

TEKS

- 9A** Compare the structures and functions of different types of biomolecules, including carbohydrates, lipids, proteins, and nucleic acids
- 9C** Identify and investigate the role of enzymes
- 10A** Describe the interactions that occur among systems that perform the functions of regulation, nutrient absorption, reproduction, and defense from injury or illness in animals
- 10C** Analyze the levels of organization in biological systems and relate the levels to each other and to the whole system
- 11A** Describe the role of internal feedback mechanisms in the maintenance of homeostasis
- 11B** Investigate and analyze how organisms, populations, and communities respond to external factors

instructional content:

- ✦ Types of Nutrients
- ✦ Digestion
 - Mechanical
 - Chemical
- ✦ Anatomy of Digestive System
 - Alimentary Canal
 - Accessory Organs
- ✦ Absorption of Nutrients
 - Structure of Small Intestine
 - Role of Circulatory System
- ✦ Excretory System Role in Homeostasis
- ✦ Anatomy of Urinary System

learning outcomes students will:

- Use all content and scientific process skills learned earlier in the course
- Name the six types of nutrients to maintain health
- Identify the organs and their functions within the digestive system
- Differentiate between mechanical and chemical digestion
- Describe the process of peristalsis
- Summarize the pathway a bolus of food would follow in the digestive system
- Explain the importance of enzymes in digestion
- Explain the importance of villi in the small intestine
- Identify the main function of the large intestine
- Describe the importance of bacteria in the guts of humans
- Explain how the excretory system maintains homeostasis
- Identify the major wastes produced by humans and the organs that eliminate them
- List the main organs of the urinary system and their functions
- Describe the main structures of the nephron and their function
- Summarize how nephrons form urine



Incorporate scientific process skills during the instruction of all Biology concepts.
Look for this icon at wardsci.com/TEKS for more information on scientific process skills.

Recommended Ward's Science products with item numbers for easy online searching: _____

science tools:

- [Altay® Digestive System Model 813349](#)
- [3B® Kidney Model 811163](#)
- [Denoyer-Geppert Urinary System Model 811048](#)

instructional resources:

- [Visual Learning Guides: Human Body 330477](#)
- [Digestive Walk-Thru Classroom Activity 181061](#)
- [Ward's What Influences Enzyme Activity? Lab Activity 361216](#)
- [Ward's Investigating Digestive Processes Lab Activity 366068](#)

- [Ward's Kidney Dialysis Simulation Lab Activity 366808](#)
- [How Do Our Kidneys Work? Lab Activity 368922](#)
- [Working Nephron Model 4685100](#)