Name_________________________________

1. Define and give a specific example of sensory adaptation

2. Draw a cross section of skin and label free nerve endings, tactile corpuscles, and lamellated corpuscles

3. Compare and contrast temperature and pain receptors. List similarities and differences for each.
4. Draw the olfactory organ and label *bulb, receptors, and nerve fibers.*

5. Draw the ear and label the four main sections. Also label the eardrum, auditory ossicles, and the labyrinth.

6. Draw a series of diagrams (or describe in words) how hearing works. Be sure you include appropriate structures in your description.
7. Describe the difference in structure and function in detection of static and dynamic equilibrium.

8. Describe the structural and functional differences between the two types of photoreceptors in the retina.

9. Draw out the full hormonal signaling loop of the thyroid. Include all hormones and arrows indicating stimulation or inhibition.
10. Describe the difference between Type 1 and Type 2 Diabetes.

11. What are the three blood cell types? List several characteristics for each.

12. Describe the steps involved in blood clotting.
13. Describe the ABO blood typing system and why certain people reject certain blood types. What is meant by “universal donor” or “universal acceptor?”

14. Why do women have to worry the Rh factor during pregnancy?

Multiple Choice

1. What kind of receptor senses light?
   a. Chemoreceptors
   b. Mechanoreceptors
   c. Pain receptors
   d. Photoreceptors
   e. Thermoreceptors

2. Which of the following is NOT a recognized taste?
   a. Bitter
   b. Fatty
   c. Salty
   d. Sweet
   e. Umami
3. When light passes into your eye, which structure does the light go through first?
   a. Cornea
   b. Lens
   c. Nerves
   d. Retina
   e. Rods

4. Intracellular receptor signaling involves what type of signaling molecule?
   a. ATP
   b. DNA
   c. Neurotransmitter
   d. Rhodopsin
   e. Steroid hormone

5. What hormone is released from the anterior pituitary?
   a. Cortisol
   b. Insulin
   c. Oxytocin
   d. Prolactin
   e. TSH

6. The adrenal gland is located on top of what organ?
   a. Brain
   b. Heart
   c. Kidney
   d. Liver
   e. Stomach

7. What is the name of the condition when white blood cell numbers are abnormally lowered?
   a. Leukocytosis
   b. Leukopenia
   c. Anemia
   d. Leukemia
   e. Fibromyalgia

8. What is NOT a component of blood plasma?
   a. Albumin
   b. Electrolytes
   c. Fibrinogen
   d. Gelatin
   e. Globulin

9. A thrombus is a:
   a. Anemia
   b. Blood clot
   c. Cancer
   d. Damaged artery
   e. Heart condition