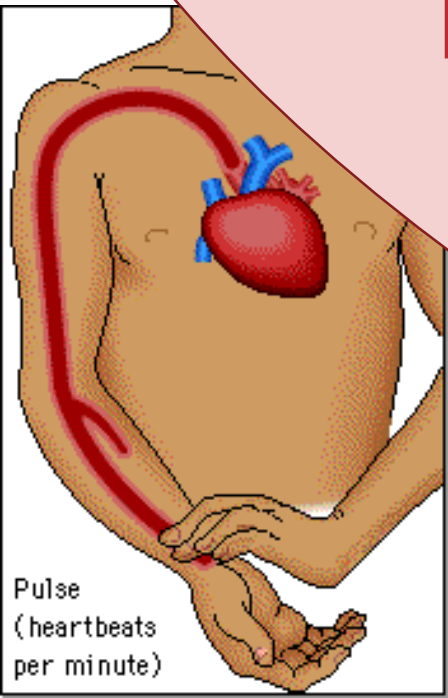


Heart Rate Exercise & Exercising Heart Rate



Pulse
(heartbeats
per minute)

NEW TOWN SECONDARY SCHOOL
PHYSICAL HEALTH & FITNESS
SECONDARY 2
LESSON 2



What is a HEART RATE?

Heart Rate is the...

- Number of times your heart **beats per minute** (bpm)
- Normally between **60** bpm to **100** bpm

What is a Resting Heart Rate?



Resting Heart Rate is the...

- Heart pumping the **lowest** amount of blood you need when you're not exercising



Does a heart rate lower than 60 necessarily signal a medical problem?

- YES / NO?
- Why do you say so?

NO!!!



A lower heart rate is common for people who get a lot of physical activity or are very athletic. Their heart muscles may be larger & stronger, and doesn't need to work as hard to maintain a steady beat.



**WHAT ARE 2 WAYS TO MEASURE
YOUR
HEART RATE?**

1. RADIAL PULSE [6 STEPS]

MEASURING YOUR HEART RATE by... **RADIAL PULSE**

Step 1: Preparation

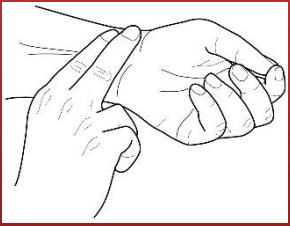
- ✓ Sit down & relax
- ✓ Face inside of your wrist upwards



Step 2: Position Fingers

- ✓ Index & middle fingers of non-resting hand together





MEASURING YOUR HEART RATE by... **RADIAL PULSE**

Step 3: Locate ligament & hollow space next to ligament

- ✓ Form a fist & bend his/her wrist. You should see a ligament elevated underneath the skin
- ✓ Place fingers next to ligament on the same side as thumb
 - ✓ You should feel a hollow, soft space



Step 4: Locate the radial artery

- ✓ Press your fingers into the hollow space to feel the radial artery beneath the skin
- ✓ Difficult to feel? Slide your fingers up and along the ligament until you reach the bottom of the wrist bones!

MEASURING YOUR HEART RATE by... **RADIAL PULSE**

Step 5: Count Radial Pulse

- ✓ Use a stopwatch / phone / watch
- ✓ Count the number of bops you feel.
- ✓ At the 10 seconds mark, stop counting.



Step 6: Convert to Beats per Minute

- ✓ Multiply the number you counted by 6 to convert it to Beats per MINUTE.

beats per 10 seconds

X 6

beats per 60 seconds (heart rate)



**WHAT ARE 2 WAYS TO MEASURE
YOUR
HEART RATE?**

1. CAROTID PULSE [VIDEO]

MY PERSONAL READING:

My Resting heart rate (RHR): _____???_____ beats per minute (bpm)

My estimated Maximum Heart Rate (MHR) = 220 – your current age

= _____???_____bpm

HEART RATE INTENSITY TABLE

	TARGET ZONE HEART RATE	EXAMPLE DURATION	
Maximize Performance	VERY HARD 90-100%	LESS THAN 5 MIN	171-190 BPM BENEFITS: develops maximum performance and speed FEELS LIKE: very exhausting for breathing and muscles RECOMMENDED FOR: fit persons and for athletic training
	HARD 80-90%	2-10 MIN	152-171 BPM BENEFITS: increases maximum performance capacity FEELS LIKE: muscular fatigue and heavy breathing RECOMMENDED FOR: everybody for shorter exercises
Improve Fitness	MODERATE 70-80%	10-40 MIN	133-152 BPM BENEFITS: improves aerobic fitness FEELS LIKE: light muscular strain, easy breathing, moderate sweating RECOMMENDED FOR: everybody for moderately long exercises
Lose Weight	LIGHT 60-70%	40-80 MIN	114-133 BPM BENEFITS: improves basic endurance and fat burning FEELS LIKE: comfortable, easy breathing, low muscle load, light sweating RECOMMENDED FOR: everybody for longer and frequently repeated shorter exercises
	VERY LIGHT 50-60%	20-40 MIN	104-114 BPM BENEFITS: improves overall health and helps recovery FEELS LIKE: very easy for breathing and muscles RECOMMENDED FOR: weight management and active recovery

In the next few activities... You will...

- ✓ Go through a series of LOW – MODERATE – HIGH intensity workout
- ✓ Calculate your Heart Rate (Carotid / Radial Pulse)
- ✓ To know at what intensity you are at...
Calculate the percentage of how hard your heart is working; that is; your Exercising heart rate, out of your maximum heart rate using the formula

$$P = \frac{\text{Exercising Heart Rate (EHR)}}{\text{Maximum Heart Rate (MHR)}} \times 100\%$$

**your MHR is 220 – your current age*

** Your EHR is your heart rate right after exercising (based on 60 sec)*

Activity 1 & 2: LOW Intensity

FILL IN THE TABLE

- ✓ Calculate your Resting heart rate when you are **SEATED**.
- ✓ Calculate your Resting heart rate when you are **STANDING**.

No	PHYSICAL ACTIVITY	INTENSITY	Exercising Heart Rate EHR (bpm)	P = $\frac{\text{Exercising Heart Rate (EHR)}}{\text{Maximum Heart Rate (MHR)}} \times 100\%$
1	Sitting – Relaxed	LOW	bpm	%
2	Standing - Relaxed	LOW	bpm	%

Activity 3: LOW Intensity

- ✓ Perform a **brisk walk** around the Basketball court.
- ✓ Brisk walk 2 times the entire length.
- ✓ Calculate your Exercising Heart Rate (EHR).

Activity 4: MODERATE Intensity

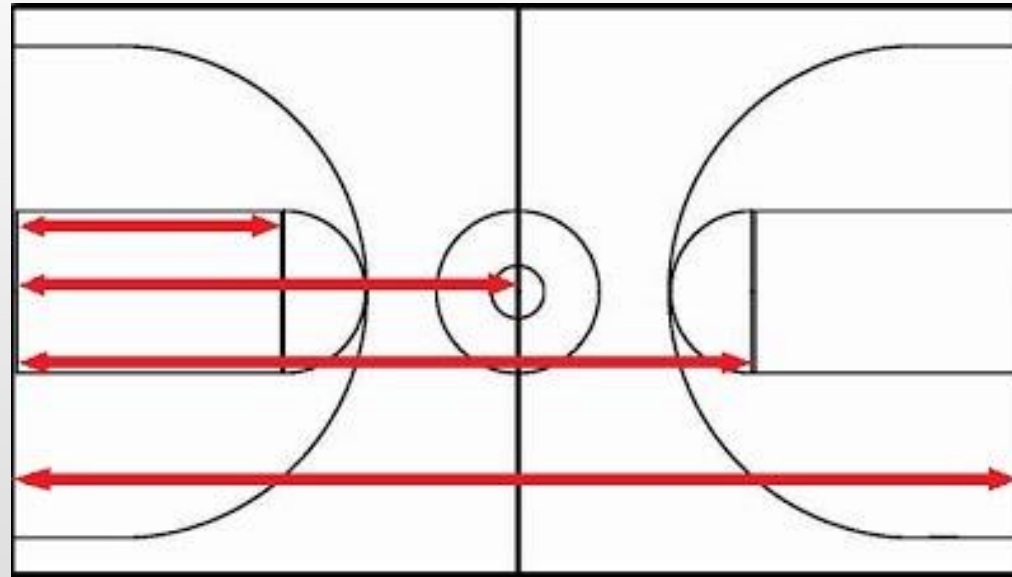
- ✓ Jog 1 round the field at a consistent pace.
- ✓ Do not walk, Do not sprint.
- ✓ Calculate your Exercising Heart Rate (EHR).

Activity 5: HIGH Intensity

- ✓ **25 Jumping Jacks**
- ✓ **Calculate your Exercising Heart Rate (EHR).**

Activity 6: HIGH Intensity

✓ Suicide Runs! (1 set)



✓ Calculate your Exercising Heart Rate (EHR).

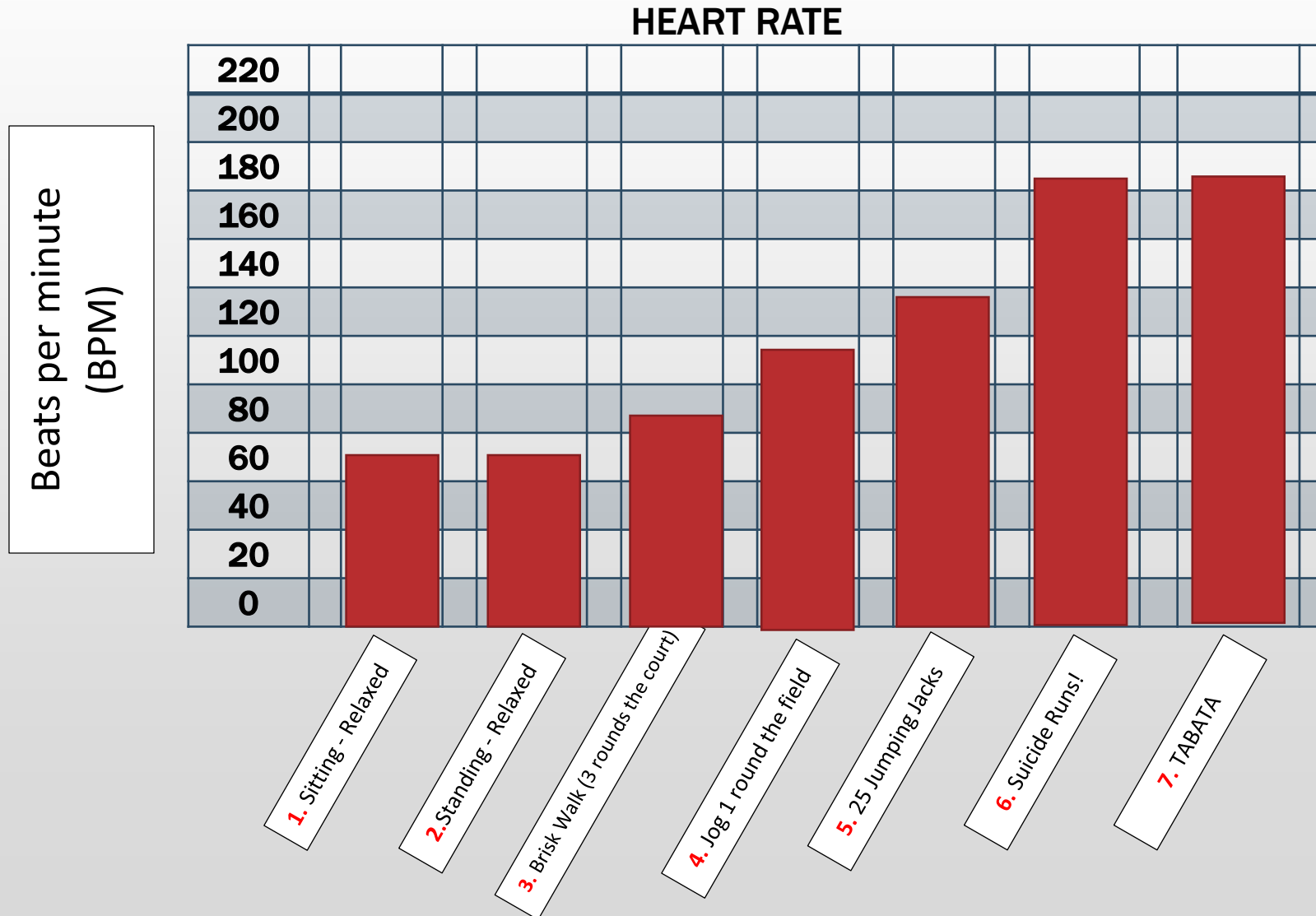
Activity 7: HIGHER Intensity

Follow the TABATA video:

- ✓ **2:20 – 3:00 minutes: Explain what is TABATA**
- ✓ **3:00 – 7:00 minutes: Cardio TABATA exercise [SET 1]**
- ✓ **Calculate your EHR**
- ✓ **7:00 – 8:00 minutes: Rest**
- ✓ **8:00 – 12:00 minutes: TABATA exercise [SET 2]**
- ✓ **Calculate your EHR**



CREATE MY GRAPH using MY RESULTS



HEART RATE INTENSITY TABLE

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**THANK YOU!
ANY QUESTIONS ?**