Heart Rate Training Zones

Name_____
Per_____Date_____

Heart Rate Training Zone: http://www.brianmac.co.uk/hrm1.htm
HR Zone Calculator: http://www.runningforfitness.org/calc/heart-rate-calculators/hrzone

Training Zones:

Zone	Percentages	Benefits
Energy Efficient/Recovery	60-70%	• Fat burning • Breaks down lactic acid
Aerobic Zone **"Target Heart Rate Zone"**	70-80%	• Improve aerobic capacity • Strengthens cardiovascular system
Anaerobic Zone	80-90%	• Develops lactic acid system • Glycogen burning • Produces lactic acid • Improves the ability to postpone the effects of lactic acid
VO2 Max "Red Line Zone"	90-100%	• Only short periods of time • Trains your fast-twitch muscles fibers • Develops speed • Reserved for interval training.

Calculations:

1. Calculate <u>Resting Heart Rate</u> (rHR) (lie down and take pulse for 1 minute) = _____.

2. Calculate <u>Maximum Heart Rate</u> (mHR) (= 220 - your age) = _____.

3. Calculate <u>Working Heart Rate</u> (wHR) = mHR – rHR = _____.

4. Calculate Training Zones:
   60% → (wHR x 0.60) + rHR = _____
   70% → (wHR x 0.70) + rHR = _____
   80% → (wHR x 0.80) + rHR = _____
   90% → (wHR x 0.90) + rHR = _____
   100% → (wHR x 1.0) + rHR = _____

5. Record your **Recovery Zone Range (60-70%)**   _____.

6. Record your **Aerobic Zone Range (70-80%)**   _____.

7. Record your **Anaerobic Zone Range (80-90%)**   _____.

8. Record your **VO2 Max Range (**Red Line**) (90-100%)**   _____.

Next, do the following:

1. Check your ranges by visiting the Heart Rate Zone calculator website at the top of the page. If there is a discrepancy, then check your math and make necessary changes.

2. Record your HR Zone Ranges (all 4 of them) on a 3x5 card . You will be running with this card and checking your heart rate as you exercise. Make sure you have a pencil on lab day to record your heart rates.

3. On the reverse side of the 3 x 5 card, record a table similar to the one below.

Distance	HR Zone	My Pulse (Radial)	My HR (Watch)
200m	Recovery		
400m	Aerobic		
600m	Anaerobic		
800m	VO2 Max (Redline)		

Procedures:

First, wet the back of the HR monitor with water or gel. Place it firmly against your wrist. Press the buttons on your watch with your index finger and middle finger. HR will flash and then show you a number. This is your heart rate.

Using the heart rate monitor, run ½ of a lap (200m) at your Recovery Zone. During the next ½ lap (400m), run in your calculated Aerobic Zone. At the beginning of lap 2 (600m), run in your Anaerobic Zone for ½ lap. Finally, run in your Red Line Zone for the last ½ lap (800m).

When finished, clean the back of the heart rate monitor with a sani wipe. Then, give the HR monitor it to the next person in your group, and have them work in their training zones.

Analysis:

In a ½ page, explain your results. Do not write your analysis in a Q/A format, but rather write it in a paragraph form. **Answer the following in your writing:**

1. Which of the target heart zones did you reach in your running?
2. Did you reach your zones at the right interval, too early, too late or not at all?
3. What was your maximum heart rate during the lab exercise?
4. At what point did the running become uncomfortable where you couldn't talk or hold a conversation.
5. Were there variations between the readout on your watch and your radial pulse?
6. Where did those variations occur?