Introduction to Scatter plot activity:

You recently went to a doctor’s visit and learned how your resting heart rate is used to make a judgement about the health of your heart. You were so interested in what you learned that you decided to explore the topic with your fellow classmates. So, you work with two other classmates to determine the effect of everyday activities on your heart rate.

**HEART RATE LAB**

Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Period\_\_\_\_\_\_\_

Directions: Answer the following questions using the charts and the activities provided in class.

1. use the video link provided to help you answer the question:

<https://www.youtube.com/watch?v=oAjnlDZH9H8> ) What is your resting heart rate?

2. What is your target heart rate zone according to Chart #2?\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_bpm

3. Engage in “Moderate activity” by walking briskly down the hallway for 2 minutes. Take your heart rate and record the results.

4. REST! Have a seat and restore your resting heart rate.

5. Engage in “Vigorous activity”- walk at a steady pace, down 1 flight of stair and up for 3 times and record your heart rate.

6. According to the charts and data you have collected, describe your current fitness level. Are you in fair cardio shape, good cardio shape, excellent cardio shape? Do you need improvement? How did you arrive at this conclusion?

7. What is the fitness level of your group? You will use a Scatter Plot to compare the fitness level of your group to yourself.

8. After creating a scatter plot:

* Extrapolate: Find a line of best fit
* Did you see a trend?
* Is there a correlation?
* If a correlation exists, is it strong, weak, positive, or negative? Explain.

This table is an example of how you can collect and record your data.

<https://learnzillion.com/lessons/1188-interpret-a-scatter-plot-by-identifying-clusters-and-outliers>

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Group Member name | Resting heart rate (sitting position) | Walking to the hallway marker | Walking down 1 flight of stairs 3x’s | After one minute resting position. | weight | height |
| 2nd block class data | | | | |  |  |
| Jada Lee | 92 | 104 | 168 | 100 | 195.5 | 5’8 |
| Donald | 64 bpm | 128 | 148 | 124 | 126 | 5’5 |
| Jada A | 92 | 56 | 88 | 48 | 105 | 4’1 |
| Iyisha | 84 | 112 | 128 | 100 | 158 | 5’5 |
| Diamon | 84 | 104 | 160 | 80 | 246 | 5’2 |
| Alexis | 84 | 92 | 148 | 108 | 119 | 5’6 |
| Alisa | 72 | 60 | 92 | 52 | 148.2 | 5’2 |
| Amari | 72 | 88 | 88 | 40 | 147 | 5’7 |
| Kamani | 108 | 132 | 146 | 96 | 192.3 | 6 |
| Latray | 92 | 40 | 92 | 36 | 117 | 5’4 |
| Jesse | 102 | 44 | 60 | 44 | 100 | 5’2 |
| Kiyon | 64 | 68 | 132 | 88 |  |  |
| DeAndre | 68 | 36 | 48 | 40 | 180.4 | 5’4 |
| Daveon | 96 | 130 | 146 | 84 |  |  |
| kenya | 88 | 96 | 200 | 92 | 115 | 5’5 |
| 3rd hour block data | | | | |  |  |
|  | Resting HR | Mod Actv. HR | Vigorous | weight | height | Final RHR |
| DerRonn | 84 bpm | 100 |  |  |  |  |
| Keara | 76 | 144 | 144 | 190 | 5’3 | 72 |
| Darquisha | 68 | 140 | 104 | 154 | 5’3 | 80 |
| Semaj | 100 | 148 | 150 | 215 | 5’6 | 71 |
| Kelvin | 80 | 200 | 196 | 158 | 6 | 88 |
| Meshell | 82 | 80 |  |  |  |  |
| Savannah | 86 | 122 | 188 | 150 | 5’3 | 2323 |
| Brandon | 70 | 64 | 72 | 120 | 5’6 | 80 |
| Tyra | 104 | 136 | 160 | 152 | 5’9 | 164 |
| James | 86 | 168 | 160 | 211 | 5’7 | 92 |
| Devonte | 86 | 116 | 136 | 147 | 5’7 | 148 |
| Daquan | 76 | 100 | 100 | 260 | 5’9 | 84 |
| Vontez | 152 | 100 | 100 | 168 | 5’5 | 76 |
| Raynard | 69 | 92 | 316 | 133 | 5’7 | 84 |
| LarryB | 78 | 100 | 212 | 133 | 5’3 | 81 |
| Taniah | 66 | 180 | 180 | 171 | 5’6 | 72 |
| Tori | 76 | 164 | 164 | 149 | 5’5 | 132 |
| Larry S | 76 | 108 | 128 | 108 | 5’5 | 76 |
| Thonesha | 74 | 144 |  |  |  |  |
| Kierra | 62 | 144 | 76 | 164 | 5’9 | 72 |
| Jalen | 76 | 138 | 138 | 93 | 4’8 | 728 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Student Name | Resting Heart Rate | Moderate activity | Vigorous activity | weight | height |
| Trachon | 100 | 92 | 160 | 122 | 5’5 |
| Doriana | 140 | 84 | 164 | 164.5 | 5’4 |
| LaNina | 108 | 96 | 188 | 110 | 5’7 |
| Alexia | 116 | 220 | 160 | 132 | 5’5 |
| Leah | 72 | 136 | 148 | 178.1 | 5’6 |
| Cher | 88 | 152 | 172 | 199 | 5’3 |
| Jerrita | 48 | 84 | 92 | 150 | 5’2 |
| Shanyra | 80 | 96 | 104 | 167 | 5’4 |
| Martisha | 100 | 124 | 128 |  | 5’2 |
| Angel | 60 | 77 | 144 | 139 |  |
| Josiah | 72 |  | 136 | 100 | 5’5 |
| JayquanAla | 80 | 112 |  | 262 | 5’11 |
| Jeanette | 153 | 152 | 156 | 136 | 5’5 |
| NaKayla | 108 | 160 | 200 | 131 | 5’6 |
| Dasean | 92 | 164 | 147 | 118 | 5’8 |
| Brianna | 84 | 160 | 172 | 122.2 | 5’4 |
| DaCory | 120 | 220 | 212 | 134 | 6’1 |
| Sunshine | 88 | 184 | 180 | 190 | 5’3 |
| Devonte | 84 | 144 | 176 | 107 | 5’7 |
| Armontay | 104 | 216 | 164 | 108.3 | 5’3 |
| Steven | 76 | 200 | 96 | 148.2 | 5’4 |
| Nancy | 100 | 140 | 220 | 106 | 4’11 |
| Britnee | 52 | 120 | 200 | 168 | 5’6 |
| Alasia | 32 | 160 | 176 | 108 | 5’3 |
|  |  |  |  |  |  |
| Fourth hour data | | | | | |
| Name | RHR | Hallway walk  MOderate | Stair well  Vigorous | weight | Height |
| Regina | 56 | 300 | 322 | 169 | 5’5 |
| Danielle | 84 | 284 | 272 |  | 5’8 |
| Tajanae | 80 | 280 | 252 | 130 | 5’7 |
| Diallo | 60 | 240 | 216 | 190 | 6’ |
| Kierra | 92 | 232 | 196 | 118 | 5’2 |
| Summer | 64 | 100 | 84 | 161 | 4’8 |
| Scemja | 52 | 100 | 148 | 109 | 3’8 |
| Janelle | 60 | 100 | 108 | 116.2 | 4’4 |
| Kalyn | 94 | 112 | 97 | 127 | 4’5 |
| Louie | 168 | 72 | 18 | 256 | 6’1 |
| Shemar | 128 | 80 | 20 | 183 | 5’8 |
| Corey | 136 | 84 | 21 | 149 | 5’9 |
| Kristopher | 144 | 92 | 23 | 166 | 5’7 |
| Joseph | 192 | 148 | 45 | 140 | 5’8 |
| Jerel | 11 | 84 | 152 | 122 | 5’6 |
| Cameron | 112 | 132 | 41 | 114 | 5’3 |
| Desmond | 56 | 100 | 38 | 185 | 5’8 |
| Janae | 76 | 80 | 64 | 169 | 5’5 |
| Jewel | 128 | 188 | 84 | 91 | 4’8 |
| Imani | 128 | 149 | 116 | 190 | 5’5 |
| Larresha | 80 | 140 | 64 | 114 | 5’2 |