

Bridgeway ACADEMY

The following two week lesson plan will guide your student through this interactive site to learn all about the eye.

<http://www.etestingcenter.com/members/startnow/cows-eye.htm>

Science—*The Eye* (Any age—the level of exploration is up to you
You can spend two weeks exploring this site and its many links to get a full picture of the eye, its many parts, the function of each part, and completing the many experiments relating to the eye. We recommend you begin by watching the Cow Dissection (unless your child is a little queasy). This should ignite some interest in the subject. Then move on by clicking on “Learn More About the Eye” and explore the site and its many eye links. There are many different experiments and outstanding visuals throughout the site.

Older students can culminate this activity by writing a research paper or short essay on the eye using the information they gain through this site.

Day One

Watch cow dissection video

Answer the following questions:

1. Step One Video: What is the major difference between a cow’s eye and a human eye?
2. Step Two Video: How many muscles does the cow’s eye have? How many muscles does the human eye have?
3. Step Three Video: What is the purpose of the fat in the eye?
4. Step Four Video: What is the purpose of the cornea?
5. Step Six Video: What part of the eye gives the eye its color? What is the pupil? What does the iris do when there is a lot of light around? What is the difference between a human iris and a cow iris?
6. Step Seven Video: What is the jelly-like substance that surrounds the lens. What is it made of?
7. Step Eight Video: What does the lens do every year? What is its purpose?
8. Step Nine Video: The lens acts like a what?
9. Step Ten Video: Where is the retina? What does it do?
10. Step Eleven Video: What is your blind spot?
11. Step Twelve Video: What is the purpose of the optic nerve? (You might need to read for this one.)
12. Step Thirteen Video: What is the tapetum? Humans do not have a tapetum; what is the back our eye like instead?

Day Two:

Click on “Learn”

View and duplicate the eye diagram. Be sure to provide basic information about each part of the eye.

Day Three

Click on “Learn”

Click on “Experimenting with a Lens” and complete the lab experiment

Day Four

Click on “Learn”

Click on “Light and Your Eye” and complete the lab experiment

Day Five

Learn about Retinal Scans and more about a cow dissection by clicking here

<http://www.exploratorium.edu/theworld/webcasts.html>

Day Six

Explore one man’s journey into blindness at this site.

<http://www.exploratorium.edu/seeing/notfadeaway/>

Day Seven

Writing assignment: How would your life change if you lost your eyesight?

Day Eight—Day Ten

The Joy of Visual Perception

<http://www.yorku.ca/eye/thejoy.htm>

This online book presents copious information and illustrations on diverse topics relating to human vision and perception. There is a wealth of information here. Give your student time to explore his or her interests, take notes, make diagrams, even prepare a research report on the information gained.