1. (1pt) We see yellow when the ________ and ________ cones are excited evenly close to their maximum.

2. (.5pt) Which of the theories of color vision best accounts for the negative afterimage?
   a. labeled line theory
   b. trichromatic theory
   c. opponent process theory
   d. color-coding theory

3. (.5pt) The three dimensions in which sound waves vary are:
   a. Frequency, amplitude, and complexity
   b. Amplitude, complexity, and intensity
   c. Frequency, pitch and timbre
   d. Loudness, amplitude and pitch

4. (3pts) Matching (some answers are used multiple times and terms may have more that 1 answer!)
   ______ Pinna  a) Transduce mechanical to neural signals
   ______ Ear canal  b) Converts the signal to a fluid vibration
   ______ Ossicles  c) Focuses and amplifies sound waves
   ______ Cochlea  d) Contains the organ of Corti and lymph and is snail shaped
   ______ Hair Cells  e) Make up the outer ear
   ______  f) Part of the inner ear

***Bonus (.5pt) Which of the above pieces of anatomy is moved by the ear drum?

5. (2pts) Please draw (artistic ability is not judged) two diagrams of cilia on hair cells which are a) producing action potentials and b) not producing action potentials. (Include: which direction the force the lymph is directed, the tip links, and whether the channels are open or closed)

***Bonus (.5pt) What ion is outside the hair cells and rushes in when the channels are open?

6. (1pt) ______________ respond to rotational accelerations of the head and ______________ respond to position of the head.

7. (2pts) Why is it important to have a vestibular system? (What does our body use the information for, etc—please explain this thoroughly giving several uses)