Our Experiment

(1) As you find each structure of the eye circle its name on the diagram.

(2) Look for these structures before you cut:

extraocular muscles - these are the muscles that move the eye
optic nerve (back)
cornea

(3) Three different eyes: cow, sheep, pig

When you dissect the different types of eyes, cut the cow eye from front to back, so the front half of the eye is separated from the back half. This will let us dissect out the lens in one piece. Try cutting either the sheep or pig eye from side to side, so the left and right halves of the eye are separated from each other.

(4) Identify the following structures in the dissected eye:

sclera
aqueous humor (wear goggles, it squirts!)
vitreous humor
lens (dissect out the intact lens from the cow eye - can you use it as a magnifying glass?)
retina (often falls off)
fovea and macula (might be hard to find)
tapetum lucidum / choroid
iris (see if you can find the 2 sets of muscles in the iris)

(5) compare eyes from cow, sheep, pig: how are they alike and different??

Alike

Different