**Heart Rate Activity**

1. As a group, choose five (5) activities at different levels, designed to show various heart rates.
   1. *The only variable for each test should be the activity itself. Try to keep everything else constant: time, distance, location, time in between each activity, number of repetitions, etc.*
   2. *Be detailed in how the activity will be performed.*
   3. *Duration of each activity should not be too long.*
2. Copy this table into your lab book – use your activities for the column headings.

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| --- | --- | --- | --- | --- | --- | --- |
|  | **Heart Rates – beats/minute (bpm)** | | | | | |
|  | **Pre-Activity BPM** | **Activity #1 BPM** | **Activity #2 BPM** | **Activity #3 BPM** | **Activity #4 BPM** | **Activity #5 BPM** |
| **Participants** |  |  |  |  |  |  |
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| **Average BPM**  *(bpm total ÷ # of participants)* |  |  |  |  |  |  |

1. All group members should participate in the activity (if possible).
2. After each activity, record each participant’s heart rate in the appropriate column.
   1. *Use the carotid pulse*
   2. *Count pulse beats for 6 seconds*
   3. *Add a zero to your count for the bpm*
3. Allow a cool-down period of 2-3 minutes between each activity.
4. When finished:
   1. *Calculate the average heart rate for each activity – record it in the appropriate column.*
   2. *Use your data to explain what you learned about heart rates – how and why they adjust in order to keep your body in homeostasis.*
   3. *What other organ systems did you notice that also worked to keep your body in homeostasis, as you engaged in each activity? How did these other organ systems do this?*
   4. *How is this Heart Rate Activity an example of feedback mechanisms?*