



Cow Eye Dissection Field Trip Workshop

GRADE LEVELS:

Grades 6th – 8th

CONCEPTS:

- The structure and function of the human eye is somewhat similar to that of the cow eye.

OBJECTIVES:

- Learn how to safely and properly handle laboratory equipment.
- Dissect a real cow eye using laboratory equipment.
- Identify parts of the eye and their functions.
- Discover how the human eye works and make comparisons to that of the cow's eye.

ACADEMIC CONTENT STANDARDS:

- Life Sciences: 6.2, 6.7, 7.1
- Scientific Inquiry: 6.1, 6.2, 7.4, 8.1

VOCABULARY WORDS:

Aqueous Humor-A clear fluid that helps the cornea keep its rounded shape.

Blind Spot-The place where all nerves from the retina join to form the optic nerve. Each eye has a blind spot where there are no light-sensitive cells.

Cones- One of the type of light sensitive cells in the retina. Cones give you color vision in bright light.

Cornea-A tough, clear covering over the iris and the pupil that helps protect the eye. Light bends as it passes through the cornea. The cornea begins bending light to make an image; the lens finishes the job.

Iris-The muscle that controls how much light enters the eye. It is suspended between the cornea and the lens. A cow's iris is brown. Human irises come in many colors, including brown, blue, green, and gray.

Lens-A clear, flexible structure that makes an image on the eye's retina. The lens is flexible so that it can change shape, focusing on objects that are close up and objects that are far away.

Myelin-The fatty layer that surrounds each nerve fiber.

Optic Nerve-The bundle of nerve fibers that carry information from the retina to the brain.

Pupil-The dark circle in the center of your iris. It's a hole that lets light into the inner eye. While your pupil is round, a cow's pupil is oval.