

|                                               |               |                         |                           |                                                  |
|-----------------------------------------------|---------------|-------------------------|---------------------------|--------------------------------------------------|
| <b>B</b>                                      | <b>I</b>      | <b>N</b>                | <b>G</b>                  | <b>O</b>                                         |
| Tropomyosin                                   | Acetylcholine | ATP                     | Energize the Myosin heads | Release of calcium from Terminal Cisternae       |
| Muscle used most of its energy can't contract | Contractility | T-tubules               | Neuromuscular Junction    | T-tubules                                        |
| Binds to Troponin                             | Mitochondria  | FREE                    | Chemical Synapse          | Motor neuron and all muscle fibers it stimulates |
| Sarcomere                                     | Muscle Tone   | Receptors on Sarcolemma | Sarcoplasmic reticulum    | Increased overlapping of contractile filaments   |
| Extensibility                                 | Myoglobin     | Calcium                 | Myosin                    | Actin                                            |

| <b>B</b>                                         | <b>I</b>                  | <b>N</b>      | <b>G</b>                                      | <b>O</b>               |
|--------------------------------------------------|---------------------------|---------------|-----------------------------------------------|------------------------|
| T-tubules                                        | Calcium                   | Sarcomere     | Mitochondria                                  | Binds to Troponin      |
| Motor neuron and all muscle fibers it stimulates | T-tubules                 | Acetylcholine | Tropomyosin                                   | Neuromuscular Junction |
| Release of calcium from Terminal Cisternae       | Myoglobin                 | <b>FREE</b>   | Actin                                         | Myosin                 |
| Contractility                                    | Energize the Myosin heads | Peristalsis   | Troponin                                      | Sarcomere              |
| Chemical Synapse                                 | Receptors on Sarcolemma   | <b>ATP</b>    | Muscle used most of its energy can't contract | Thermogenesis          |

|                                                        |                                   |              |                                                     |                                                              |
|--------------------------------------------------------|-----------------------------------|--------------|-----------------------------------------------------|--------------------------------------------------------------|
| <b>B</b>                                               | <b>I</b>                          | <b>N</b>     | <b>G</b>                                            | <b>O</b>                                                     |
| Calcium                                                | oxygen<br>debt/recovery<br>period | Troponin     | Contractility                                       | Actin                                                        |
| Sarcomere                                              | Neuromuscular<br>Junction         | Elasticity   | Acetylcholine                                       | Tropomyosin                                                  |
| Muscle used<br>most of its<br>energy can't<br>contract | Chemical<br>Synapse               | <b>FREE</b>  | Release of<br>calcium from<br>Terminal<br>Cisternae | Motor<br>neuron and<br>all muscle<br>fibers it<br>stimulates |
| Energize<br>the<br>Myosin<br>heads                     | Myosin                            | Mitochondria | Extensibility                                       | Receptors<br>on<br>Sarcolemma                                |
| Thermogenesis                                          | Crossbridge<br>attachments        | Sarcomere    | Muscle<br>Tone                                      | ATP                                                          |