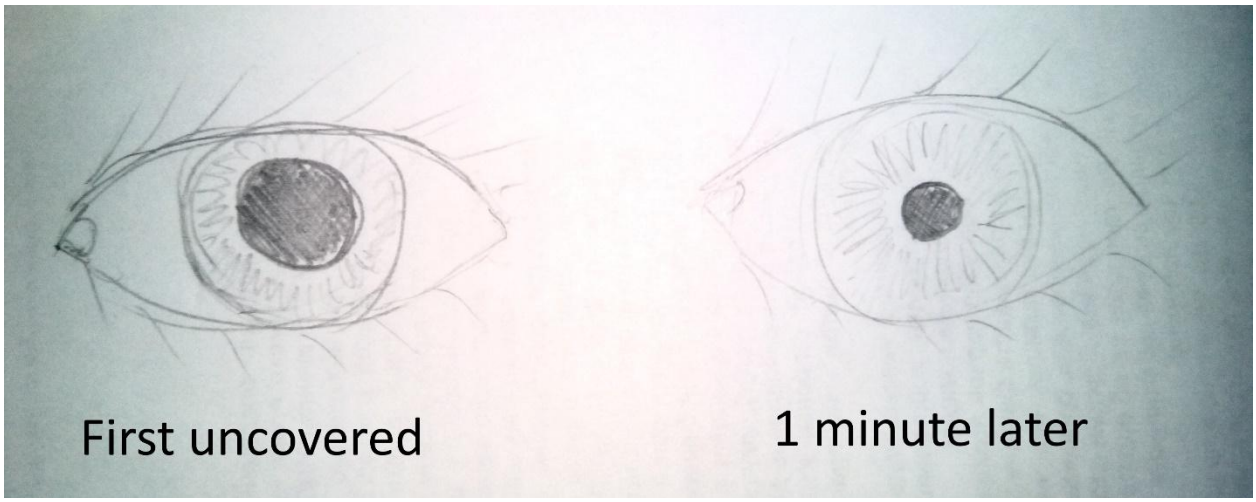
Answer on Question #57209 – Biology – Human Anatomy and Physiology

Question:

A student in a brightly lit room covered both of her eyes with her left hand while holding a mirror in the other hand. The student closed her eyes. She counted slowly to 60. Then she quickly removed her hand from her eyes, opened them and looked in the mirror. Make drawings of what her iris and pupil would look like, as they appeared when the eye was first uncovered and about one minute later. Explain how the changes shown between your drawings occurred and how these changes help the functioning of the eye.

Answer:



When eyes were covered, there was relatively dark. And there was small amount of nerve impulses caused by light. Therefore, pupils were dilated to be able catch more light. Right after eyes were uncovered, pupils were still dilated. But then light creates more nerve impulses, causing muscles to close the pupils. This mechanism helps the eye to control amount of light that falls on the retina. We need certain amount of light to form the picture of what we see. If there is too much light or too little, the picture becomes unrecognizable.