



**Across**

- 3** Which and how many motor units are involved in a muscle contraction.
- 6** Further from the trunk.
- 10** The inability of a hormone to react with a receptor
- 12** An electrical waves which leads to the contraction of the atrium
- 14** Processes which require oxygen.
- 16** The smallest contractile unit of skeletal muscle.
- 17** Hormone which is fat soluble; from the adrenal cortex and gonads.

- 18** Hydrogen atoms are passed down through an electron carrier called a \_\_\_\_\_/
- 21** Reactions which require energy and include anabolic processes.
- 22** Structures which collect blood from the capillaries.
- 24** Attached to the bone periosteum.
- 25** Special cellular organelles where the reactions of aerobic metabolism occur.

**Down**

- 1** The breakdown of 1 molecule of ATP to release energy.
- 2** The function is to rapidly transport blood pumped from the heart.
- 4** The study of reactions between the nervous and endocrine system.
- 5** Hundreds dominate the sarcoplasm.
- 7** Made of amino acids; example is insulin
- 8** The break down of larger molecules into smaller molecules with the release of energy.

- 9** A high energy phosphate molecule.
- 11** Tissue building.
- 13** Formed from pyruvate during glycolysis.
- 15** The end result of glycolysis.
- 19** Chemical messengers that are synthesized, stored, and released into the blood.
- 20** A series of reactions that continue oxidation of substrate in glycolysis.
- 23** Thin filaments consisting of two strands arranged in a double helix.