

## Lab Report Template

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| Name<br>: | Cheyenne and Rilyn | Date: |  |
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### 4.3.4 Raising the Beat

#### Problem

What will be the increased rate for the respiration rate and pulse after performing the activity of walking up and down (at a strolling pace) the ramp on the inside hallway.

#### Hypothesis

If we walk up and down the inside ramp 20 times, then our respiration rate and pulse rate will increase by 10%.

#### Materials

- Ramp
- Stethoscope
- Watch/timer

#### Procedures

1. Get a partner and read over the problem/hypothesis. After getting a partner create a plan and divide procedures equally. 1 person will walk. 1 person will record.
2. Perform the task of recording the constant/control for the experiment. The constant/control should be recorded at resting position before beginning any activity.
  - a. To record the respiration rate:
    - i. 1 person sit down to be tested
    - ii. 1 person test
    - iii. the tester will count the number of breaths that the other teammate breathes in 1 minute
    - iv. the teammate that is breathing will watch a timer to keep track of time
    - v. alternate jobs and repeat steps i-iv
  - b. to record the pulse:
    - i. 1 person sit down to be tested
    - ii. 1 person test
    - iii. the tester will place their index finger and middle finger on the other teammate's wrist and find the pulse
    - iv. once the pulse is found count the beats for 15 seconds and multiply answer by 4
    - v. alternate jobs and repeat steps i-v
3. Record your findings on the table.
4. Begin the travel to the ramp area and begin your travel up the ramp.
5. On begin, you will walk at a strolling pace.
6. After you have walked up and down the ramp immediately begin the recording process of the respiration rate and the pulse rate of the person who performed the activity.
7. Record your findings on the table.

## Data Collection

| Name:    | Respiration Rate | End | Heart Rate/Pulse | End |
|----------|------------------|-----|------------------|-----|
| Cheyenne | 12               | 16  | 68               | 104 |
| Rylyn    | 14               | 28  | 72               | 84  |

## Analysis of Results

According to the results we have concluded that the respiration rates and heart rates have increased on both participants. According to the results, the rates were higher than 10%.

## Conclusions

Based on the results, our group was able to determine that by strolling up and down an inclined plane such as the ramp that was used in the experiment the respiration rates and pulse rates of participants increased. The predictions that were made in the beginning were slightly off, being that our rates increased to a margin greater than 10%.