carolina Quicktips®

Carolina's Perfect Solution® Cow Eye Dissection

Carolina's Perfect Solution® cow eye dissection introduces students to the anatomy of the mammalian eye. This activity allows students to identify the major structures of the eye. The activity supports 3-dimensional learning and builds toward the following:

- NGSS Scientific and Engineering Practice: Developing and Using Models
- NGSS Core Idea: Life Science 1: From Molecules to Organisms: Structures and Processes

Materials Required

Carolina's Perfect Solution® Cow Eye (228903)
Adjustable Safety Glasses (646705)
Laboratory Aprons Value Pack (706245)
Nitrile Disposable Gloves (706335, 706336, 706337)
Disposable Tray
Scissors

Activity Procedure

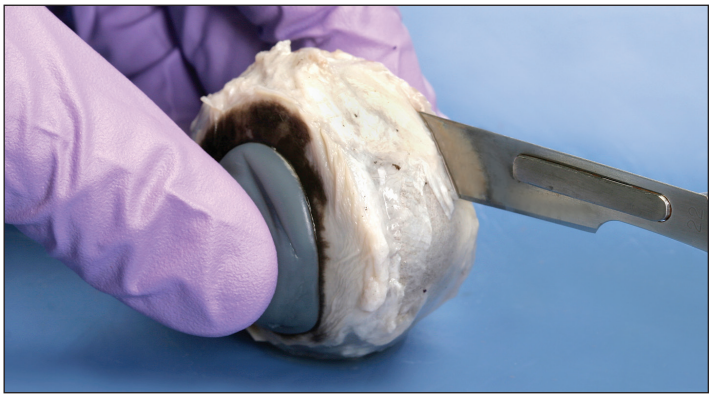
1. Obtain a Carolina's Perfect Solution® cow eye and place it on a dissecting tray.
2. Trim away any excess tissue surrounding the eyeball and observe the external features of the eye. Identify the following structures: optic nerve, sclera, and cornea.
3. Hold the eye gently with your thumb and forefinger at the cornea and near the optic nerve.
4. Begin a cross section of the eye by making an incision slightly behind the middle of the eyeball through the sclera.
5. Once you have made a cut around the eyeball, separate the eye into halves.
6. Let the vitreous humor and any associated material slowly slide out of the eye. You may need to tease the vitreous humor gently away from the lining of the eye.
7. Observe the inside front portion of the eye. Locate and remove the lens.
8. To remove the cornea, cut around the front of the eye where the cornea meets the sclera. Locate the iris. Carefully pull out the iris and lay it flat on the tray.
9. Identify the optic nerve, retina, and blind spot on the back of the eyeball.

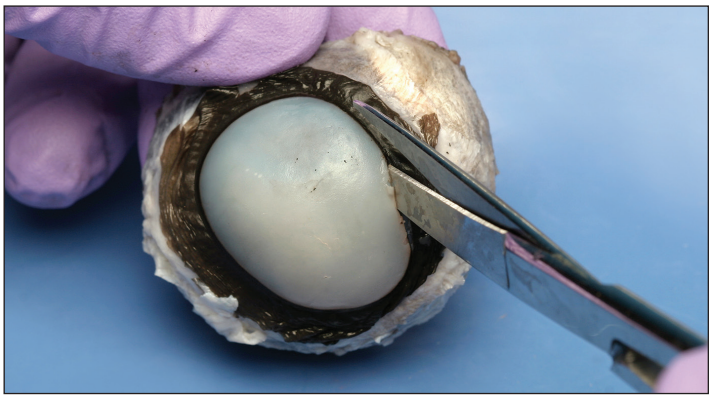
Results/Summary

Students should identify the major structures of a mammalian eye. Exploring the cow eye can lead to further discussions concerning form and function, specialized tissue types, and the interdependence of organ systems.

Safety

Have students wear safety glasses or goggles, gloves and lab aprons when dissecting.





Additional Information

View more information, content links, and products related to this activity at **www.carolina.com/takeaways.**

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