

Biology & Health Heart Rate Lab

PURPOSE:

1. To investigate heart rate changes in different activities.
2. To provide experience graphing data and interpreting data.

PROCEDURE:

1. You will work in groups of 2 or 3 people.
2. One person will be designated the recorder & control person.
3. The other people will be the experimental people.
4. There are two main methods to take a heart rate:
 - A. In non-moving or slow moving activities take your heart rate for a full minute and record.
 - B. In fast moving activities take your heart rate for 10 seconds and multiply by 6 and record.
5. There are nine different activities. At the end of each activity the experimental people AND the control person (recorder) will simultaneously take their heart rates and record. For the first four activities take your heart rate for a full minute, and for the last five activities take your heart rate for 10 seconds and multiply by 6.
6. You will do these activities for the times listed:

<u>ACTIVITY</u>	<u>LENGTH OF TIME</u>
1. SITTING	1 ½ MINUTES
2. LYING DOWN	1 ½ MINUTES
3. STANDING	1 ½ MINUTES
4. SLOW WALK	2 MINUTES
5. MEDIUM WALK	2 MINUTES
6. FAST WALK	2 MINUTES
7. JOG IN PLACE, SLOW	2 MINUTES
8. JOG IN PLACE, FAST	2 MINUTES
9. RUN IN PLACE	2 MINUTES
10. OPTIONAL - WITH COKE, SITTING	1 ½ MINUTES
11. OPTIONAL – WITH COKE, LYING	1 ½ MINUTES
12. OPTIONAL – WITH COKE, STANDING	1 ½ MINUTES

The optional activities should be done by drinking a whole can of coke, and then waiting five minutes before doing the listed activities.

HEART RATE LAB DATA SHEET

ACTIVITY	CONTROL HEART RATE	Experiment #1 HEART RATE	Experiment #2 HEART RATE
SITTING			
LYING DOWN			
STANDING			
SLOW WALK			
MEDIUM WALK			
FAST WALK			
JOG IN PLACE SLOW			
JOG IN PLACE FAST			
RUN IN PLACE			
OPTIONAL - WITH COKE, SITTING			
OPTIONAL - WITH COKE, LYING			
OPTIONAL - WITH COKE, STANDING			

Use a bar graph and graph the above data with Heart Rate on the vertical axis and the activities on the horizontal axis.