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**.
6. 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. They have the ability to heal themselves.
9. Strong elastic tissue often found at the ends of bones where bones come together is **cartilage**.
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 **ribs** form a cage-like structure that provides protection for organs such as the heart and lungs.
14. The **pelvis** 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 **ball-and-socket joint**.
18. The joint that allows side to side movement of your skull on top of your backbone is a **pivot joint**.
19. The joints that allow for back and forth movement at your elbow, knees, fingers, and toes are **hinge joints**.
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 **skeletal muscle tissue**.
32. **Smooth muscle tissue** 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 **voluntary** - we control them.
35. Our heart and smooth muscles are **involuntary** - they are automatic and we don't control them.
36. Muscles are attached to the bone by strong bands of tissue called **tendons**.
37. Muscles pull and do not push bones.
38. When a muscle pulls on a bone it **contracts** causing the muscle to shorten and thicken.
39. When a muscle **relaxes** it gets thinner and longer and does not 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 **fracture**.
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 **sprain**.
46. When an injury occurs by overstretched a muscle or tendon it is called a **strain**.
47. When a muscle contracts strongly and painfully it is called a **cramp**.

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