### Today – March 29<sup>th</sup>

- All Complete Employability Skills Reflection #23; 7<sup>th</sup> keep laptops out
- Intro Notes and perhaps a calculator (not essential) out
- Advanced Submit Patient File and Coloring Sheets; warm-ups out
- Reminders n' Stuff:
  - Binder Check #2 due next Friday
  - All missing 3<sup>rd</sup> quarter assignments due 4/15!
  - Return CLUB MED clothing/equipment

• Job Shadow needs?

# Today – March 29<sup>th</sup>



#### **Introduction to Sports Medicine**

- Lecture: Finish Cardiorespiratory Endurance; begin Energy Systems
- Activity: Calculate your MHR and your aerobic & anaerobic training zones

### **Advanced Sports Medicine**

- Warm-Up: Nervous System Basics
- Coloring Sheets posted on website
- Discussion: Diving deeper into Neuromuscular Control

## Warm-Up (No notes, no blanks)

- 1. Describe/List the anatomical "pathway" of a neural signal from the point of receiving a stimulus to muscle contraction.
- 2. Why is it necessary to have a basic understanding of neural pathways to appreciate how neuromuscular control works?
- 3. List terms synonymous with or related to SENSORY and MOTOR.
- 4. Mechanoreceptors are a type of \_\_\_\_\_ cells; motor neurons are a type of \_\_\_\_\_ cells
- 5. The ganglia of \_\_\_\_\_\_ nerve roots are made up of the \_\_\_\_\_\_ of \_\_\_\_\_ neurons (or \_\_\_\_\_\_ neurons)

### Warm-Up Key

- Receptor, sensory/afferent neuron, dorsal nerve root, (interneuron), ascending tract, sensory cortex, motor cortex, descending tract, motor neuron, ventral nerve root, neuromuscular junction
- 2. Variable responses from students.
- SENSORY: Afferent, Ascending, Somatosensory, Receptor, Input, Dorsal Nerve Root, Sensory Cortex, Mechanoreceptors, Toward the CNS MOTOR: Efferent, Descending, Somatomotor, Effector,

Output, Ventral Nerve Root, Motor Cortex, Motor Neurons, Away From the CNS

- Mechanoreceptors are a type of <u>receptor</u> cell; motor neurons are a type of <u>effector</u> cells
- The ganglia of <u>dorsal</u> nerve roots are made up of the <u>cell</u> <u>bodies</u> of <u>sensory</u> neurons (<u>afferent</u> or <u>unipolar</u> neurons)