**Heart Rate & Exercise Intensity**  

**Name:** ___________________________

---

**Resting Heart Rate Formula (Record in beats per minute):**

- Resting Heart Rate Average over 5 mornings (or quiet times):
  
  Day 1 _____ + Day 2 _____ + Day 3 _____ + Day 4 _____ + Day 5 _____ = _____ \( \div 5 = _____ \) RHR*

Resting heart rate is a general indicator of your overall cardiorespiratory fitness. Average is 60-70 bpm.

---

**What should my heart rate be while exercising?**

The easiest method for determining training heart rate zones is to use the following formula:

\[
220 - \text{your age} = \text{maximum heart rate}
\]

Example: 220 - 23 years = 197 bpm for maximum heart rate

Now determine 60-85% of the maximum heart rate.

Example: If 197 is maximum heart rate, 60% = 197 x .6 = 118 bpm and 85% = 197 x .85 = 167 bpm

So 118-167 bpm is the training heart rate zone for this 23 year old.

Why 60-85%, this is considered a vigorous or optimal training zone to increase cardiorespiratory fitness. This formula does not take into account a person’s personal fitness level.

Determine your maximum heart rate and training heart rate zone for 60-85%:

Vigorous (or Optimal) Training Heart Rate Zone (60-85%) = ______________________

---

If you are just beginning to exercise or have been sick, use a lower training zone, 50-60% of maximum heart rate.

Determine this zone for yourself:

Moderate Intensity Training Heart Rate Zone (50-60%) = ______________________

---

**FIT Formula for Cardiorespiratory Fitness**

- **F**= **Frequency**  
  3 days a week of vigorous intensity exercise  
  5 days a week of moderate intensity exercise

- **I**= **Intensity**  
  50-60% moderate intensity  
  60-85% vigorous intensity

- **T**= **Time**  
  30 minutes of moderate intensity exercise  
  20 minutes of vigorous intensity exercise  
  60-90 minutes of moderate intensity exercise for weight loss

Improvements in cardiorespiratory fitness will be evident through a lower resting heart rate, lower blood pressure and faster recovery from vigorous exercise. As your fitness level improves and as you age, it is important to recalculate your training heart rate zone to determine the correct intensity level.

**During a group exercise class, your heart rate typically follows this pattern:**

- **Warm-up:** just above resting to approximately 40-60% intensity level
- **Cardio:** anywhere from 50-90% intensity level depending upon the exercises and class format
- **Strength training or muscular fitness:** heart rate will remain in the 30-50% intensity level depending upon exercises, if using heavier weights and moving through exercises quickly, heart rate may climb higher.
- **Cool-down:** should decrease below 40% intensity level.
Measurement of Heart Rate during Exercise:
1. Manually: using your second and third fingers and feeling your pulse at the radial or carotid arteries, starting with number Zero, count the number of beats you feel for 6 or 10 seconds.
2. Heart Rate Monitor: Transmitter strapped around your chest transmits heart rate to a receiver on your wrist.
3. Rate of Perceived Exertion: (RPE) subjectively rating how you feel based on a scale from 1-10 (or 3-20). 1 being easy, 10 being hard. If using 3-20
4. Talk Test: if you can still carry on a conversation with some heavy breathing between words, you are probably in the mid to upper range of your training heart rate zone.