

# EYE DISSECTION

## IDEA EXCHANGE

Catalyst 2003

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Acknowledgements: I did not create this activity sheet, but I have used it for years. I'm not sure who to thank for this sheet. I acquired it when I taught in Surrey at Newton Jr, Tamanawis, or Princess Margaret Secondary.

Introduction: I have always done an eyeball dissection in Sc 8, since it is a topic of study in Science Probe 8 and there is a mention of the senses in the Life Sciences learning outcomes. It is a highlight of the year for many students.

Materials: (that I've used)

Safety goggles	dissecting tray	probe	forceps
gloves	scalpel (or razor blade)	dissecting scissors	
preserved eyeball			

Procedures/Suggestions:

- I use the sheet as simplified instructions to Activity 2B "Looking at an Eye" p. 30 in Science Probe 8. I require the students to complete the sheet, draw and label the 2 halves of the eye, and do the discussion questions for Act. 2B.
- I've used fresh eyeballs from a slaughter house and prefer to use them. However, vacuum packed, preserved eyeballs are convenient to store and use.
- The eyeballs have a lot of fat around them. I tell students to remove as much as possible before cutting the eyeball open. This prevents cutting in half in the wrong place.
- Students tend not to use the scissors, and they prefer to use the scalpels (razor blades).
- Be sure that students have ample time to clean-up and wash their hands.
- It's very important students put all waste in the garbage. In our school, the custodians prefer that we take this immediately to the dumpster for disposal. Please check with your custodians.



# THE EYE- DISSECTION



Name: \_\_\_\_\_

Date: \_\_\_\_\_

Block: \_\_\_\_\_

## Part 1.

Without cutting into the eyeball:

1. Find the Muscles of the eyeball ( Do not confuse it with the fat. The fat is pale yellow in color). What color are the muscles?

\_\_\_\_\_

2. Find the Cornea. Is it clear in the preserved eyeball? Explain?

\_\_\_\_\_

3. Find the Optic Nerve. What is the diameter of the optic nerve?

\_\_\_\_\_

**IDENTIFY THE ABOVE PARTS TO YOUR TEACHER BEFORE CONTINUING.**

In order to see the pupil and the iris, the cornea must be removed from the eye. To do this, carefully use the razor blade to cut along the outer rim of the cornea. Remove cornea.

4. Notice that the Aqueous Humour leaks out of the eye when the cornea is removed. What color is the Aqueous Humor? \_\_\_\_\_

5. Locate the pupil.

6. Locate the iris. What color is it? \_\_\_\_\_

7. Locate the Sclera. What is the function of the sclera?

\_\_\_\_\_

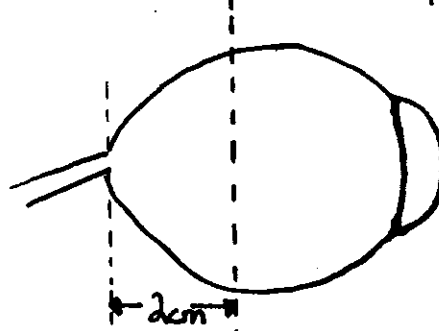


STOP



## Part 2:

Place the eye on its side, with the optic nerve to your left. With razor blade make a cut into the eyeball approximately 2 cm from the optic nerve. Cut around the entire eye at a distance of 2 cm from the optic nerve.



Pick up the smaller (back) part of the eye:

8. Locate the Retina. How far forward does the retina extend?  
\_\_\_\_\_

9. Locate the Blind Spot region on the retina. Where is this region in relation to the optic nerve? \_\_\_\_\_

10. Locate the Choroid Coat. What color is it? \_\_\_\_\_

Pick up the larger (front) part of the Eye:

11. Locate the Vitreous Humour. Describe the Vitreous Humor?  
\_\_\_\_\_

12. Locate the Lens and remove it from the eye.

13. Observe what happens when you drop the lens on the table from a height of about 30 cm. Squeeze the lens. \_\_\_\_\_

a) Is it rigid or flexible?  
or both? \_\_\_\_\_

b) Describe its shape and Texture?  
\_\_\_\_\_

14. Clean up and wash all equipment!!

