

# Reading Comprehension

## 1. READ THE PASSAGE AND THEN TICK TRUE OR FALSE

The human eye is the organ which gives us the sense of sight, allowing us to learn more about the surrounding world than we do with any of the other four senses. We use our eyes in almost every activity we perform, whether reading, working, watching television, writing a letter, driving a car, and in countless other ways. Most people probably would agree that sight is the sense they value more than all the rest.

The eye allows us to see and interpret the shapes, colors, and dimensions of objects in the world by processing the light they reflect or emit. The eye is able to see in bright light or in dim light, but it cannot see objects when light is absent.

### **Process of vision:**

Light waves from an object (such as a tree) enter the eye first through the *cornea*, which is the clear dome at the front of the eye. The light then progresses through the *pupil*, the circular opening in the center of the colored *iris*. Next, the light passes through the *crystalline lens*, which is located immediately behind the iris and the pupil.

Initially, the light waves are bent or converged first by the cornea, and then further by the *crystalline lens*, to a nodal point (N) located immediately behind the back surface of the *lens*. At that point, the image becomes reversed (turned backwards) and inverted (turned upside-down).

The light continues through the *vitreous humor*, the clear gel that makes up about 80% of the eye's volume, and then, ideally, back to a clear focus on the *retina* behind the *vitreous*. The small central area of the retina is the *macula*, which provides the best vision of any location in the retina. If the eye is considered to be a type of camera, the retina is equivalent to the film inside of the camera, registering the tiny photons of light which interact with it.

Within the layers of the retina, light impulses are changed into electrical signals and then sent through the *optic nerve*, along the *visual pathway*, to the occipital cortex at the posterior or back of the brain. Here, the electrical signals are interpreted or "seen" by the brain as a visual image. When the light entering the eyes is bright enough, the pupils will constrict (get smaller), due to the *pupillary light response*.

Actually, then, we do not "see" with our eyes but, rather, with our brains. Our eyes merely are the beginnings of the visual process.

**Tick true or false and correct the false statements**

	True	False
1. The light waves are converged first by the cornea and then further by the nodal point N		
2. Sight is the most precious organ of sense for a living being		
3. A lot of people are afraid of blindness		
4. Thanks to the eyes we can see during the day and at night		
5. The eye can be considered as a kind of camera		
6. Light impulses get to the brain through the visual pathway too		
7. When the light isn't enough, the pupils don't get smaller		

**Tick the right statement**

- What is the primary (most powerful) focusing structure of the eye?  
a. cornea   b. pupil   c. iris   d. crystalline lens
- Which type of photoreceptor is most sensitive to bright light and colour?  
a. iodopsin   b. rhodopsin   c. cone   d. rod
- The vitreous humor, which occupies about 80% of the eye's interior, is mostly composed of  
a. inorganic salts   b. water   c. collagen fibrils
- Which eye structure is comparable to the film of a camera because it senses light focused on it?  
a. pupil   b. vitreous humor   c. retina   d. optic nerve head
- What is the point of sharpest, most intense visual acuity within the eye?  
a. fovea centralis   b. macula   c. retina   d. optic disc

**Answer the following questions**

- What's the macula and its role?
- Explain the sentence in the passage "we do not *see* with our eyes".
- What is the eye made up of?
- In the text it is often referred to the cornea and to the retina in describing the process of vision, can you give more information about them?

**Penalty .....**

**Mark .....**