Chapter 14 Skeletal and Muscular Systems Review (Test Tuesday!)

- 1. Groups of organs that work together are called systems.
- 2. The framework of bones that supports the body is the skeletal system.
- 3. Our skeleton is found on the inside making it an endoskeleton.
- 4. The skeletal system has four main functions: 1. support, 2. protect, 3. movement, 4. blood cell production.
- 5. The soft tissue inside bones is called the marrow.
- The marrow produces: 1. white blood cells (fight infection) 2. red blood cells (carry oxygen) 3. platelets (clotting)
- 7. Fat is also stored in the marrow.
- 8. Bones are living. The have the ability to heal themselves.
- 9. Strong elastic tissue often found at the ends of bones where bones come together is <u>cartilage</u>.
- 10. Our ears and nose are made of cartilage.
- 11. The long row of connected bones in the middle of the back is called the backbone.
- 12. The backbone is made up of numerous bones called vertebrae.
- 13. The <u>ribs</u> form a cage-like structure that provides protection for organs such as the heart and lungs.
- 14. The <u>pelvis</u> is located at the end of the backbone. Its bowl shape helps to protect internal organs as well as hold them in place.
- 15. The place where two or more bones come together is called a joint.
- 16. A joint that allows small sliding movements between our vertebrae is a sliding joint.
- 17. The joint found at your hips and shoulder that allows the greatest range of movement is a <u>ball-and-socket joint</u>.
- 18. The joint that allows side to side movement of your skull on top of your backbone is a <u>pivot joint</u>.
- 19. The joints that allow for back and forth movement at your elbow, knees, fingers, and toes are <u>hinge joints</u>.
- 20. The joints found in your skull/cranium that don't move are called fixed joints.
- 21. Strong bands of tissue that connect bone to bone at joints are ligaments.
- 22. There are three types of tissue in a bone: 1. compact bone tissue, 2. sponge bone tissue,3. marrow
- 23.Bone is made of three things: 1.bone cells, 2.proteins, 3.minerals like calcium
- 24. The organs of the skeletal system are the bones.

- 25. The part of the skull that protects your brain is called the cranium.
- 26. The cranium is made up of many bones that have fixed joints.
- 27. The organ system that makes up the muscles in your body is the muscular system.
- 28. There are over 600 muscles in your body.
- 29. Muscles make up about 1/3 of your body weight.
- 30. There are three types of muscle tissue found in our body: 1. skeletal muscle tissue,
 - 2. smooth muscle tissue, 3. heart/cardiac muscle tissue.
- 31. The muscle tissues that are attached to our bones and help move our body by pulling on the bones are the <u>skeletal muscle tissue</u>.
- 32.<u>Smooth muscle tissue</u> are found in the walls of "hollow" internal organs like the stomach, intestines, and blood vessels.
- 33.Heart/cardiac muscle is the muscle responsible for pumping blood throughout our body. Thankfully it never takes a break!!!
- 34.Our skeletal muscles are <u>voluntary</u>- we control them.
- 35.Our heart and smooth muscles are <u>involuntary</u>- they are automatic and we don't control them.
- 36. Muscles are attached to the bone by strong bands of tissue called <u>tendons</u>.
- 37. Muscles pull and do not push bones.
- 38. When a muscle pulls on a bone it <u>contracts</u> causing the muscle to shorten and thicken.
- 39. When a muscle <u>relaxes</u> it gets thinner and longer and <u>does not</u> pull on the bone.
- 40.Muscles often work in pairs. When one contracts the other relaxes. Example: biceps and triceps.
- 41. We keep our skeletal and muscle systems healthy by: 1. eating healthy foods, 2. getting lots of rest, 3. exercising
- 42.A crack or break in the bone is a <u>fracture</u>.
- 43. When a bone breaks but does not go through the skin it is a closed fracture.
- 44. When a bone breaks and goes through the skin it is an open fracture.
- 45. When an injury occurs at a joint by overstretching or tearing a ligament it is called a <u>sprain</u>.
- 46. When an injury occurs by over stretching a muscle or tendon it is called a strain.
- 47. When a muscle contracts strongly and painfully it is called a <u>cramp</u>.

Study daily between now and Friday! If you put some time into this, I know that you will do well!