| $P$ | Cardio Zones Cheat Sheet |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 |
| Benefit (simplified) | Biggest and Best area to increase overall calorie burn | Feel better all the time, burn a ton of calories | Get faster in zone 2 or racing pace | mental fortitude, competition/athletic conditioning | "Strength" of heart |
| Benefit (short, complicated) <br> [all are good for heart/lung health] | Calorie burn, antisedentary | Improve fat oxidation, mitochondria health, insulin resistance, blood flow to and from stored fat, capillarization | Improved carb oxidation, lactate usage, movement efficiency | Lactate clearance/buffering, sustained speed | Contractile strength of left ventricle/stroke volume |
| Primary Fuel | Fat | Fat | Carbs (aerobic) | Carbs (anaerobic) | Carbs (anaerobic) |
| Secondary Fuel | Carbs (aerobic) | Carbs (aerobic) | Fat | Carbs (aerobic) | Carbs (aerobic) |
| Ways to tell which zone you're in |  |  |  |  |  |
| if you're bad at cardio, you probably have to aim lower than HR averages. If you're experienced, likely above - which is why i added the other ways to tell |  |  |  |  |  |
| \% of age predicted HR Max (220-your age) | Resting-50\% | 50-70\% | 70-80\% | 80-90\% | 90-100\% |
| RPE (How difficulty it feels 1 10) | 1-4 | 4-6 | 7-8 | 9 | 10 |
| Target HR (on average, assuming you're <40 years old | 60-110ish | 110-140ish | 140-160ish | 160+ | 180+ |
| Talk Testing | can talk normal, like at rest | can talk in full sentences comfortably, but someone on the other line could tell you're at least moving | 2-4 words before needing a breath | prob not | nah |
| Physical Discomfort | None | None, as you go on it typically feels easier not harder | As you go on it typically gets harder | Burning/acidic feeling in limbs. "legs before lungs" | Breathing/Heart rate at max. "lungs before legs" |
| How long can you spend here | Virtually limitless | 4+ hours | 30-120 min | 2-10 min | 30s-2 min |


| Programming |  |  |  |  |  |
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|  | Zone 1 | Zone 2 | Zone 3 | Zone 4 | Zone 5 |
| Common forms | Steps, N.E.A.T., laundry, cooking | Long continuous, comfortable cardio | Long continuous, not as comfortable cardio but can mentally push through for a long time | Long intervals with long rest <br> or short intervals with short rest | Max effort, max HR intervals from :30 to 2 min moderate to long rest |
| How much time per week, spent in each |  |  |  |  |  |
| Beginner | as much as you can | 95-100\% | Only if you want |  | 0-5\% |
| Intermediate | as much as you can | 90-95\% | Only if you want |  | 5-10\% |
| Advanced | as much as you can | 80\% | 10\% |  | 10\% |
| Pro (competitive) | as much as you can | 70-80\% | 10-20\% |  | 10\% |
| In Practice (just examples) |  |  |  |  |  |
| Beginner | Steps | 30-45 min, 2-3x per week | 15 min continuous at above zone 2 speed | 20 on 20 off for 4 min | $5 \times 30$ s on at max $H R, 2$ |
| Intermediate | Steps | 45-60 min, 2-4x per week | 30 min continuous at above zone 2 speed | $5 \times 1$ min on 1 min off | $5 \times 45$ s on, 2-3 min rest |
| Advanced | Steps | 60-90 min, 3-5x per week | 30-60 min continuous at above zone 2 speed | 2-5 reps of 2-3 min on, equal time rest | 2-4 reps of 1 min on at max HR, 2-3 min rest |
| Pro (competitive) | Steps | 90-120 min, 3-5x per week | 60+ min continuous at above zone 2 speed | 2-5 reps of 3-10 min on, equal time rest | 2-4 reps of 1-2 min on at max HR, 2-5 min rest |

