Chapter 24 Study Guide:

- Terms
- 2. Digestive System worksheet
- 3. List all 10 digestive system organs

Mouth, salivary glands, esophagus, stomach, liver, gallbladder, pancreas, small intestine, large intestine, rectum, anus

List the function of each organ in the digestive system
 <u>Mouth:</u> holds teeth that are necessary for chewing and breaking down

<u>Saliva</u>: enzyme that is needed to break down food in chemical digestion <u>Esophagus</u>: tube to the stomach that by peristaltic action moves food down the tube to the stomach.

<u>Stomach:</u> muscle that continues the mechanical digestion of food by contracting and squeezing the food to mix it with the stomach acids and enzymes to further break the food down.

<u>Liver:</u> makes bile to break up fat, stores nutrients and breaks down toxins <u>Gallbladder:</u> temporarily stores bile

<u>Pancreas:</u> keeps the stomach acids from getting into the small intestine. <u>Small Intestine:</u> muscular tube that contains the villi that absorb the nutrients from the broken down food

<u>Large Intestine</u>: undigested material that is a soupy mixture enters the large intestine. The large intestine absorbs the water out of the soupy mixture to make semisolid waste called feces or stool

Rectum: holds the feces.

Anus: where waste passes from inside the body to outside the body

- What is the pathway of digestion? Describe each step of digestion and what is occurring at each step
 - Mouth > Esophagus > Stomach > Small Intestine (Duodenum, Jejunum, ileum) > Large intestine> Rectum > Anus.
- 6. List all 4 (including how many of each organ this is) organs of the Urinary System
 - 2-Kidneys, 2-ureter, 1-bladder and 1-urethra
- 7. List the functions of each organ

Kidneys: filter blood, ureter: tube from kidney to bladder and transports urine to the bladder, bladder: sac that holds urine until it is excreted, Urethra: tube that excretes urine outside the body.

- 8. What is the pathway of urine in the urinary system? Kidneys to ureter to bladder to urethra to out
- 9. What is a diuretic?

Causes kidneys to make more urine

- 10. What are the differences between mechanical and chemical digestion? <u>Mechanical:</u> Breaking down/mashing of food <u>Chemical:</u> large molecules are broken down into nutrients
- 11. What is an example of chemical digestion?

Chemical: enzymes in saliva breaking down food

- 12. What is an example of mechanical digestion?

 Mechanical: The teeth cutting and grinding food
- 13. What is the stomach and how does it break down food? Contraction of muscles combined with enzymes and stomach acids
- 14. What is the function of the liver for the digestive system? The Liver makes bile to break up fat, stores nutrients and breaks down toxins.
- 15. What is the function of the gall bladder for the digestive system? Temporarily stores bile
- 16. What is the function of the pancreas for the digestive system? Makes fluids that protect the small intestine from the stomach acids, it also regulates blood sugar and makes hormones which is really part of the endocrine system.
- 17. What is the primary waste that nephrons remove? Ammonia
- 18. What is another name for Ammonia (waste)? Urea
- 19. What nutrients are stripped from the food? fats, proteins, carbs, vitamins and minerals
- 20. Where do the nutrients go after being stripped? Into the bloodstream to go to the rest of the body if nutrients aren't needed, they are stored in the liver.
- 21. How are kidney stones formed?
 Salts and other wastes collect inside the kidneys
- 22. What are the 3 disorders of the urinary system Bacterial infections, kidney stones, kidney disease
- 23. What happens in each of the 3 disorders?

<u>Bacterial infections:</u> bacteria gets into the bladder and ureter through the urethra, should be treated early to avoid kidney damage.

<u>Kidney stones</u>: waste and salts form together to make stones, can interferre with urine flow and are painful. Drs want to pass naturally, but may need meds to break them up and if that doesn't work surgery is required.

<u>Kidney disease:</u> damage to nephrons can prevent normal kidney function so the blood doesn't get filtered correctly. Sometimes people have to go on machines to filter their blood (Dialysis)

- 24. What waste products must your body get rid of to remain healthy?

 Ammonia and Carbon Dioxide
- 25. Why is the digestive system necessary?

 To break down food to get the nutrients the body needs
- 26. Why is the urinary system necessary? To get rid of the waste that the body does not need and remove waste from blood