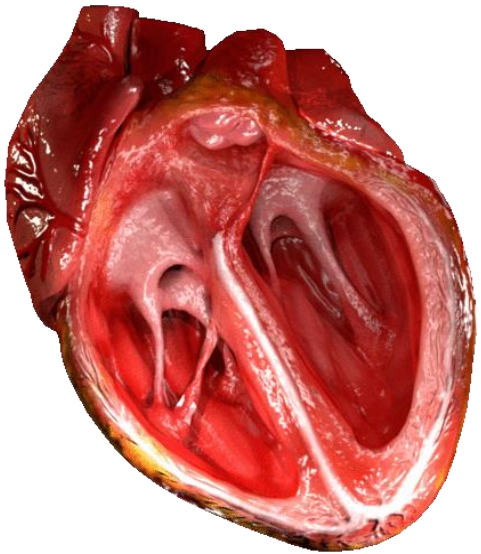
A guide to Heart Zone Training
PTMS Physical Education



Why We Use Heart Rate Monitors

- It engages and motivates students in their physical education activities
- It achieves fitness outcomes based on data and not observation
- Students get instant, personalized, information during physical education class
- After each class, a report will be generated for parents/student (example report is provided on last slide with guide how to read it)
- It allows teachers to set measurable student performance goals
- It is a way to transform the PE program using the best technology on the market today
- Heart-rate training gives you objective guidance on whether you're on the right track, or pushing too hard or taking it too easy (Student Safety)

Why Heart Rate Training?

Heart-rate training entails keeping your heart rate - the number of time your heart beats in a minute - within a zone range during a workout. The 5 different heart rate zones are expressed as a percentage of your maximum heart rate, which is the greatest number of times your heart can beat in a minute.

5 Heart Rate Zones Chart On Next Slide

ZONE 5 Hard Zone *90-100% of MHR* *Feels like: Very exhausting for breathing and muscles*	Benefits: Helps fit athletes develop speed ● 15 calories per minute ● 6-10 FIT points per minute
ZONE 4 High Moderate Zone *80-90% of MHR* *Feels like: Muscular fatigue and heavy breathing*	Benefits: Increases maximum performance capacity for shorter sessions ● 10-14 calories per minute ● 4 FIT points per minute
ZONE 3 Low Moderate Zone *70-80% of MHR* *Feels like: Light muscular fatigue, easy breathing, moderate sweating*	Benefits: Improves aerobic fitness ● 7-9 calories per minute ● 3 FIT points per minute
ZONE 2 High Easy Zone *60-70% of MHR* *Feels like: Comfortable, easy breathing, low muscle load, light sweating*	Benefics: Improves basic endurance and fat burning ● 4-6 calories per minute ● 2 FIT points per minute
ZONE 1 Low Easy Zone *50-60% of MHR* *Feel like: Very easy for muscles and breathing*	Benefits: Helps with recovery ● 1-3 calories per minute ● 1 FIT point per minute

Heart rate training benefits everyone, from the beginning exerciser trying to lose weight, to individuals trying to improve their cardiovascular fitness, to the highly conditioned athlete preparing for the next competition.

Key Heart Rate Terms and Information

What is your maximum heart rate?

The highest # of beats per minute that you can produce without genetic limitations.

What is your resting heart rate?

The measurement of your heart rate while resting. For children 10 years and older and adults the average resting heart is between 60-100. For well conditioned athletes their resting heart rate can range from 40-60 beats per minute

What can you learn from your resting heart rate?

Your resting heart rate is a real time snapshot of your heart muscle is functioning. Lower resting heart rates generally indicate better health. The best way to test if your cardio level is improving along with heart function is to monitor the resting heart rate monthly.

Things that affect your resting heart rate

- Stimulants (caffeine, tobacco, alcohol, drugs, medications)
- Being Overweight (your heart has to work overtime to deliver essential nutrients)
- Temperature and hydration level
- Becoming more aerobically fit will strengthen your heart increasing its efficiency and decreasing your resting heart rate
- Anxiety/stress elevate the heart

Recovery Heart Rate

Your Recovery Heart Rate is the speed at which your heart rate returns to normal after exercise. This number is probably the most important heart rate data because it will give a good idea on the current fitness level. We do a 1-minute absolute test and a 2 minute percentage test. The next slide will give you your scoring guide we will use from heart zones.

- Your heart will recover quicker as you become fitter
- Generally you want your heart rate to drop 12 beats per minute if your standing and 22 if you are sitting
- You should monitor your one-minute and two-minute recovery heart rate monthly to gauge whether your fitness level is improving. If it's not, then you may need to alter your workouts so they are more demanding.

Absolute Recovery Heart Rate

Difference between the peak heart rate minus 1 minute absolute heart rate number. When we do this test it will show up on your heart rate report.

>52 beats per minute	Extremely Rapid
42-51 beats per minute	Very Rapid
32-42 beats per minute	Rapid
22-31 beats per minute	Average
12-21 beats per minute	Slow
<12 beats per minute	Extremely slow

Rate of Recovery Heart Rate Percentage

The Recovery heart rate number divided by the Peak heart rate number. This is a 2-minute test.

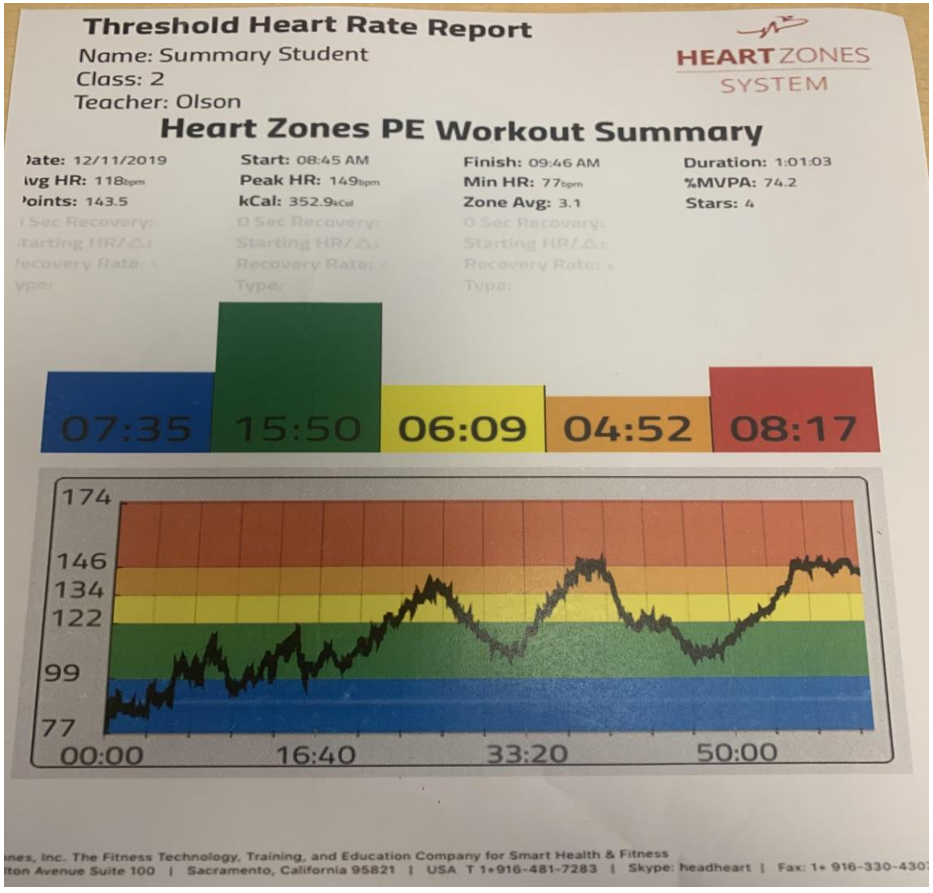
>30%	**Extremely Rapid**
>25%	**Very Rapid**
>20%	**Average**
>15%	**Slow**
>10%	**Very Slow**
<=10% beats per minute	**Extremely slow**

How are FIT points earned?

Fit points are earned based on the amount of time that students spend in the different heart rate zones. Each zone scores a different amount of points based on the intensity of the zone. The harder the intensity the more points you earn. Fit point zone values are on the 5 heart rate zones sheet. The formula for FIT Point is:

Frequency x **Intensity** (Zone number) x **Time** = the sum of this equation is **FIT Points**.

Understanding your heart rate report



Bar Graph = Reflects the amount of time in each zone during session.

Avg HR = The average rate of heart beats per minute during the session.

Points = How many FIT points were earned during the workout. The FIT stars reflect if you hit the class goal for the day.

Peak HR = The highest heart rate reached during workout.

Min HR = The lowest heart rate during the session.

kCal = Calories burned during the session.

Zone Avg = This score gives you the average of what zones you were in during workout.

%MVPA: The percentage of time Moderate to Vigorous Physical Activity during session.

Heart Rate Recovery = Is the score for that particular HR Test.