Name: _____ Group: _____ Date: _____

LAB 64
OBSERVATION

DISSECTING THE EYE OF A MAMMAL

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Goal

Locate and observe the structures of the eye.

Observation criteria

1. Identify the main structures of the eye.

_____

_____

_____

2. In the table below, record the characteristics that will help you to identify each of these structures when observed during this lab.

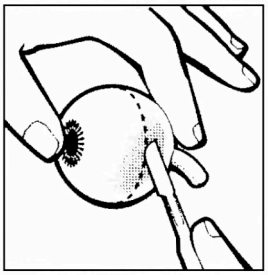
Structure	Characteristics

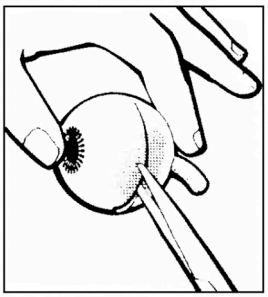
Name: _____ Group: _____ Date: _____

Materials

- gloves
- eye of a mammal
- scalpel *or* knife
- dissecting forceps
- dissecting scissors
- dissecting pan
- 4 watch glasses *or* Petri dishes

Procedure





1. Observe the exterior of the eye. Note the overall shape.

2. Locate and identify the structures connected around the eye.

3. Locate the optic nerve. Note the colour and texture.

4. Locate the iris. Note the colour and shape.

5. With the scalpel, make an incision around the eyeball as shown in the illustration at top.

6. Collect the liquid that seeps out of the eye on one watch glass. Note the name, colour and texture of the liquid.

7. With the dissecting scissors, separate the eye into two pieces by cutting along the incision made in step 5 as shown in the illustration at bottom.

8. With the dissecting forceps, carefully detach the internal membrane at the back of the eye. Identify the structure attached to it.

9. Spread out the membrane collected in step 8 on the second watch glass. Note the name, colour, thickness and texture.

10. With the dissecting forceps, carefully detach the second internal membrane at the back of the eye.

11. Spread out the membrane collected in step 10 on the third watch glass. Note the name, colour, thickness and texture.

12. Observe the remaining internal membrane at the back of the eye. Note the name, colour, thickness and texture.

13. At the front of the eye, locate the membrane in front of the iris. Note the name, shape and colour.

14. Collect the liquid in front of the iris on the fourth watch glass. Note the name, colour and texture of the liquid.

15. Locate the lens and remove it from the eye. It is possible that the lens may have seeped out with the liquid collected in step 14.

16. Observe and note the colour, shape and texture of the lens.

17. Dispose of the eye as directed by your lab instructor.

18. Clean up and put away materials.

Name: _____ Group: _____ Date: _____

Observations

Record your observations in the table below. Give the table a title.

Title:

Structure	Observations
Overall shape of eye	
Structures attached around eye	
Optic nerve	Colour: Texture:
Iris	Colour: Shape:
Liquid that fills eyeball	Name: Colour: Texture:
First membrane at rear of eye	Name: Colour: Thickness: Texture:
Second membrane at rear of eye	Name: Colour: Thickness: Texture:
Third membrane at rear of eye	Name: Colour: Thickness: Texture:
Membrane in front of iris	Name: Shape: Colour:
Liquid in front of iris	Name: Colour: Texture:
Lens	Colour: Shape: Texture:

Name: _____ Group: _____ Date: _____

Reflecting on your observations

1. Why is the pupil black in colour?

2. What is the function of the optic nerve?

3. What is the function of the muscles attached to the eye?

4. Are the two liquids collected from the eye similar? If not, how do they differ?

5. Why is the retina the first membrane at the back of the eye?

6. Did your observations help you to better understand the structures and functioning of the eye? Explain your answer.

7. How could you improve the protocol for this lab?