

- 5) The ability of a specific tissue or organ to respond to the presence of a hormone is dependent on _____ 5) A ✓
- A) the presence of the appropriate receptors on the cells of the target tissue or organ
 B) the membrane potential of the cells of the target organ
 C) the location of the tissue or organ with respect to the circulatory path
 D) nothing—all hormones of the human body are able to stimulate any and all cell types because hormones are powerful and nonspecific
- 6) Which of the following is NOT a category of endocrine gland stimulus? 6) A ✓
- A) enzymatic B) humoral C) neural D) hormonal
- 7) The "pacemaker potential" of pacemaker cells is produced by the opening of _____ at the end of an action potential. 7) D ✓
- A) K⁺ and fast Na⁺ channels B) slow Ca²⁺ channels
 C) Fast Ca²⁺ channels D) slow Na⁺ channels
- 8) Some of the nerve endings in the skin are sensitive to changes in temperature. They are part of a negative feedback mechanism regulating body temperature. These nerve endings represent a(n) _____ in the negative feedback mechanism. 8) C ✓
- A) control center B) effector
 C) receptor D) homeostatic balance or "ideal" value
- 9) Virtually all amino acid-based hormones exert their signaling effects through intracellular _____ 9) A ✓
- A) second messengers B) calcium
 C) nucleotides D) deactivating ions
- 10) Select the correct statement about the heart valves. 10) D ✓
- A) Aortic and pulmonary semilunar valves control the flow of blood into the heart.
 B) The mitral (bicuspid) valve separates the right atrium from the right ventricle.
 C) The tricuspid valve divides the left atrium from the left ventricle.
 D) The atrioventricular (AV) valves prevent backflow of blood into the atria during ventricular contraction.
- 11) Which of the following statements is the most correct regarding homeostatic imbalance? 11) D ✓
- A) The internal environment is becoming more stable.
 B) Negative feedback mechanisms are functioning normally.
 C) Positive feedback mechanisms are overwhelmed.
 D) It is considered the cause of most diseases.
- 12) While auscultating heart sounds during a checkup, Andy's doctor hears a high-pitched whistling sound during ventricular contraction. Which type of valve could cause this? 12) A ✓
- A) stenotic aortic semilunar valve B) deficient pulmonary semilunar valve
 C) insufficient mitral (bicuspid) valve D) incompetent tricuspid valve