**The Cardiovascular System: Blood Pressure Regulation**

1. a. Short term mechanisms for regulating blood pressure include regulating what three things?

    1.

    2.

    3.

    b. Long term mechanisms will regulate _____.

2. Two major arterial baroreceptors are located where?

    a.

    b.

3. Using up and down arrows, show the effect of increased blood pressure (BP) on the impulses sent to the brain, the effect on the parasympathetic (PNS) and sympathetic (SNS) nervous systems and the resulting change in blood pressure.

    ↑BP → ____ impulses →____ PNS and ____ SNS → ____ BP

4. As a result of these changes in the PNS and SNS, list two effects on the heart and one on blood vessels.

    Heart:

    Blood vessels:

5. Similar to question 3, show the effect of decreasing blood pressure.

    ↑BP → ____ impulses → ____ PNS and ____ SNS → ____ BP

6. In addition to effects on the heart and blood vessels, what hormones were

    released from the adrenal gland? _____

    and _____

7. a. What cells in the kidney monitor low blood pressure? _____

   b. What enzyme is released as a result of low blood pressure? _____

   c. What does this enzyme act on in the blood? _____

8. Name two effects of Angiotensin II.

   a. _____

   b. _____

9. a. The main effect of aldosterone is: _____

   b. How does this increase blood volume? _____

10. a. What other hormone will increase water reabsorption from the kidney?

    _____

    b. What is the major stimulus for this hormone? _____