

## PROJECT 6 EXAMINE THE EYE

Identify the normal structures of the eye.

### INFORMATION

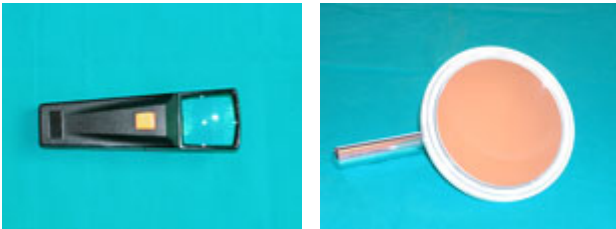
The eyeball is situated in the protective, hollow, bony eye socket of the skull. The eyeball houses an optical lens system whereby light is focused and projected on light-sensitive receptors in the retina. Two movable eyelids protect the eyeball from injury, dust, and drying out. Movement of the eyeball is controlled by a set of six muscles.

### SETTING:

Ensure that you use a room with good lighting.

### YOU WILL NEED:

- An examination light (preferably a magnifying examination light)
- A hand or desktop mirror



### STEP 1

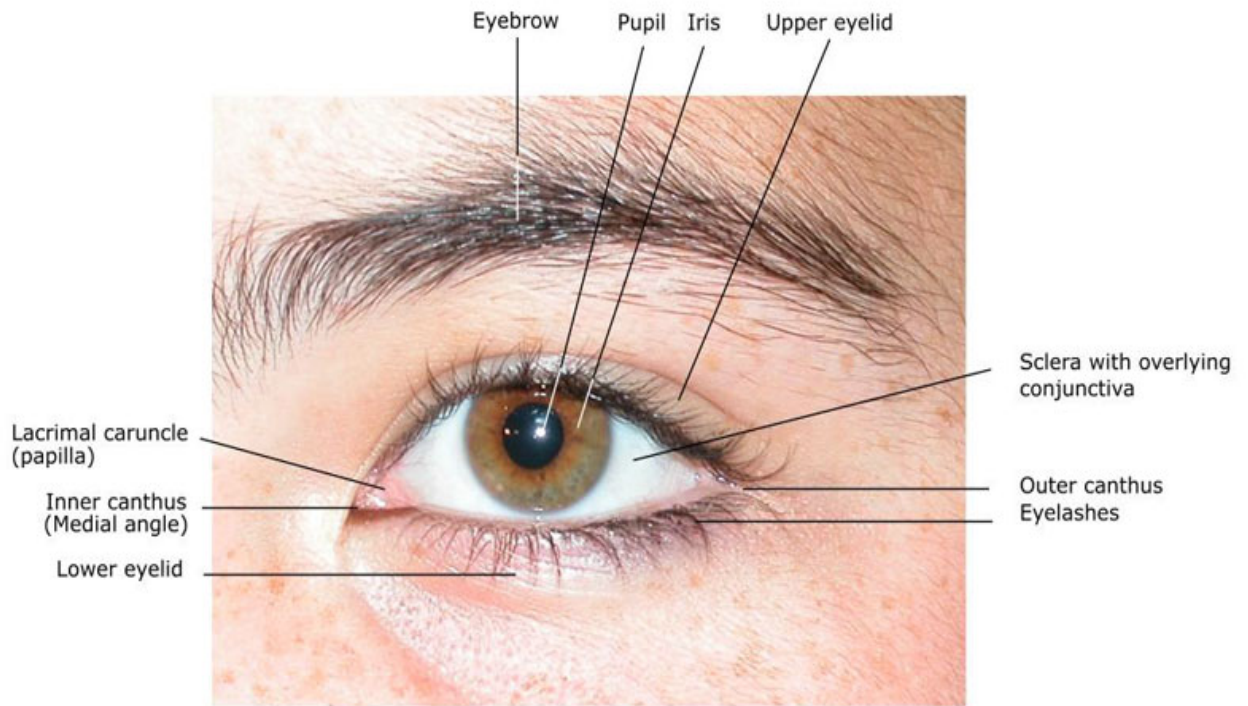
Position yourself comfortably in front of the mirror when performing self-examination. To examine another person, stand in front of this person facing him/her, armed with an examination light. If it is a tall person, perform the examination with this person in the seated position.



### STEP 2

Study the picture of a normal eye.

## THE STRUCTURES OF THE EYE



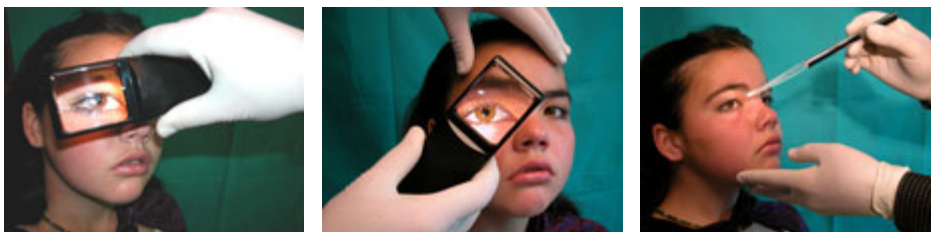
### NOTE OF CAUTION:

Be careful! Do not let anything touch the inside of the eye.

### STEP 3

Identify all the different structures of the eye being examined.

Use the penlight and magnifying examination light to inspect the different structures of the eye in more detail.



### HINT:

If the protective blink reflex (open-close-open movement of the eyelids) makes it difficult to examine the eye, the eyelids may be gently kept in the open position by finger retraction as indicated in the picture.

#### **STEP 4**

Compare the left and right eyes regarding the various structures, dimensions, colors and blood vessels.



#### **STEP 5**

With the necessary care and supervision examine somebody else's eye.



#### **PLEASE NOTE:**

- Always wash your hands and put on a new pair of gloves each time you examine a different person.

#### **POINTS OF INTEREST**

- The membrane lining the inside of the eyelids and covering the white area of the eye (sclera) is called the conjunctiva.
- Blood vessels are normally visible over the sclera of the eye. Too many blood vessels over this area may indicate inflammation or infection of the conjunctiva (conjunctivitis).
- Blood vessels are normally absent over the iris and pupil areas of the eye.
- The color of the iris may vary in different individuals (but rarely between the two eyes of the same individual). The color of the iris may be variable shades of blue, green, or brown.
- Tears, produced by the tear glands, protect the eyes by keeping them moist, and they help to lubricate the movement of the eyelids. Tears are normally produced in small amounts but increase when the eyes are irritated, for example, by cutting an onion or when crying. Excess tears drain via small canals situated on the eyelids to the lacrimal sac, and from here into the nose.