Answers Chapter 20 Support & Movement Test Review

Vocabulary. Be able to explain all of the following terms:

appendicular skeleton - bones of the shoulder, hip, pelvis, arms and legs

axial skeleton - bones of the skull, ribcage, and backbone

cartilage - tough, flexible tissue

scoliosis - curvature of your backbone (spine)

joint - the place where two or more bones meet

marrow - soft tissue inside the bone

bone - very hard tissue, which is a little flexible

arthritis - inflammed joints

skeletal muscle - muscles attached to bones, which make movement possible

tendon - tough elastic bands of tissue

voluntary muscle - you can control the movement of these muscles i.e. skeletal muscle

involuntary muscle- muscles that you cannot control i.e. smooth muscle and cardiac muscle

cardiac muscle - pump blood through the heart and the rest of the body

smooth muscle - found in the walls of blood vessels, the stomach and other organs

flexor - a muscle that bends at a joint

extensor - a muscle the straightens at a joint

cramp - occurs when muscles spasm by contracting suddenly and strongly

strain - a large tear that requires rest and time to heal

epidermis - outer layer of skin

dermis - the inner layer of skin

hair follicle - each hair that grows out of your body comes from a hair follicle, found in the dermis layer of your skin

oil glands - found near hair follicles they secrete a substance that helps soften the skin and keeps it waterproof

sweat glands - used for excretion

pg 358 Vocabulary Review Matching #1, 3, 4,6,7,8

1. axial skeleton

4. extensor

7. voluntary

3. joint

6. bones

8. hair follicle

pg 358 Applying Defintions #1, 2, 4,5,6,8

- 1. epidermis is the outer layer of skin, the dermis is the inner layer
- 2. flexor bends at the joint when muscles move, extensors straighten at the joint when muscles move.
- 4. bone is very hard tissue, which is only slightly flexible. Cartilage is a touch tissue which is flexible
- 5. skeletal muscle is attached to the bones in your body and only moves when the bones move therefore it is voluntary. Involuntary muscles include the smooth muscle and cardiac muscles they do not need to be told by your body to move.
- 6. axial skeleton makes up the skull, rib cage and backbone whereas the appendicular skeleton is made up of bones of the shoulder, hip, pelvis, arms and legs.
- 8. smooth muscle is found in the stomach, the intestines and blood vessels whereas cardiac muscle is found only in the heart.

<u>Content Review</u>. Write T if the statement is true. If it is false, change the underlined words to make it true:

- The <u>skull</u> protects the brain.
- 2. The bones of the arms and legs are part of the axial skeleton. F
- 3. <u>Cartilage</u> is the tough, but flexible material in the ears. T
- 4. Skeletal muscles can only push bones. F
- 5. Your skin is made up of three layers. F
- 6. Inflamed joints are the main symptom of muscular dystrophy. F
- 7. The dermis layer contains many dead skin cells. F
- 8. Involuntary muscles are muscles that \underline{cannot} be controlled. T
- 9. Blood cells are made in the tendons of bones. F

10. Cardiac muscle is found only in the <u>lungs</u>. F

Review Questions:

1. What are five functions of the skeleton?

Supports the body and gives it shape
Covers and protects certain body organs
Work with muscles to make movement possible
Some bones Make blood cells
Bones store minerals such as calcium and phosphorous that the body needs

2. Describe what happens to the skeleton of a baby during development and after birth?

As a baby the skeleton is made mostly of cartilage and very little bone, as you grow and develop

the cartilage gets replaced by bone.

3. Describe three problems of the skeletal system.

Fractures - breaking a bone which can be partial or complete

Arthritis - inflamed joints which causes pain and limited movement. The cartilage between bones is destroyed and replaced with bone deposits.

Scoliosis - usual curve in your backbone.

4. Explain how muscles work, using the bicep and tricep as an example.

The biceps in the front of the arm bend your arm at the elbow. When the arm is bent the biceps contract or are flexed. The triceps are at the back of your arm. The job of the tricep is to straighten the arm or extend.

5. What is the purpose of the epidermis?

The purpose of the epidermis is to support and protect the body.

Concept Review

Pg 359 Concept review: Understanding a Diagram #1, 2, 4, 5

1. clavicle 2. radius and ulna 4. Femur 5. tibia and fibula

Label the following diagram:

1. skull 2. jaw bone (mandible) 3. collarbone (clavicle) 4. shoulder blade

5. breast bone (sternum) 6. rib cage 7. Humerous 8. spine 9. ulna 10. Radius 11. illium (pelvis) 12. femur

13. tibia 14. fibula