

Multiple choice: Indicate which answer(s) is(are) correct by crossing the little circles.

1. The receptive field (RF) of an individual cone is:
 - larger in the fovea than in the periphery
 - elongated
 - overlapping with the RF of other cones
 - wavelength selective

2. Ganglion cells
 - are classified either ON- or OFF-center
 - are orientation selective
 - are very sensitive to local contrast differences
 - have receptive fields that decrease in size with visual eccentricity

3. The cochlea
 - contains inner and outer hair cells
 - is transducing pressure into electrical signals
 - contains the organ of Corti
 - is embedded in bone

4. The basilar membrane
 - is thicker at its end than at its beginning
 - codes sound frequency by vibrating at different locations
 - codes sound amplitude by modulating its own vibration amplitude
 - codes sound frequency because of its own mechanical properties

5. Sound localization is computed
 - mostly in the brain stem
 - mostly in secondary auditory cortex
 - in the basilar membrane
 - based on activity differences between the inner hair cell populations of each ear

6. Temperature information:
 - is mediated by encapsulated receptors
 - reaches SII (secondary somatosensory cortex) without relay in S1
 - is mediated either by "cold" or "warm" fibers
 - is responsible for the feeling of spicy food being "hot"

7. The flavor of food:
 - X depends on its visual appearance
 - X depends on olfactory and gustatory signals
 - X can be divided into at least 5 gustatory categories
 - X is affected by the subject's state of satiety

8. The vestibular system:
 - X contains the otholitic organs
 - X is tightly coupled with the oculomotor system
 - O contains a total of 8 semi-circular canals
 - O uses signals that reach cortex without any relay in the thalamus

9. Primary motor cortex:
 - X controls primarily striated muscles
 - X receives input from the supplementary motor area
 - O controls ipsilateral foot muscles
 - X contains a disproportionally large representation of the hand

10. The amygdala:
 - X is involved in fear conditioning
 - X is located in the temporal lobe
 - X is part of the limbic system
 - X can provoke fearlessness and orality when lesioned

11. fMRI
 - X is a technique used to assess cortical activity
 - O has a better spatial resolution than electrode recording techniques
 - X measures changes in blood oxygenation levels
 - O cannot be used in humans