

Structure and Function in Living Systems

Name:

Sensing the Environment

Period:

Use Chapter 17, Section 2 of your textbook to answer the questions below. The word banks can be used to fill out the sentences below them.

camera cones cornea impulses iris larger lens photoreceptor pupil
retina rods smaller

Sense of Sight (p.536)

1. Your eyes are like a _____, because they both receive visible light.
2. The _____ is a clear membrane that protects the eye.
3. The _____ is the opening in the center of the eye.
4. The _____ is a layer of light-sensitive cells at the back of the eye.
5. A _____ is a special neuron that responds to light energy.
6. Your brain itself does not see light, but gets _____ that it perceives as light.
7. What kind of photoreceptors would you be using to see at night? _____
8. What kind of photoreceptors would you be using to see colors during the day? _____



Reacting to Light (p.537)

- _____ 9. What opening lets light into the eye?
a. pupil b. retina c. iris d. rods
10. The _____ is a ring of muscle that controls the amount of light getting into the eye.
 11. If it is bright, your iris will make your pupil _____ in diameter to keep too much light from getting in.
 12. If it is dark, your pupil will be _____ in diameter to let more light in.

Focusing the Light (p.537)

13. The clear, curved material behind the iris is the _____, which bends light going into your eye.
- _____ 14. What happens when the lens focuses light in front of the retina?
a. nearsightedness b. farsightedness c. blindness d. normal vision
- _____ 15. What happens when the lens focuses light behind the retina?
a. nearsightedness b. farsightedness c. blindness d. normal vision

turn over for more questions

