**Simplistic Answer for common questions such as…..**

**When exercising how you do increase (Breathing rate, Heart rate, Redistribute Blood)**

Note the yellow sections are all the **SAME**

|  |  |  |
| --- | --- | --- |
| Breathing Rate (Increasing) | Heart Rate (Increasing) | Blood Shunting  |
| Exercise  | Exercise | Exercise |
| Increase in CO2  | Increase in CO2  | Increase in CO2  |
| Detected by chemoreceptors | Detected by chemoreceptors | Detected by chemoreceptors |
| Message to medulla | Message to medulla | Message to medulla |
| Respiratory control centre  | Cardiac Control Centre  | Vasomotor Centre |
| Sympathetic nervous system | Sympathetic nervous system | Sympathetic nervous system |
| Stimulates breathing muscles | SAN | Vasodilation Skeletal muscles |
| Deeper and faster breathing | Increased Heart Rate  | Vasoconstriction digestive organs  |