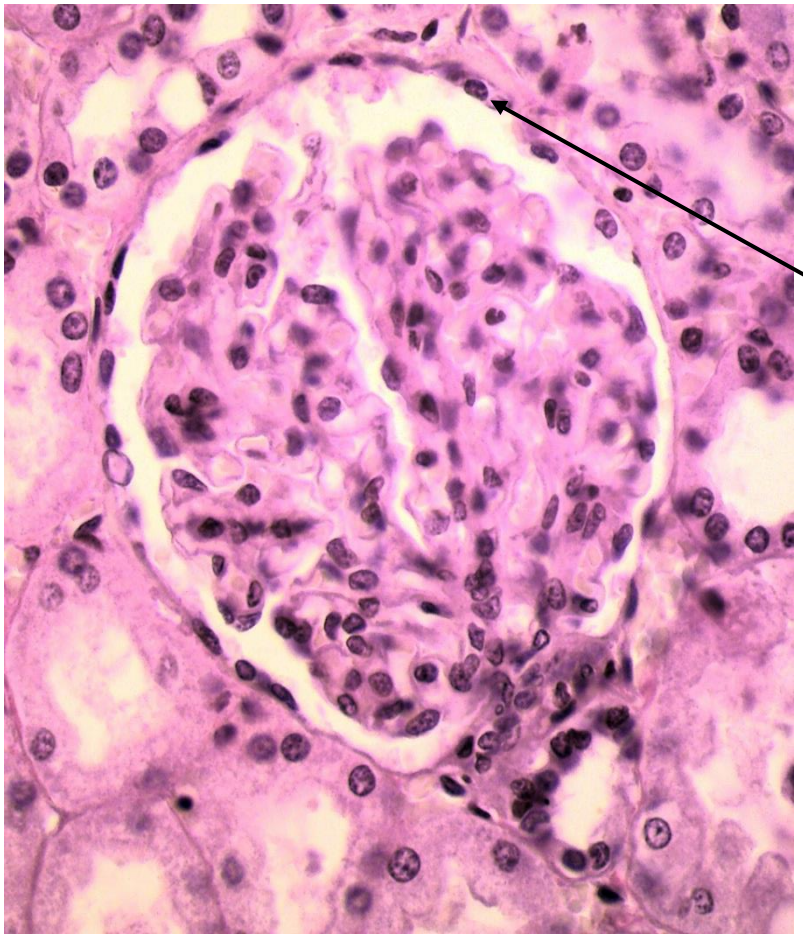
MITOSIS MODEL

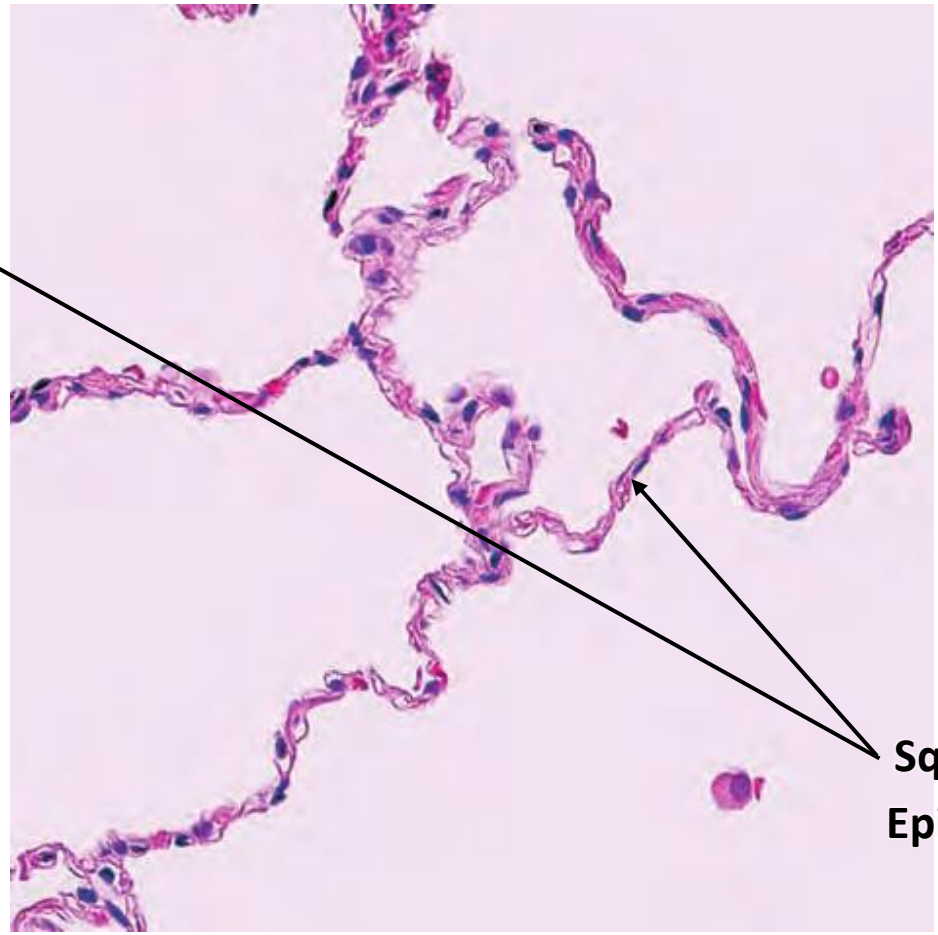


SIMPLE SQUAMOUS EPITHELIUM

Function: Diffusion and filtration

Location: Lung alveoli, kidney glomerulus, capillary walls



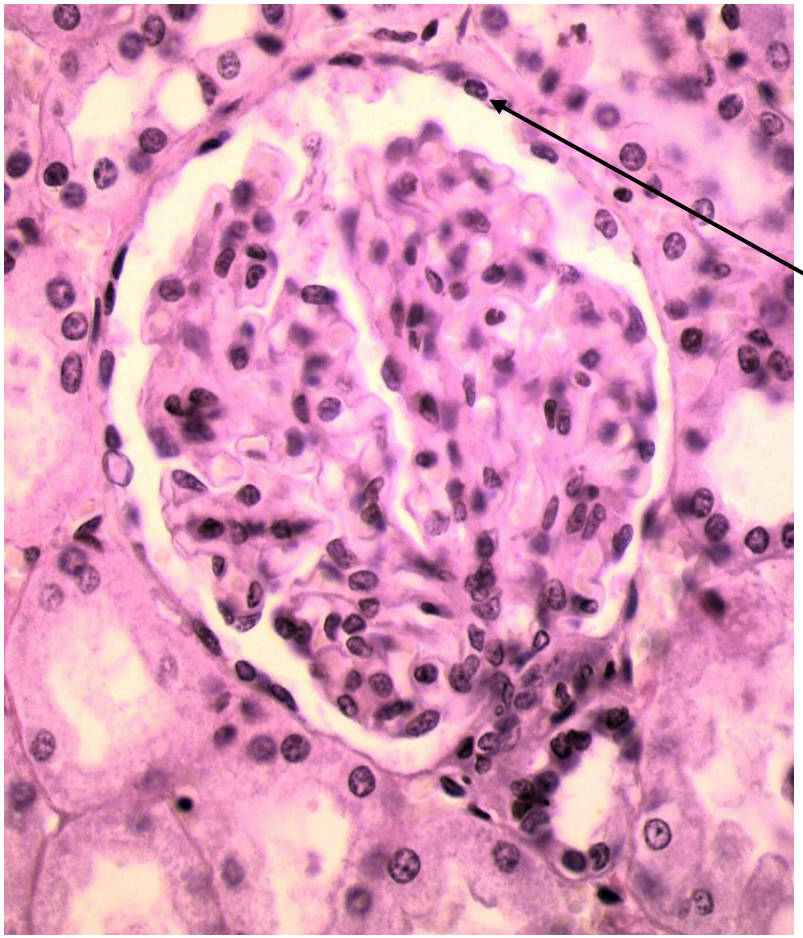


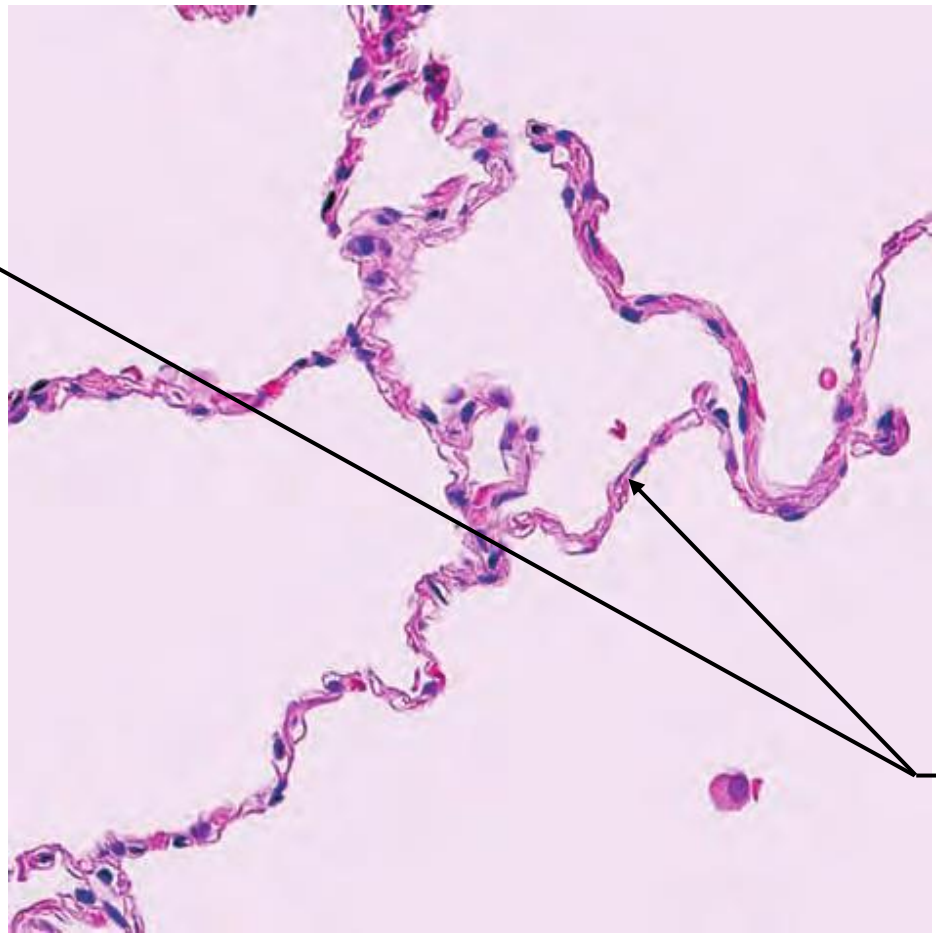
Simple Squamous Epithelium

_____

Function: _____

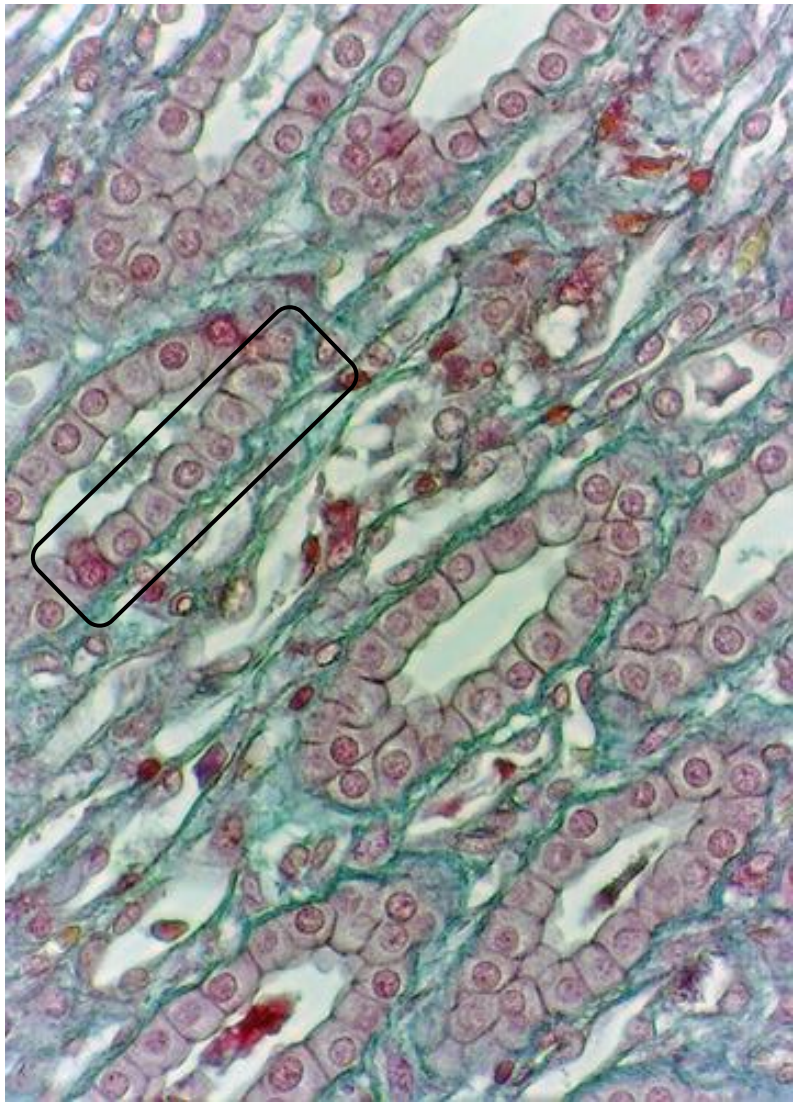
Location: _____

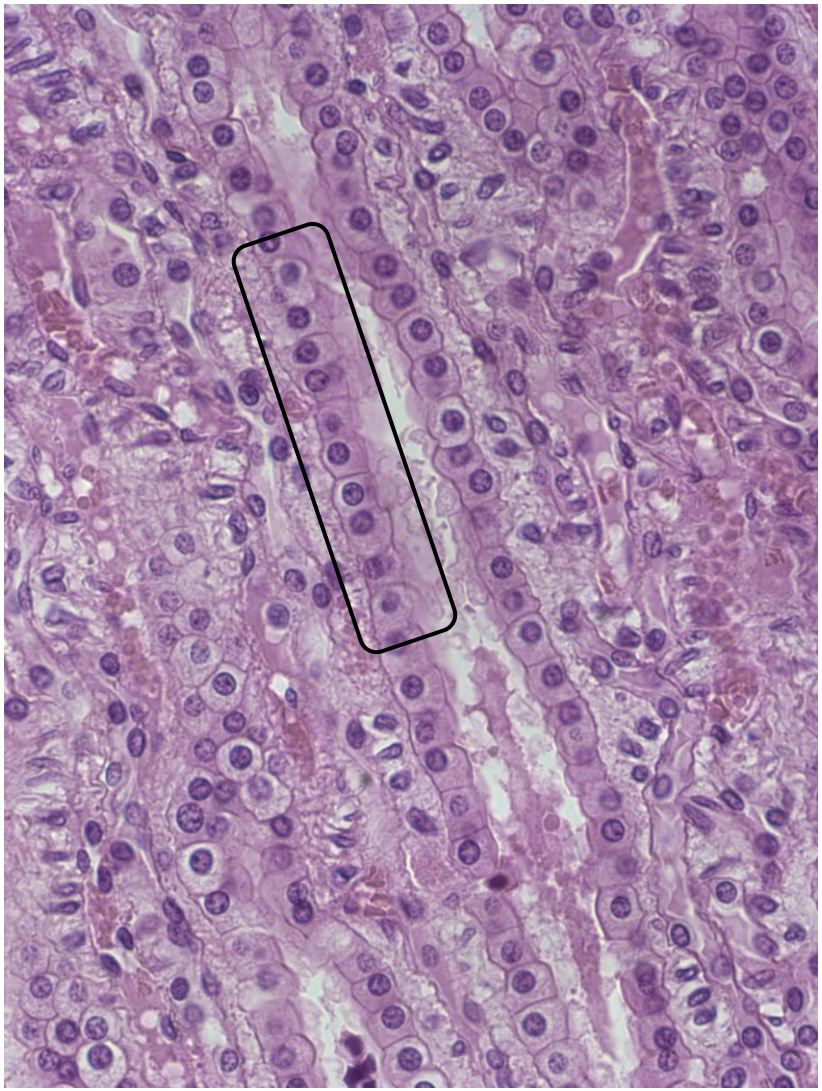




SIMPLE CUBOIDAL EPITHELIUM

Function: Secretion and some absorption
Location: Any secretory gland, kidney tubules and other ducts

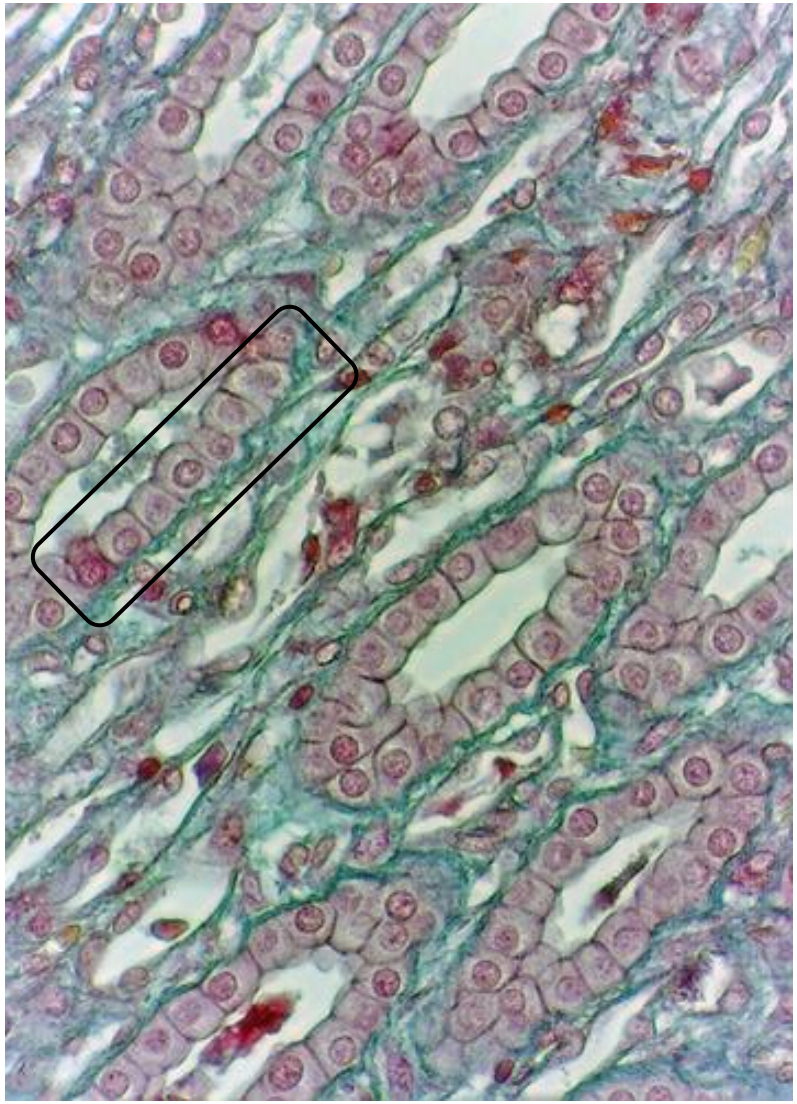


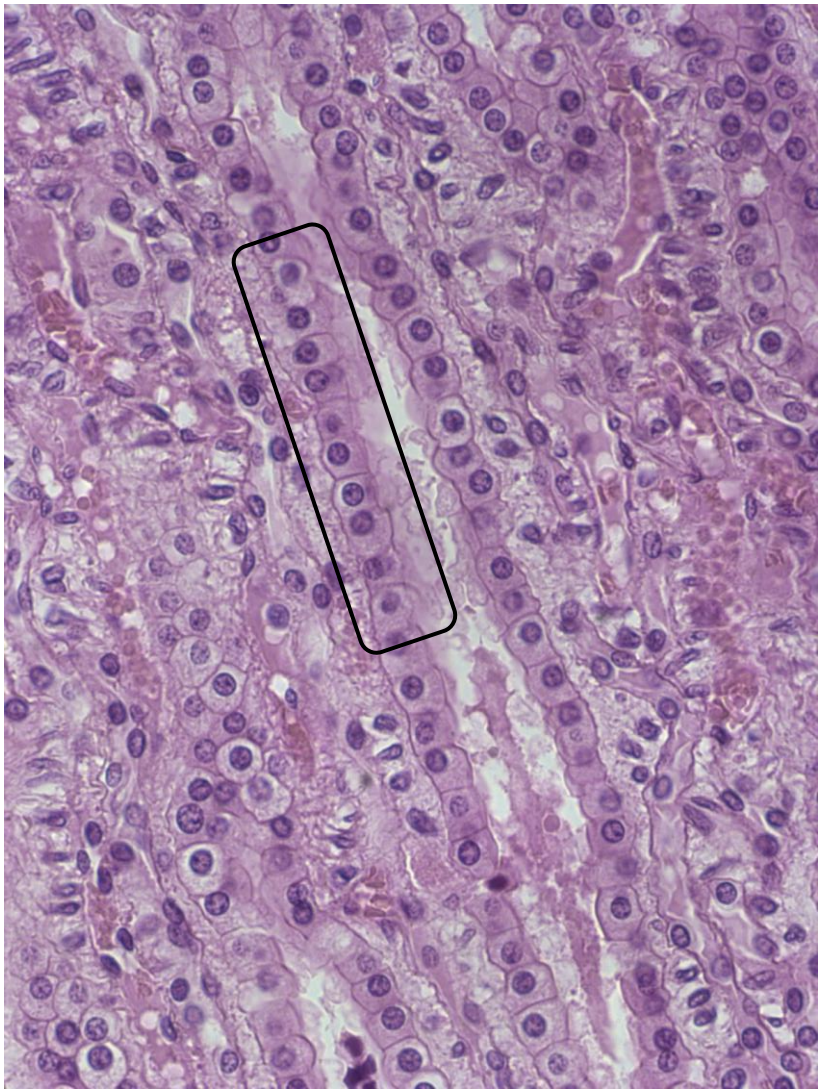


_____

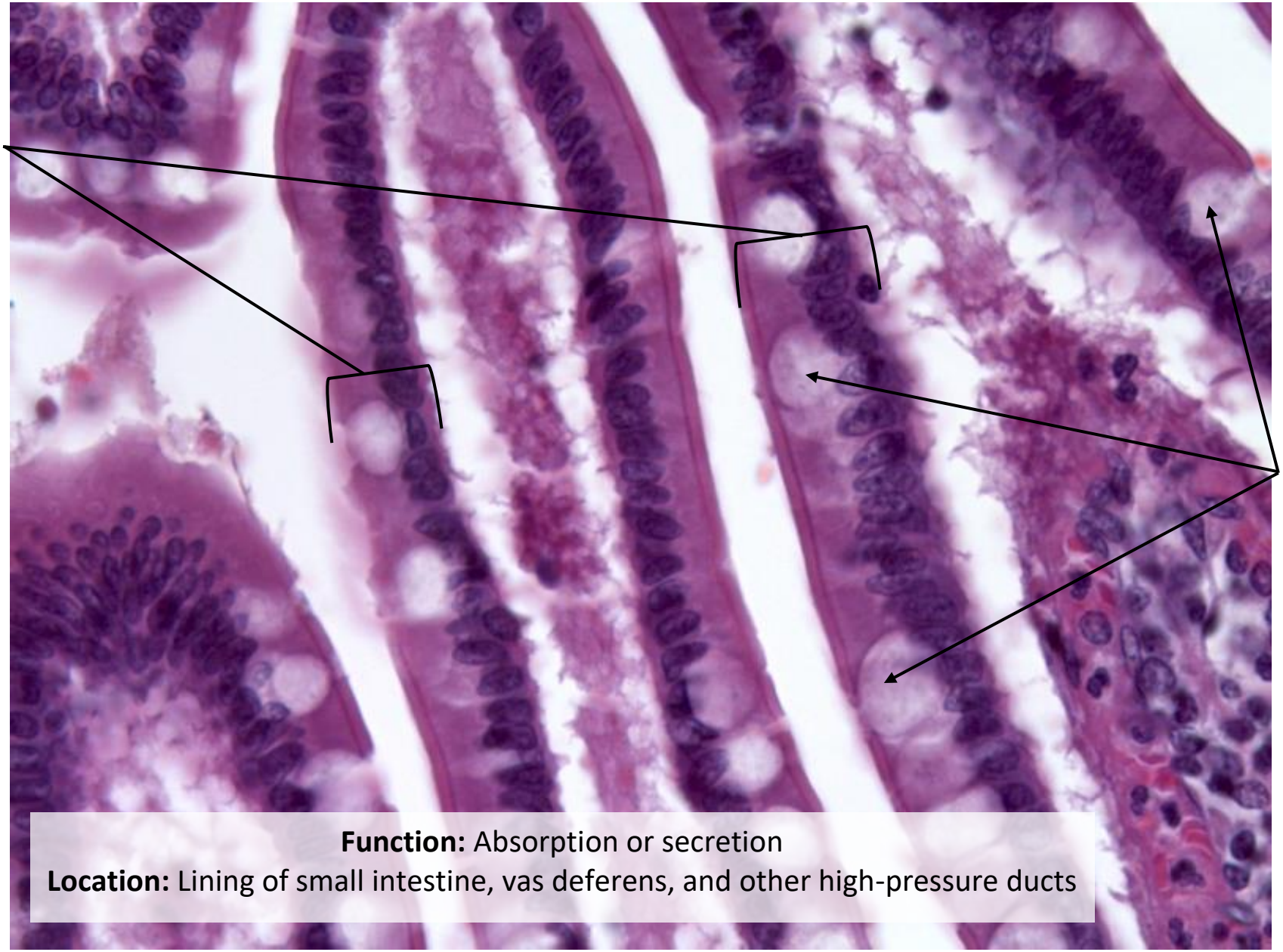
Function: _____

Location: _____





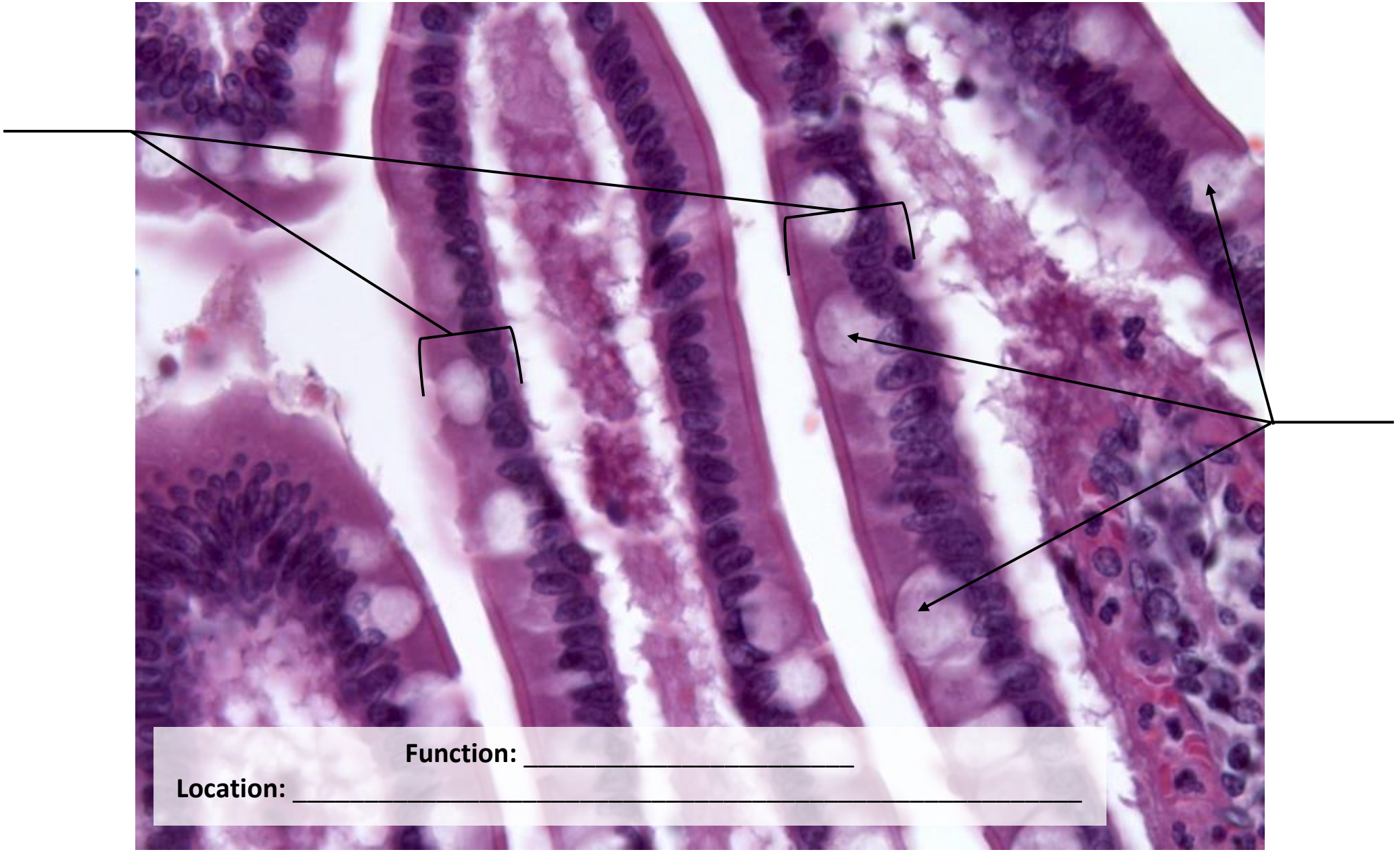
SIMPLE COLUMNAR EPITHELIUM



Function: Absorption or secretion

Location: Lining of small intestine, vas deferens, and other high-pressure ducts

_____

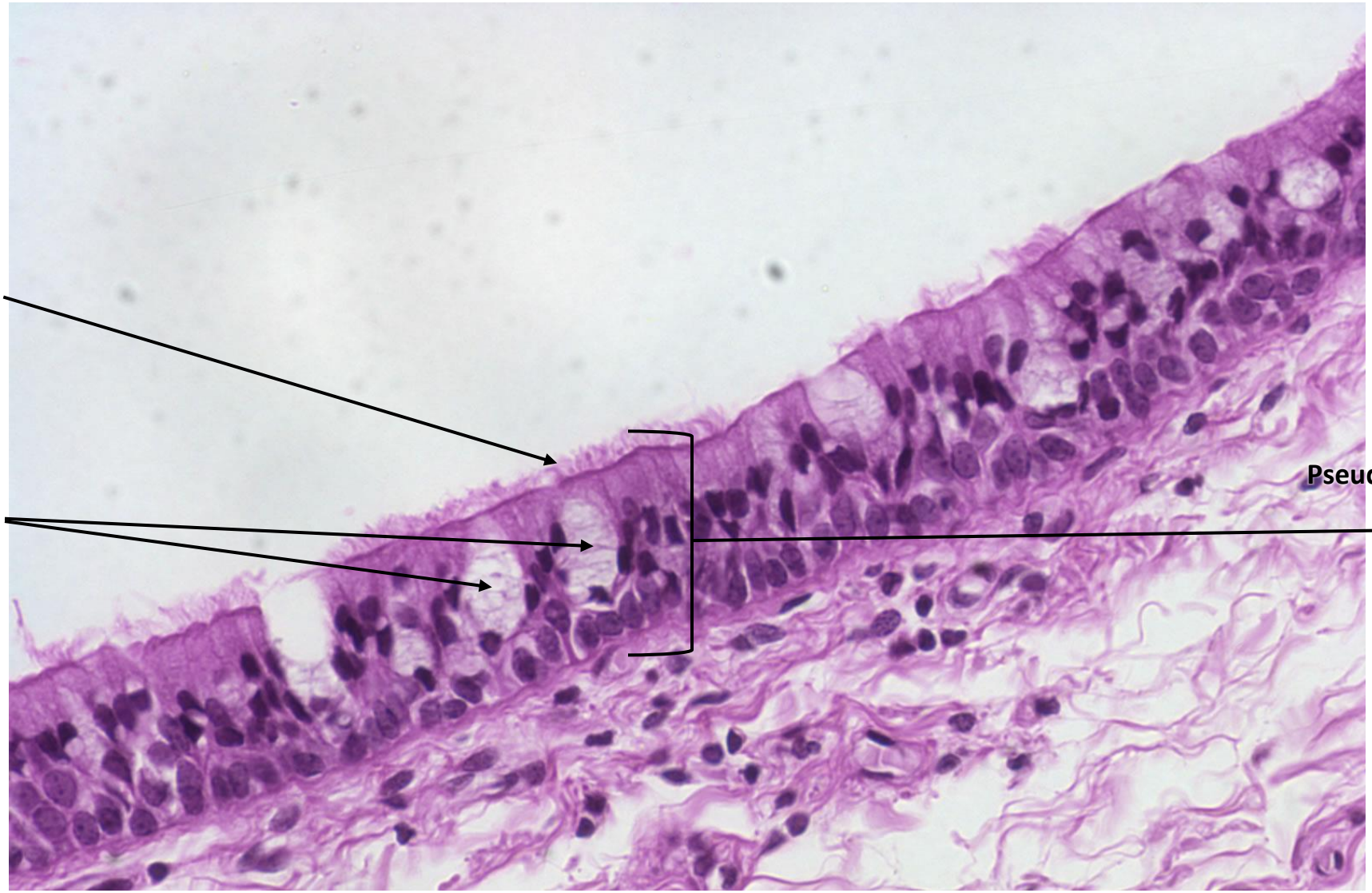


Function: _____

Location: _____

PSEUDOSTRATIFIED CILIATED COLUMNAR EPITHELIUM

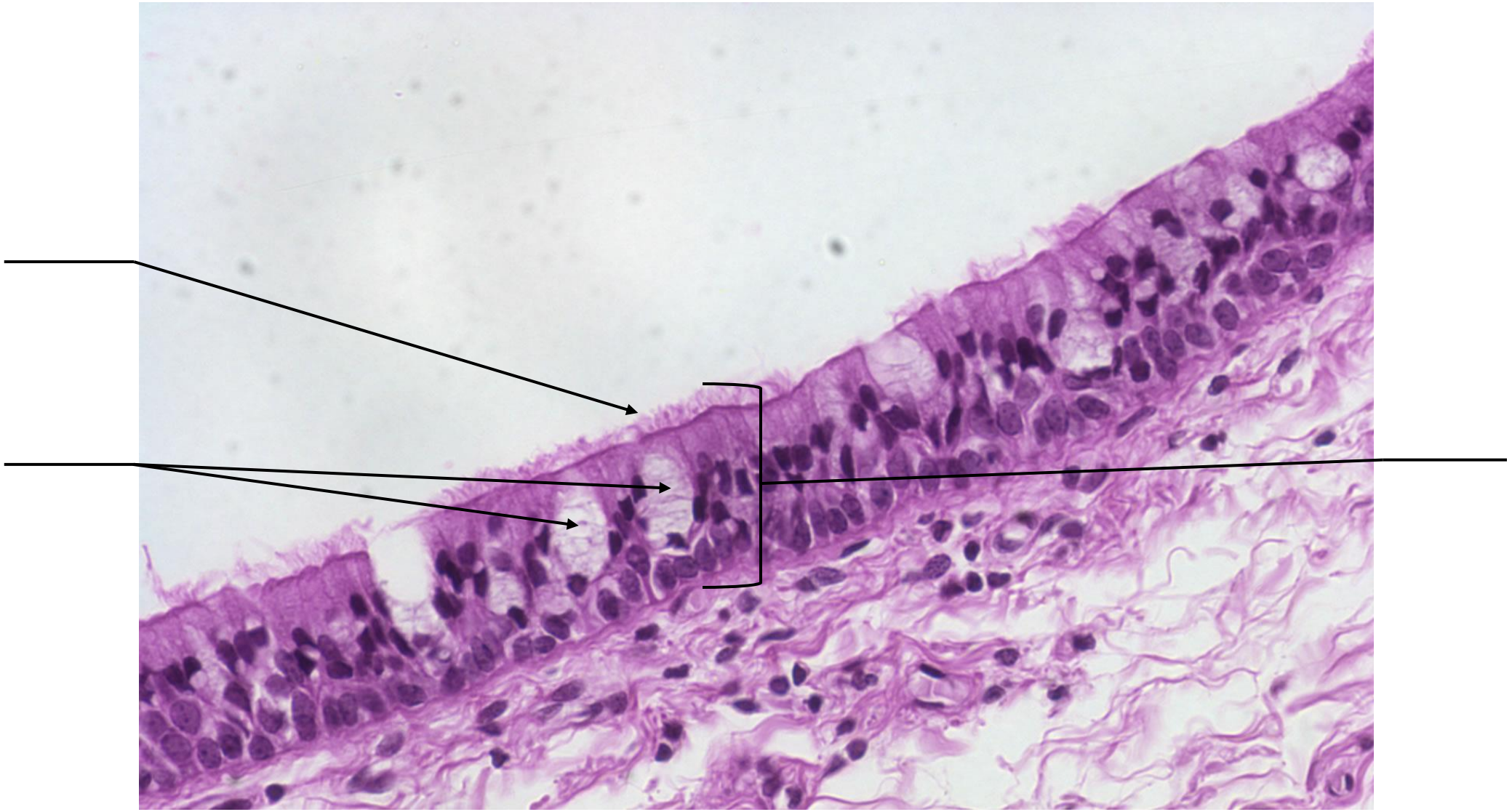
Function: Protection, removal of foreign material
Location: Nasal cavities, sinuses, pharynx, trachea, and bronchi of lungs



_____

Function: _____

Location: _____



STRATIFIED SQUAMOUS EPITHELIUM

Function: Protection against abrasion

Location: Epidermis, oropharynx, anal canal

STRATIFIED SQUAMOUS EPITHELIUM

Function: _____

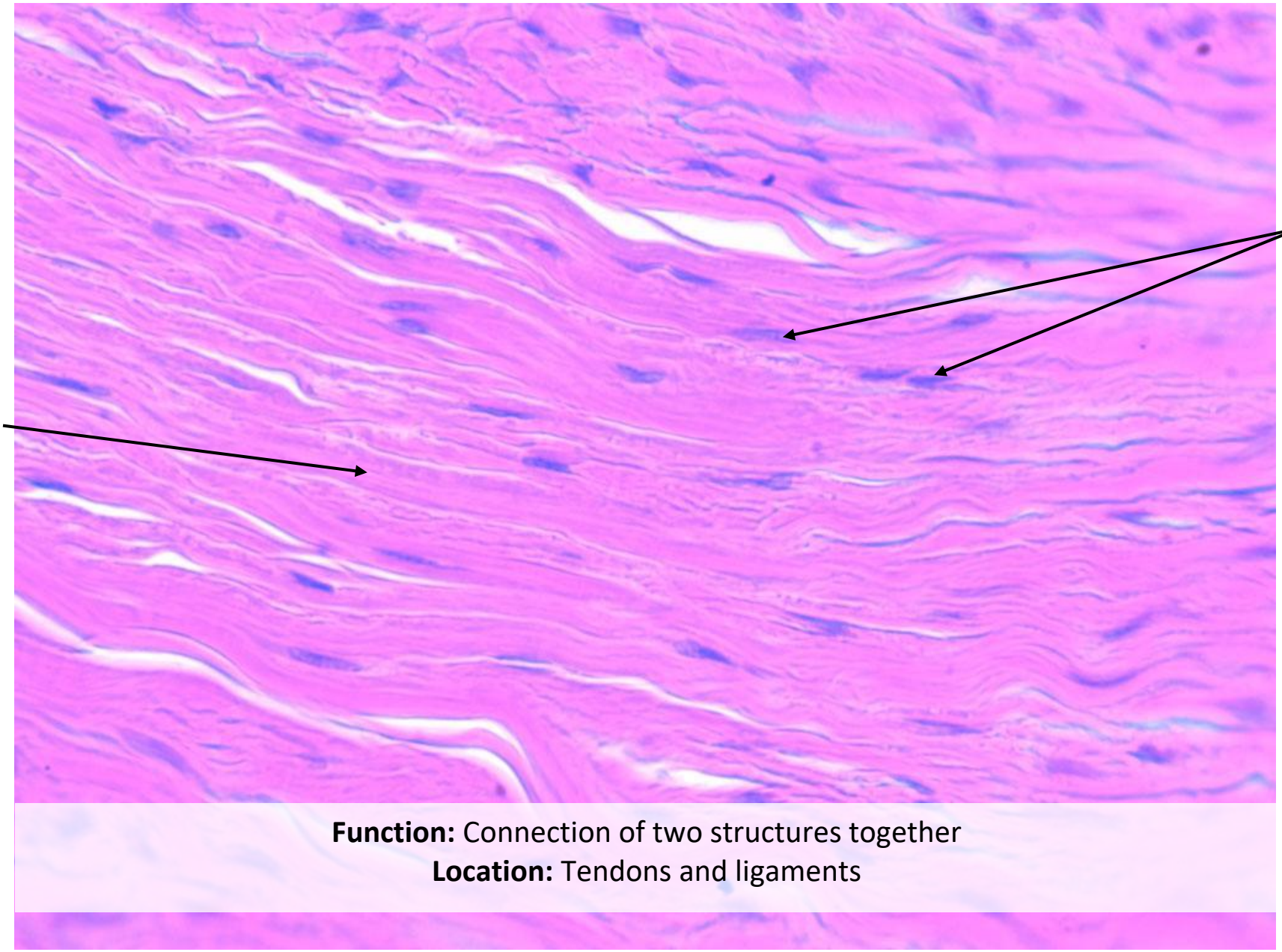
Location: _____

AREOLAR CONNECTIVE TISSUE

Function: Attach one tissue/organ to another, separates muscles

Location: Under skin, surrounding vessels, glands, muscles and nerves

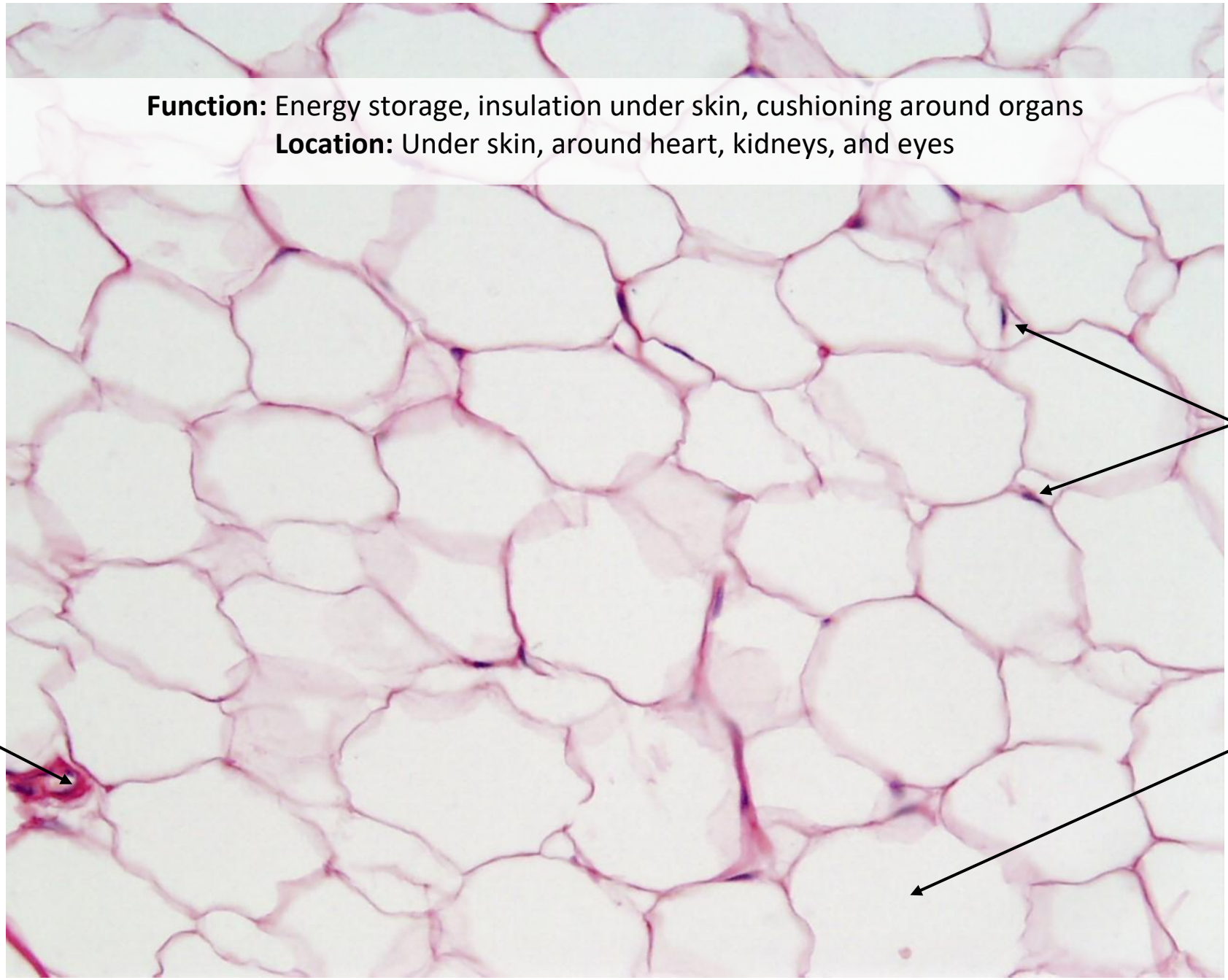
DENSE REGULAR CONNECTIVE TISSUE



Function: Connection of two structures together
Location: Tendons and ligaments

ADIPOSE TISSUE

Function: Energy storage, insulation under skin, cushioning around organs
Location: Under skin, around heart, kidneys, and eyes



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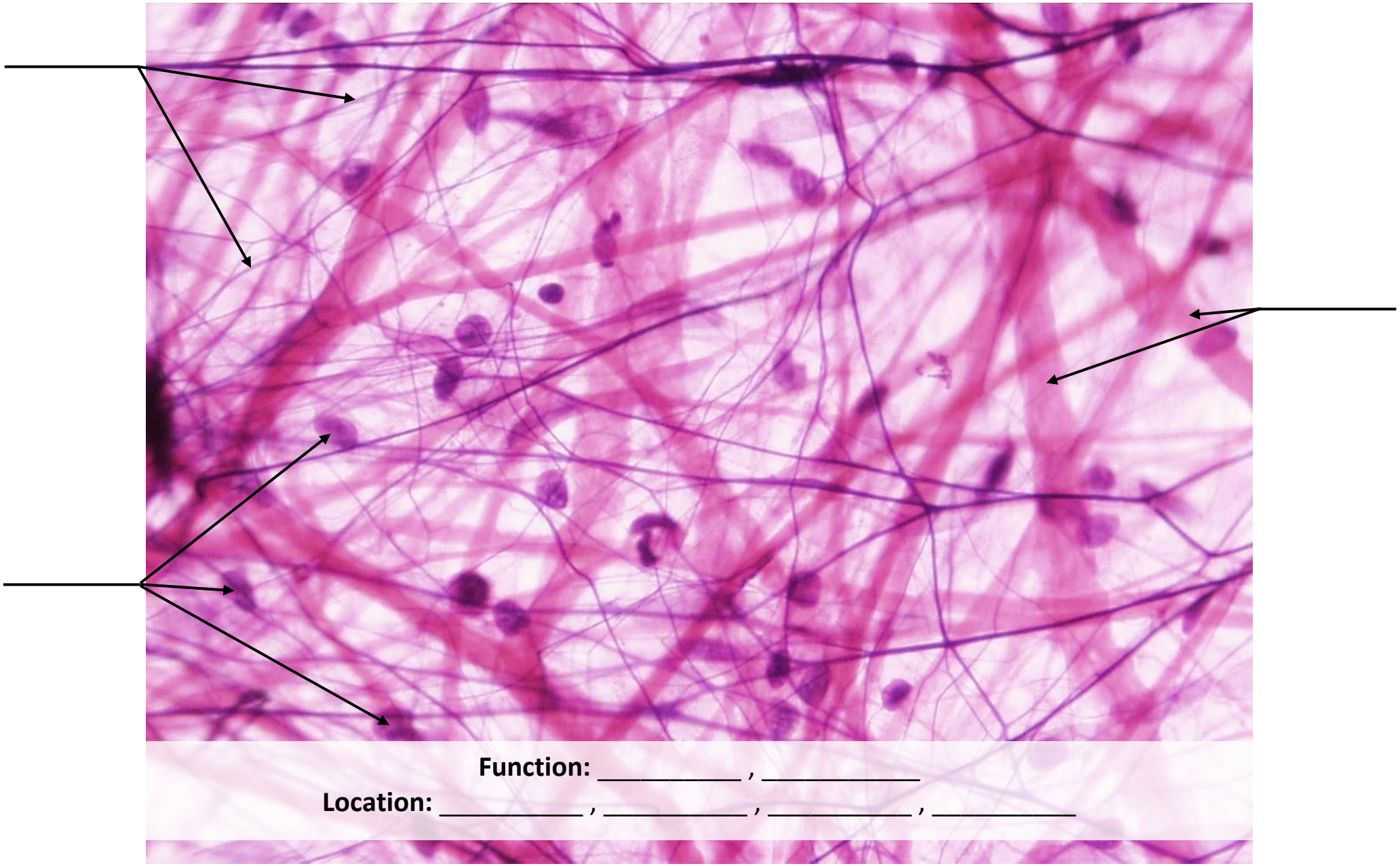
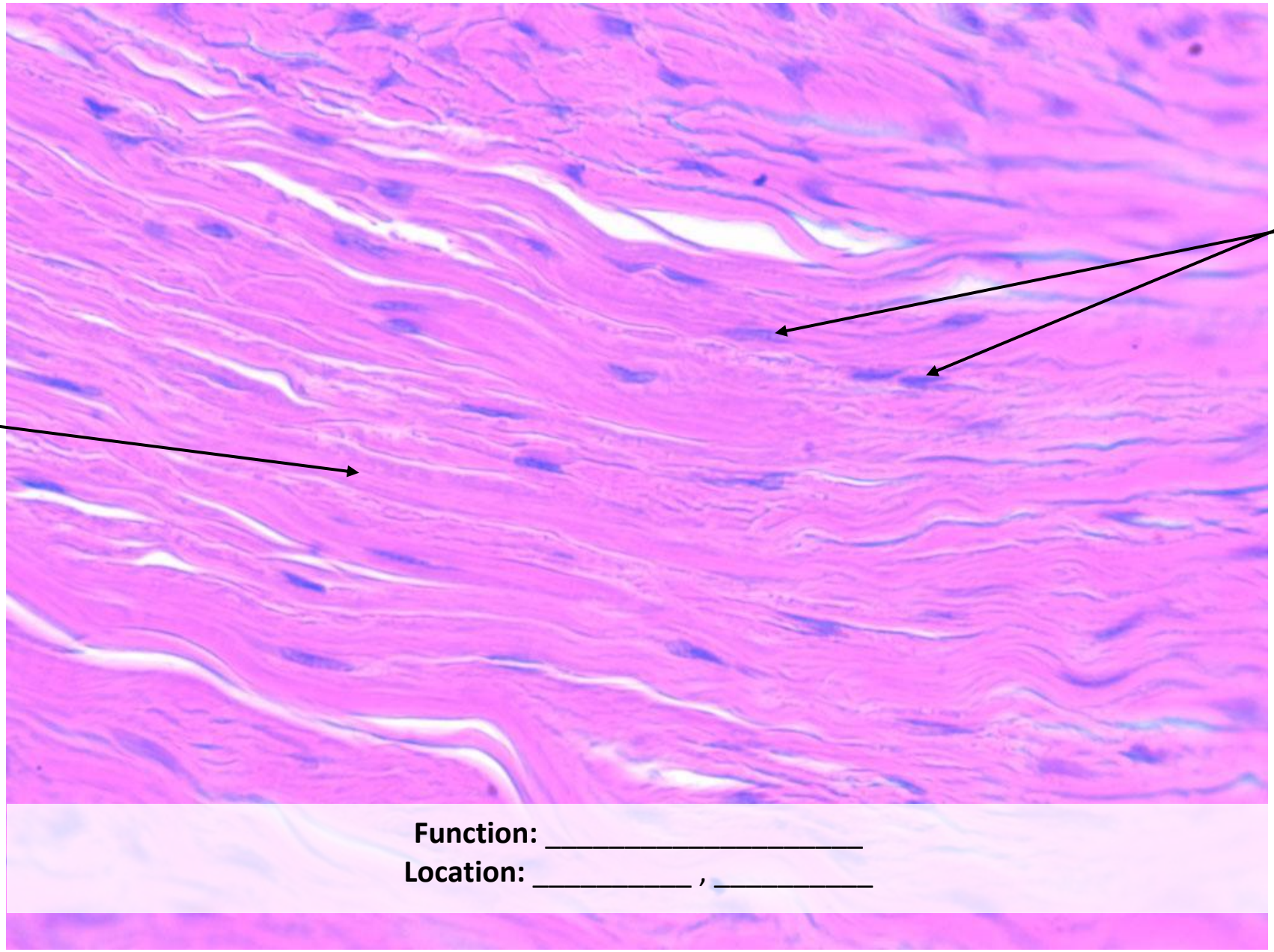


Function: _____ , _____

Location: _____ , _____ , _____ , _____

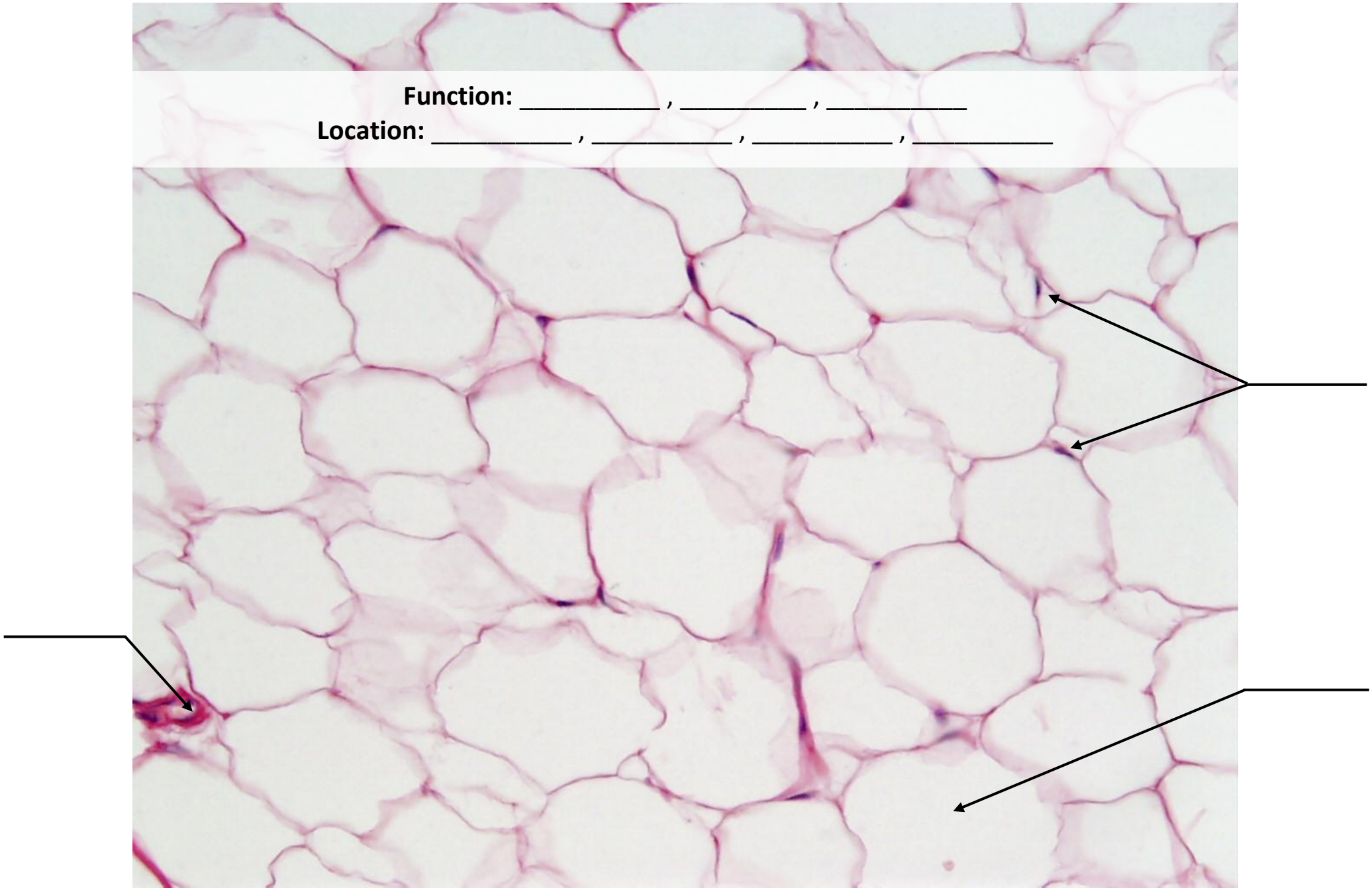
_____



Function: _____

Location: _____ , _____

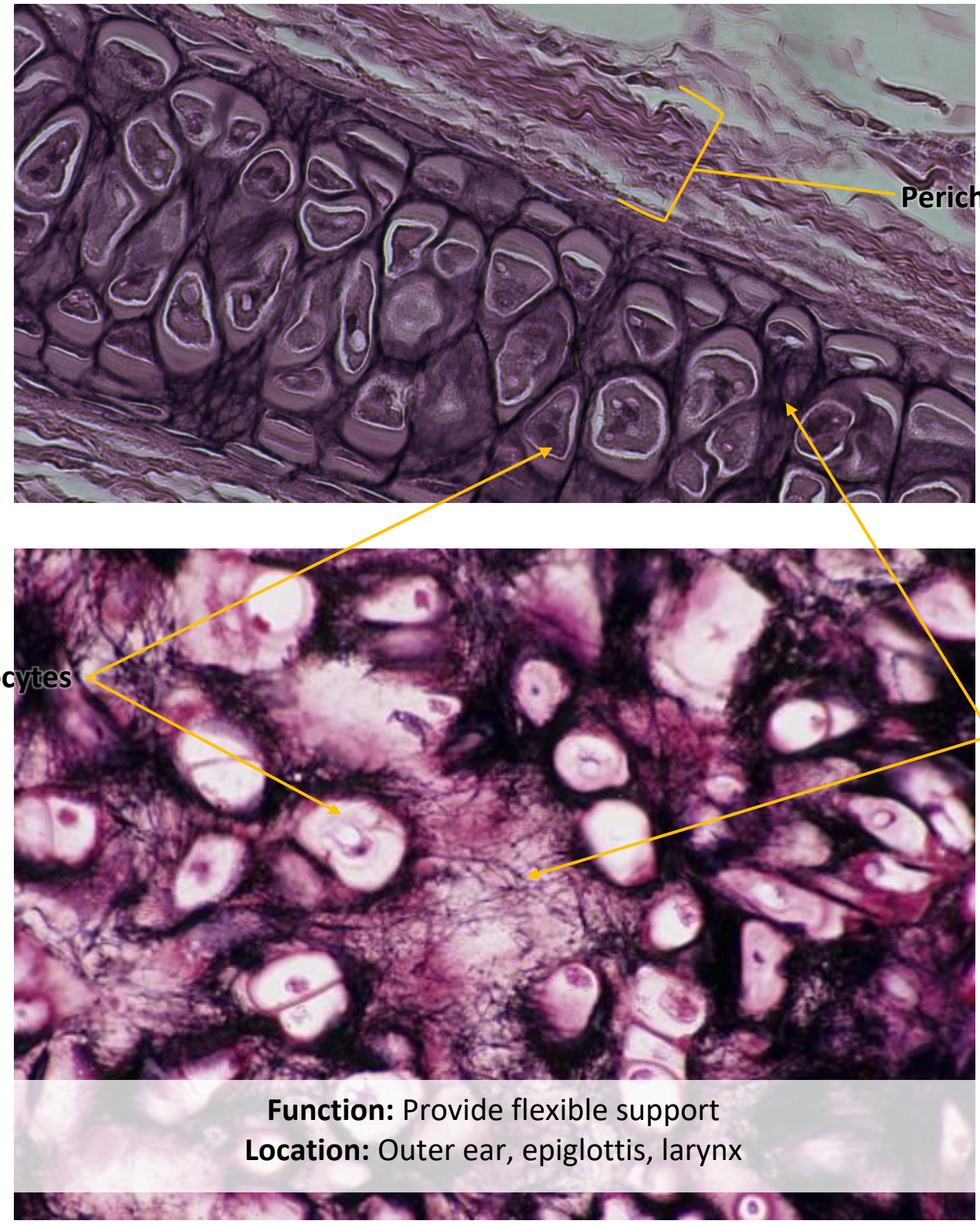
_____



Function: _____ , _____ , _____

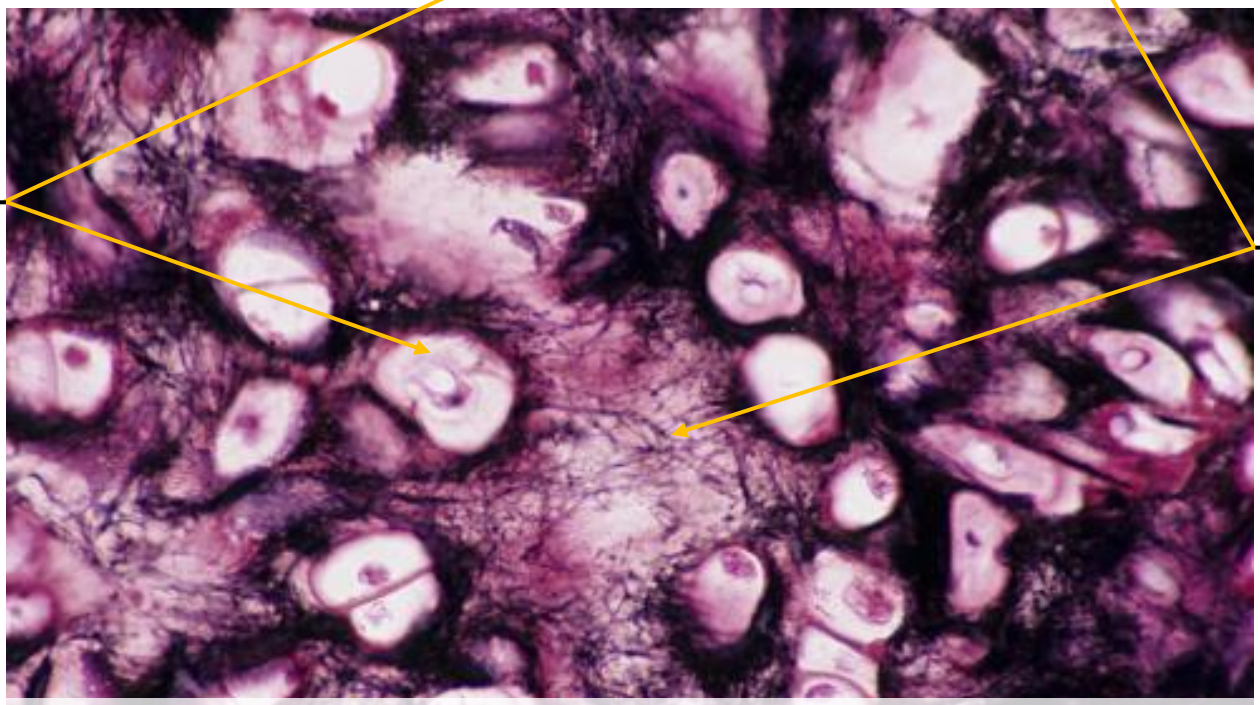
Location: _____ , _____ , _____ , _____

ELASTIC CARTILAGE



Function: Provide flexible support
Location: Outer ear, epiglottis, larynx

_____



Function: _____

Location: _____ , _____ , _____