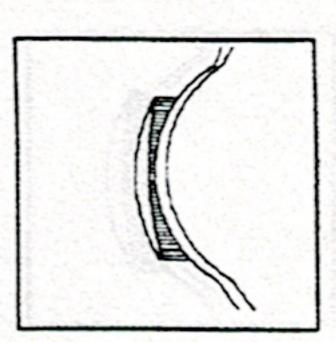
2: Basic Optical Principles

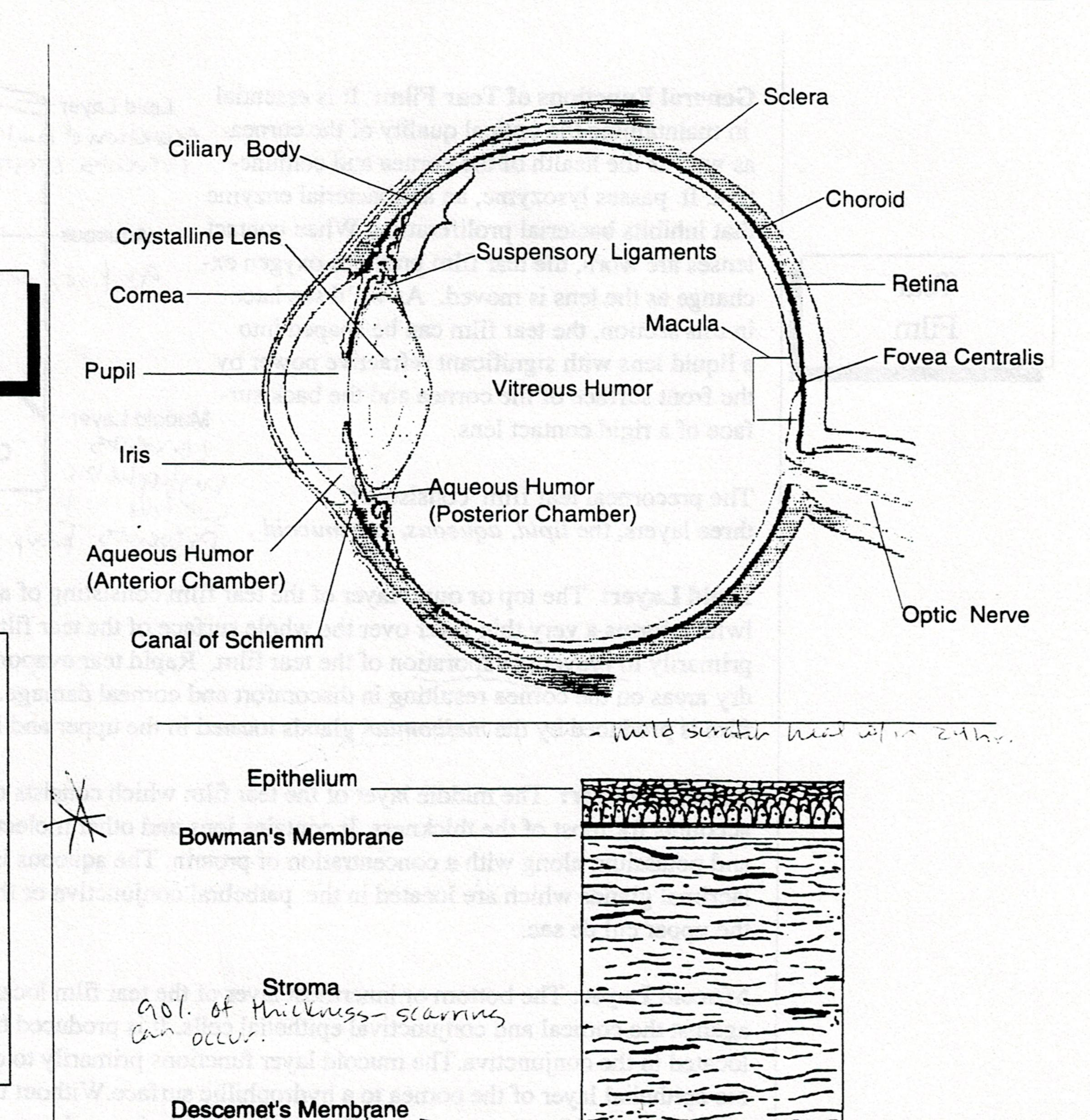
Endothelium



Anatomy



The taped portion for the first half of Part 2 is found on tape 2, side 2. Much of the information on the anatomical features of the comea and tear film, as well as information on patient selection is augmented on the taped presentation.



The cornea consists of five distinct layers. These include the Epithelium, Bowman's Membrane, Stroma, Desemet's Membrane, Endothelium. The corneal epithelium is highly regenerative. The cells reproduce so rapidly that a mild scratch or abrasion of the cornea can heal itself within 24 hours. This is not true of the other corneal layers. Overall, the cornea is about 0.5mm thick at its center with the stroma comprising 90% of the total thickness. Knowledge of corneal physiology becomes especially important when fitting contact lenses.