

Name_____

Biology per _____ Date _____

Score_____ Sign-Off _____

Lab Activity: Blood Pressure

Pre-lab Questions

What is blood pressure? _____

What does the Systolic Reading indicate? _____

What does the Diastolic Reading indicate? _____

How is the measurement written? (be specific)_____

Using the Blood Pressure Monitor

1. Remove any tight clothing from your upper LEFT arm.
2. Make sure the cuff is fully deflated. Put the cuff on so the tube is aligned with your middle fingers and is about a ½ inch above your elbow crease.
3. Position your arm so that the cuff is about at heart level.
4. Press the “on/off” button and wait until the machine has fully turned on.
5. Inflate the cuff to 160 mm Hg then stop. When the machine is finished reading, the measurements will be shown on the display.
6. Deflate the cuff fully and turn the machine off when finished.

Procedure

1. Sit quietly and relax for 5 minutes. At the end of the 5 minutes, take your blood pressure and record the reading and pulse in the data table.
2. Choose one of the following variables to test: stress, cold, exercise, reclining, or caffeine. **Write a hypothesis** on you think your variable will affect your blood pressure.
 - a. Stress: Think about a stressful event and discuss it with your partner for 3 minutes.
 - b. Cold: Stick your right hand in an ice bath for 3 minutes
 - c. Exercise: Do 20 jumping jacks.
 - d. Reclining: Lie down on a lab bench, head to wall, feet hanging off end, for 3 minutes.
 - e. Caffeine: Consume caffeine (coffee or caffeinated soda) and wait for 3 minutes.
3. After finishing the steps involved with the variable you chose, take your blood pressure and record the reading and pulse in the data table.

Hypothesis _____

Data Table

TRIAL	DATE	TIME	PULSE (bpm)	BLOOD PRESSURE
Sitting				/
Variable:				/

Conclusion

1. Did your results match your hypothesis? _____
2. Give an explanation for why your blood pressure changed in the way it did.

