Heart Rate Lab

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Problem**: How does the heart rate change based on body activity?

**Hypothesis**: (Make an educated guess.) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Materials**: Clock/watch with a second hand

**Pre-Lab Procedures**

1. Sit still for 60 seconds

2. Find your pulse either on your neck or your wrist. ( <https://youtu.be/bB7j0lvso7Q> )

3. Time yourself for 15 seconds, count the number of beats and multiply x 4 to get your

heart rate. (60 secs)

4. Record your data

5. Repeat 2 more times.

6. Stand up for 60 seconds, repeat steps 2-5.

7. Using a data table, calculate your averages. This is your baseline heart rate for 60 seconds.

**Lab Procedures:**

1. Lay down on the floor for 60 seconds, THEN take your pulse WHILE STILL laying down for 15 seconds. Record data.

2. Stand up/sit down continuously for 60 seconds. Record pulse for 15 seconds.

3. Walk casually around the room for 60 seconds. Record pulse for 15 seconds.

4. Walk briskly for 60 sec. Record pulse for 15 seconds.

5. Jog in place for 60 sec. Record pulse for 15 seconds.

6. Jumping Jacks for 60 sec. Record pulse for 15 seconds.

7. Dancing - "We got the beat" for 60 sec. Record pulse for 15 seconds. Calculate pulse for 60 seconds (15x4) (open the link - <https://youtu.be/CRwR33FLmrI>

**Data and Observations**: Use the data table attached (see below)

**Results/Analysis**: (What does your data show?)

**Conclusion**: (Write a summary of your findings.)

**Data Table**

**Pre- Lab Data**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Base Line** | **Pulse 1 (15 sec)** | **Pulse 2 (15 Sec)** | **Pulse 3 (15 Sec)** | **Average (15 sec)** | **60 sec Pulse (15x4)** |
| **Sitting/**  **At rest** |  |  |  |  |  |
| **Standing/**  **At rest** |  |  |  |  |  |
|  |  |  |  | **Average Both** | **\_\_\_\_\_\_\_\_\_\_\_\_\_** |

**Lab Data**

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Pulse**  **15 seconds** | **Pulse 60**  **seconds** | **Activity** |
| **Baseline** | **Average** |  | **Baseline** |
| Lay down on the floor for 60 seconds, THEN  take your pulse WHILE STILL laying down  for 15 seconds. |  |  | **Lay down** |
| Stand up/sit down continuously for 60 secs. |  |  | **Stand/Sit** |
| Walk casually around the room for 60 secs. |  |  | **Casual Walk** |
| Walk briskly for 60 sec. |  |  | **Brisk Walk** |
| Jog in place for 60 sec. |  |  | **Jog** |
| Jumping Jacks for 60 sec. |  |  | **Jumping Jacks** |
| Dancing - "We got the beat" for 60 sec. |  |  | **Dancing** |