



FIT POINTS: THE MAGIC SAUCE IN THE HEART ZONES SYSTEM

Measure Your Workout and Train Using FIT POINTS and FIT STARS

© Heart Zones, Inc.

FIT POINTS are a simple way to quantify how hard and how long you are working out. For the first time, you can now measure the quantity of your effort versus the volume (distance or time) of your workout. Why is this important?

FIT POINTS are effort points, physical stress points, or training load points - it is all the same. Tracking your points is one of the best ways to measure exercise. Are you working out hard enough, too hard? For example, runners like to quantify their training volume which is how far they run in miles/meters or how many minutes they run. Cyclist like to quantify their training by hours or miles riding the bike.

More Behind the Science of Training

FIT POINTS, however, are different than measuring training only by distance or time, which doesn't include the one and key metric - *intensity*. FIT POINTS quantify the amount of exercise *plus* your exercise intensity during a workout session which is the holy grail of fitness workouts using intensity or in Heart Zones Training, your heart rate zone number.

Training load points or FIT POINTS are measured using a simple arithmetic formula that is easy to calculate but even easier when calculated using our software and apps: the Heart Zones PE app for groups (fee app) and the Heart Zones Training iPhone app for individuals (free app). Both Apple iOS apps do all the calculations for you behind the scenes and then displays the results on your iPhone or if you train with a group, the Heart Zones PE Big Board.

THE FIT POINTS FORMULA

If you are familiar with the exercise principle called the FIT Principle then FIT POINTS are the sum of the three letters in the FIT principle. The word FIT stands for frequency (F), intensity (I), and time (T). Training load is the sum of the frequency of workouts, multiplied by the intensity of the workout and time. When these three measurements are multiplied together they equal FIT POINTS.

$$\text{FIT POINTS} = \text{Frequency (F)} \times \text{Intensity (I)} \times \text{Time (T)}$$

If you multiply these three components of an exercise workout, you have a measure of total workload also called "exercise dosage or prescription."

HEART ZONES TRAINING AND FIT POINTS¹

Each heart zone has a different number associated with it which represents the amount of weight, load, stress for each zone. As exercise intensity gets more strenuous, the weight or the numerical value for a zone increases to match the intensity of that zone. If you follow the three zone ZONING program, then the easy Blue zone is worth 1 point, the higher intensity moderate Yellow zone is worth 3 points and the hot, hard, high Red zone is worth 5 training load or FIT POINTS. If you use the five zone Threshold or Maximum heart rate system, then the following chart shows the numerical value of each.

Zone Number	Zone Color and Name	Points
Zone 5	Vigorous Red Zone	5.0-5.9
Zone 4	Hard Orange Zone	4.0-4.9
Zone 3	Moderate Yellow Zone	3.0-3.9
Zone 2	Green Zone	2.0-2.9
Zone 1	Easy Blue Zone	1.0-1.9

Calculating FIT Points

Here's an example of how to calculate FIT POINTS. You're doing one workout activity a day (frequency) and the level of intensity for that workout is the bottom of the Yellow Zone 3 (worth 3 points per minute) and the total exercise time is 30 minutes. The simple calculation is as follows:

$$1 \times 3 \times 30 = 90 \text{ FIT Points}$$

Frequency (F) x Intensity (I) or bottom of Yellow Zone x Minutes (T) = Training Load Points

¹ Points or the quantification of training load is so important that we patented it. Heart Zones, Inc. was awarded the only US federal patent ever awarded to a cardiovascular training system - the Heart Zones Training.

ZONES POINTS

Easy. Intuitive. Yet, there's one more thing. Zones are a range of heart beats and vary in size. Since a single zone could be as many as 10-30 heartbeats in range, the top of a zone should be awarded more load points than the bottom of that zone. That's because the range of heart beats inside one heart zone varies between individuals. It depends on the individual and on their threshold or maximum heart rate numbers. To accommodate for the fact that the top of the Yellow Zone 3 is much more strenuous than the bottom or the middle zone of that golden Zone 3, the system "fractionalizes" the zone to give you the proper point count. Another way is to say it, is the middle of Zone 3 is worth 3.5 points and the very top of Zone 3 is worth 3.9 points in the calculation. This fractionalization makes the calculation fair.



Until the advent of the heart rate monitor or the step tracker, it was impossible to objectively measure exercise stress - training load. The missing piece in the FIT POINTS formula, which is a key component in the assessment of exercise workload, is how to assess exercise intensity or how hard is your effort (zones). This is precisely what a heart rate monitor and a step tracking sensor can provide - a measurement of exercise intensity using the zone training method. Only now, with the use of these new sensors can you properly measure training load - the amount of exercise that we get from our workout or FIT Points.

HOW MANY POINTS ARE RECOMMENDED FOR A WORKOUT?

The golden zone, if you are like many time crunched workout enthusiast, is the moderate Yellow zone. Zone 3 provides you with enormous aerobic benefits like burning lots of calories, especially calories from fat while increasing your endurance. In other words, the Yellow zone of moderate intensity activity might be the biggest bang for your investment of time.

30 Minutes Equals 100 Fit Points

Why does Heart Zones recommend achieving 100 or more FIT POINTS in a 30-minute workout? It's because all workouts should consist of a warm up time at the beginning, a cool down time at the end plus a "main set" in Heart Zones 3 through 5 "Time in Zone" which burns lots of calories and

30 Minutes Equals 100 Points				
Blue Zone 1	added to Yellow Zone 3	added to Red Zone	=	Total FIT POINTS
(5 min x 1.4)	+	(20 min x 3.4)	+	(5 min x 5.1) = Total FIT POINTS
7 points	+	68 points	+	25.5 points = 100.5 FIT POINTS

improves the participant's aerobic capacity (endurance).

45 Minutes Equals 150 Points One Interval Basketball Game					
Mid-Blue Zone 1	(+)	mid-Yellow Zone 3	(+)	Red Zone 5	= ___ FIT POINTS
15 min x 1.5	+	15 min x 3.5	+	15 min x 5.0	= ___ FIT POINTS
22.5 points	+	52.5 points	+	75 points	= 150 FIT POINTS

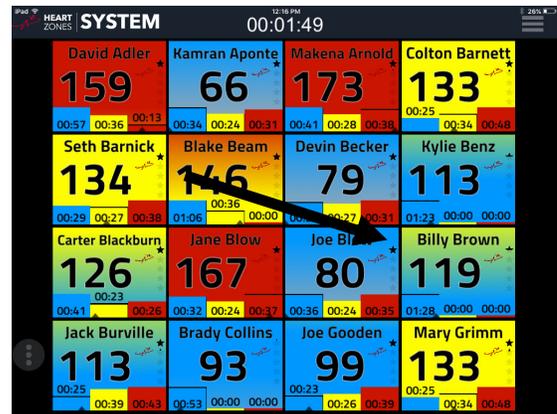
45 Minutes Equals 150 Points

The more time in your workout at the higher zones the more FIT POINTS you earn. And, if it is your goal to provide the same benefits just mentioned - weight loss, endurance capacity and no-pain enjoyment of the workout - then by extending time by 15 minutes in the Yellow zone and then adding more Zone 5, the Red Zone, you can earn 150 FIT POINTS.

HOW MANY STARS ARE RECOMMENDED?

The participant's goal is to achieve 5 stars for the workout sessions. A participant can earn stars by spending most of their exercise time in Zone 3 and higher. FIT STARS are only a part of the Heart Zones PE group application. Hence, as the instructor, it is important that you take the following steps to enable FIT STARS in the Application:

- Tap on the application's menu
- Tap on Current Class
- Set the "Planned Class Length (Minutes) for the length of time for your total class



The STAR calculations are then automatically set for the class based on the FIT Point calculator. For example, if your class is 15 minutes in time, the calculator distributes the required number of FIT Points (50 Fit Point) over the length of time for the class (15 minutes) in order to earn 5 stars in 15 minutes.

Fit Points are shown as "Star" rewards on the first tile on the Big Board and as FIT POINTS in absolute numbers on the flipped tile. Participant goal is 5 stars for most workouts.

SUMMARY

FIT POINTS and FIT STARS are the magic sauce within the Heart Zones System and no other software uses them. Unique to Heart Zones Training, FIT POINTS and STARS are one of the most important heart rate derived numbers you can follow, challenge, and progressively increase as your fitness improves. Log your FIT POINTS. Plan your training using your FIT POINTS. Make FIT POINTS part of a challenge, a contest in your school or club or as an individual. And remember, the more FIT POINTS you earn, the fitter and healthier you may be and may become. FIT POINTS and FIT STARS make you a star.



Heart Zones, Inc. The Fitness Technology, Training, and Education Company for Smart Health & Fitness
2636 Fulton Avenue Suite 100 | Sacramento, California 95821 | USA | 1+916-481-7283 | www.heartzones.com