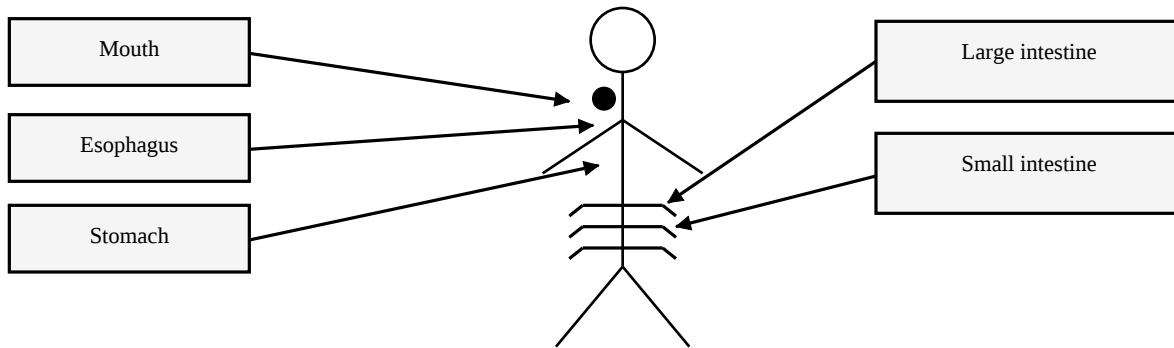


SCIENCE 8 — QUARTER 1 REVIEWER

Visual Study Guide • Digestive System • Excretory System • Mendelian Genetics • Vitamins & Minerals

1. DIGESTIVE SYSTEM — FOLLOW THE FOOD

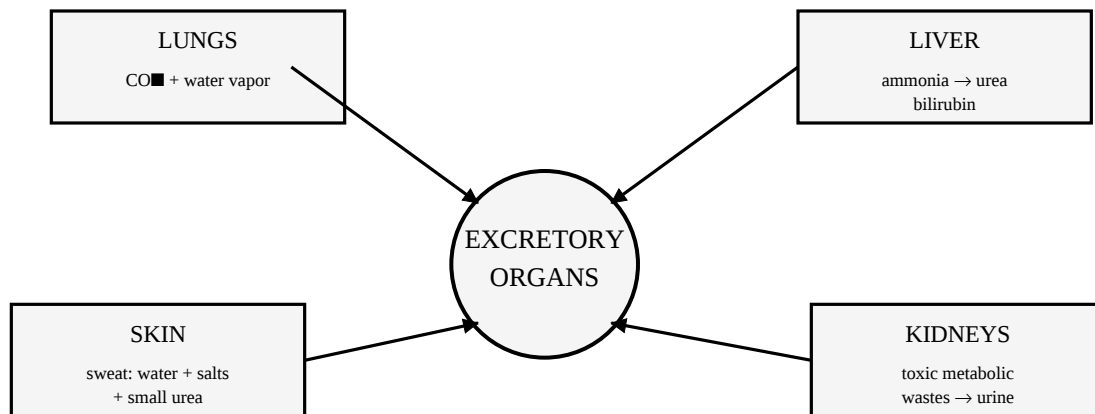
Remember the pathway: **Mouth** → **Esophagus** → **Stomach** → **Small Intestine** → **Large Intestine**.



FOOD MOVES FORWARD THROUGH THE ALIMENTARY CANAL

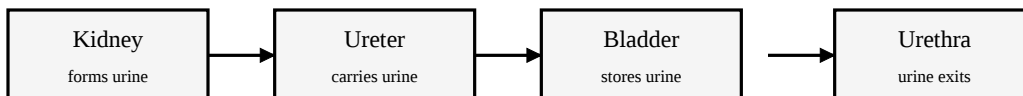
2. EXCRETORY SYSTEM — WHO REMOVES WHAT?

Use this map to connect each organ with its major waste-removal role.



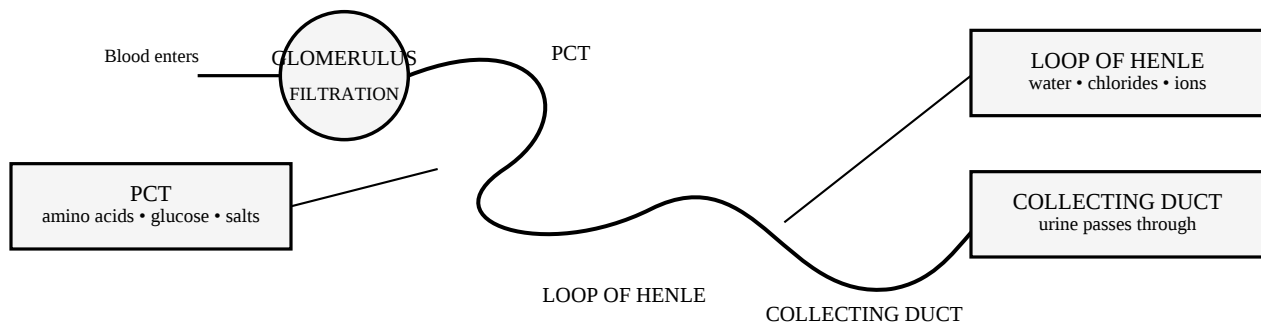
Each organ removes different wastes and helps maintain homeostasis.

3. URINE PATHWAY — MEMORIZE THE ARROWS



KIDNEY → URETER → BLADDER → URETHRA

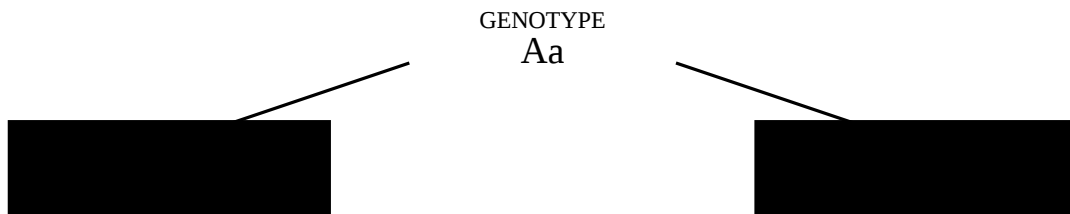
4. NEPHRON — FILTRATION + REABSORPTION



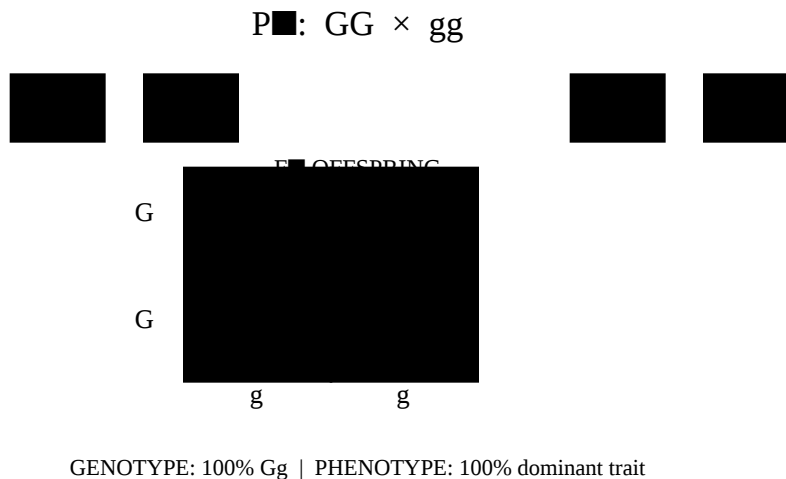
THINK: GLOMERULUS = FILTER • TUBULES = REABSORB

5. MENDELIAN GENETICS — THE FOUR WORDS TO KNOW

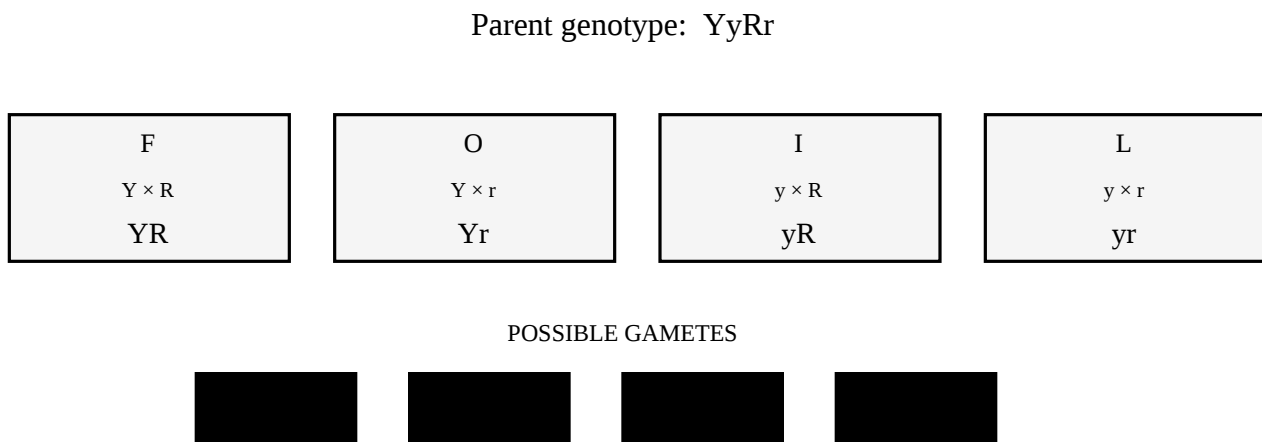
ALLELE a form of a gene form	GENOTYPE genetic makeup letters	PHENOTYPE physical trait shown appearance	PUNNETT SQUARE predicts inheritance chart
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6. MONOHYBRID CROSS — SEE WHY $GG \times gg \rightarrow$ ALL Gg



7. DIHYBRID CROSS + FOIL — YyRr MAKES FOUR GAMETES



8. QUICK MEMORY MAP

★ **Digestive:** Mouth → Esophagus → Stomach → Small intestine → Large intestine

★ **Small intestine:** Duodenum → Jejunum → Ileum

★ **Urine:** Kidney → Ureter → Bladder → Urethra

★ **Nephron:** Glomerulus = filtration; Loop of Henle/PCT = reabsorption; Collecting duct = urine passes through

★ **Genetics:** Allele = gene form • Genotype = letters • Phenotype = appearance • Homozygous = same • Heterozygous = different

★ **FOIL:** YyRr → YR, Yr, yR, yr

EXAM STRATEGY

When you see a **sequence**, draw arrows. When you see a **genotype**, read the letters first. When you see a **nephron**, ask: “filtration or reabsorption?” When you see **YyRr**, immediately think **YR, Yr, yR, yr**.