

Name: \_\_\_\_\_ Per: \_\_\_\_\_

### Vital Signs Activity Lab

*Note: While we are evaluating whether vital signs are within the normal range we cannot diagnose a problem since we are not doctors!*

#### Respiratory rate

Count your partner's respiratory rate and then have them count yours.

Record your results: (record names with data)

Evaluate whether or not the respiration rate is within the normal range of 12-20 breaths/minute

"Patient"	Trial 1	Trial 2

#### Pulse

Count your partners pulse manually using their wrist or elbow. Record the result.

Switch partners and repeat the procedure.

Record the results

Evaluate whether the pulse is within the normal range of about 72 beats/minute for each partner.

"Patient"	Trial 1	Trial 2

## Blood Pressure

**Safety Note: If at any time your lab partner (“patient”) feels too uncomfortable please utilize the pressure release valve to let the air out of the cuff.**

1. Put the cuff on your partner’s upper left arm and turn the power on. The cuff should be snug but not tight. Instruct them rest their arm on the lab bench and sit quietly.
2. Manually inflate the cuff no higher than 180.
3. Have your “patient” wait quietly without moving while the device is getting a reading.
4. Once you have recorded the displayed blood pressure deflate the cuff to release the air in the cuff.
5. Switch partners and repeat.

Patient’s Name	Blood pressure Trial #1	Blood pressure Trial #2	Evaluation (Normal or Abnormal?)

### Normal Blood Pressure Range

Systolic (mm Hg)	Diastolic (mm Hg)	Blood Pressure Range
130	85	High / Normal Blood Pressure
<b>120</b>	<b>80</b>	<b>Normal Blood Pressure</b>
110	75	Low / Normal Blood Pressure

### High Blood Pressure Range

Systolic (mm Hg)	Diastolic (mm Hg)	High Blood Pressure Stages
140	90	Stage 1
160	100	Stage 2
180	110	Stage 3
210	120	Stage 4

### Low Blood Pressure Range

Systolic (mm Hg)	Diastolic (mm Hg)	Pressure Range
90	60	Borderline Low blood Pressure
60	40	Too Low Blood Pressure
50	33	Dangerously Low Blood Pressure

**What is the Average Blood Pressure Range for Your Age?**

From	To	Average	Minimum	Maximum
15	19	117/77	105/73	120/81
20	24	120/79	108/75	132/83
25	29	121/80	109/76	133/84
30	34	122/81	110/77	134/85
35	39	123/82	111/78	135/86
40	44	125/83	112/79	137/87
45	49	127/84	115/80	139/88
50	54	129/85	116/81	142/89
55	59	131/86	118/82	144/90
60	64	134/87	121/83	147/91

1. What is the average blood pressure for your age?

How does this number differ from the average given in the charts on page one?

2. Why do you think the average blood pressure increases with age?

3. According to your data, what is your diastolic reading?

4. According to your data, what is your systolic reading?

5. Define "hypertension".

If you have extra time you may modify your activity and see how it affects blood pressure. If you do this, please write a quick description of what you did and how it affected blood pressure.