Eyeball Dissection Observations

Materials:

*sheep eyeball	*dissection tray	*safety goggles
*scissors	*paper towels	*probe
*gloves (optional)		

Procedures:

External parts of the eye

1. Get an eyeball from the teacher and place it on the tray so that the front of the eye is facing you. Rotate the eye until the tear gland is facing you.
2. On the outside of the eye, find each part of the eye listed below. On **Eye Drawing #1**, **Label**, **color** and **write the function** of each part of the eye that you find using **Diagram #1** to help you.
    a. Fat- large amounts of fat help to protect & cushion the eye from shock
    b. Tear gland- forms a bulge at the top area of the eye. Produces tears to wash the surface of the eye.
    c. Tear ducts- tubes that carry tears from the gland to the eye
    d. White coat- Tough outer coat of the eye (white of the eye)
    e. Iris- round black circular section that controls amount of light entering into the eye
    f. Pupil- Round hole at the end of the iris. This is where light enters into the eye.
    g. Eye muscles- Reddish flat muscles around the eye.
        i. Upper muscle- muscle on top of the eye that raises the eye
        ii. Lower muscle- muscle below the eye to lower the eye
        iii. Outer muscle- muscle on the outside that moves eye away from the nose
        iv. Inner muscle- muscle that moves the eye toward the nose
3. Cut away the muscles using your scalpel. Be careful when using the scalpel. Do NOT cut towards your body or someone else's body.
4. Turn the eye so it is facing sideways, to the right/left of you. Look at the front surface of the eye. Find the parts below. **Label**, **color** and **write the function** of each part that you see in **Eye Drawing #2,** use **Diagram #2** to help. (The optic nerve you may have to draw into the diagram #2 picture. Do NOT color in the muscles.)
    a. Optic nerve- Found in the back. The optic nerve is a white cord connects the eye to the brain.
    b. Eyelid- Covers and protects the eye from dust, bright light, impact
    c. White coat- Tough outer coat of the eye (white of the eye)
    d. Membrane- Smooth moist membrane that covers the white coat
    e. Cornea- Clear layer in front of the eye that allows light to enter & helps focus light
    f. Iris- round black circular section that controls amount of light entering into the eye
    g. Pupil- Round hole at the end of the iris. This is where light enters into the eye. Changes in the pupil are caused by changes in the iris.
        i. When bright light is present, the iris closes/ constricts the pupil.
        ii. When there's very little light, the iris opens/ enlargens the pupil.