

a)

i) Photoreceptor cells are located in the retina

ii) The conjunctiva is labelled B and it protects the eye.

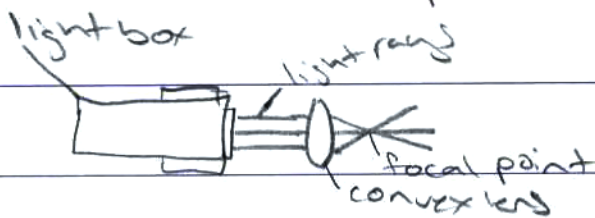
The Choroid is labelled A and it is the thick, transparent outer layer of the eye that gives the eye its shape and protects the eye

b) i) Observe the animal's physical appearance while making the sound, attempt to determine the location of the sound. If it appears to be vocal, like a human, dissection would confirm this.

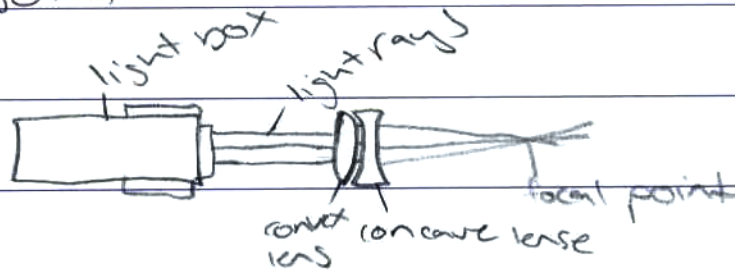
ii) We could attempt to recreate the sound / make a model, eg. a cricket uses friction of its hind legs to produce sound. We can produce sound through friction. We could also confirm the sound production through comparison with other animals better known to us.

c) Cataracts are the clouding of the lens and technology can be used to extract the lens using laser and replaced with an artificial lens to allow light to once again pass through the eye.

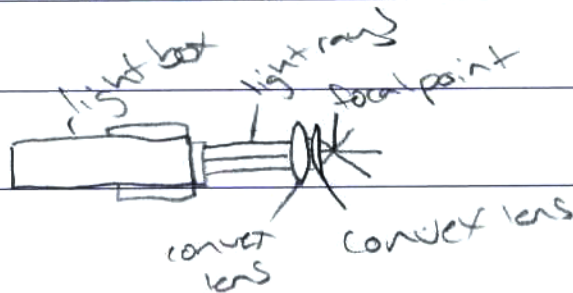
d) used a light box marking 3 straight white lines along our table. we then put a convex lens in the way of the light marking the three rays meet (focal point)



we then proceeded to place a concave lens after the convex lens. This increased the distance to the focal point



we then put a narrower convex lens after the original lens. This closed the distance to the focal point



(e) Two devices designed to assist people with different types of hearing impairment are the Bionic Ear device and the Hearing aid device. The appropriateness of these two devices can be examined. Firstly the hearing aid device is a mechanism that is tangible, it is placed on the outside of the ear behind the pinna with an amplifying device that is placed into the tympanic auditory canal. The hearing aid is for sufferers that have a problem hearing though one not completely deaf. As sound waves enter the ear the mechanism amplifies the sound this in turn will function like a normal ear. This device would not be appropriate for a chronic hearing impairment where a person is completely deaf. The Bionic ear device is designed to assist people that are completely unpaired of hearing. This device is needed to be surgically inserted into the ear, the Bionic ear is able to trigger electrical impulses through to the inner ear and then to the auditory nerve whereby the nerve messages travel to the auditory area of the ~~cerebrum~~ brain. The device is hidden and is not visible to the



outside world.