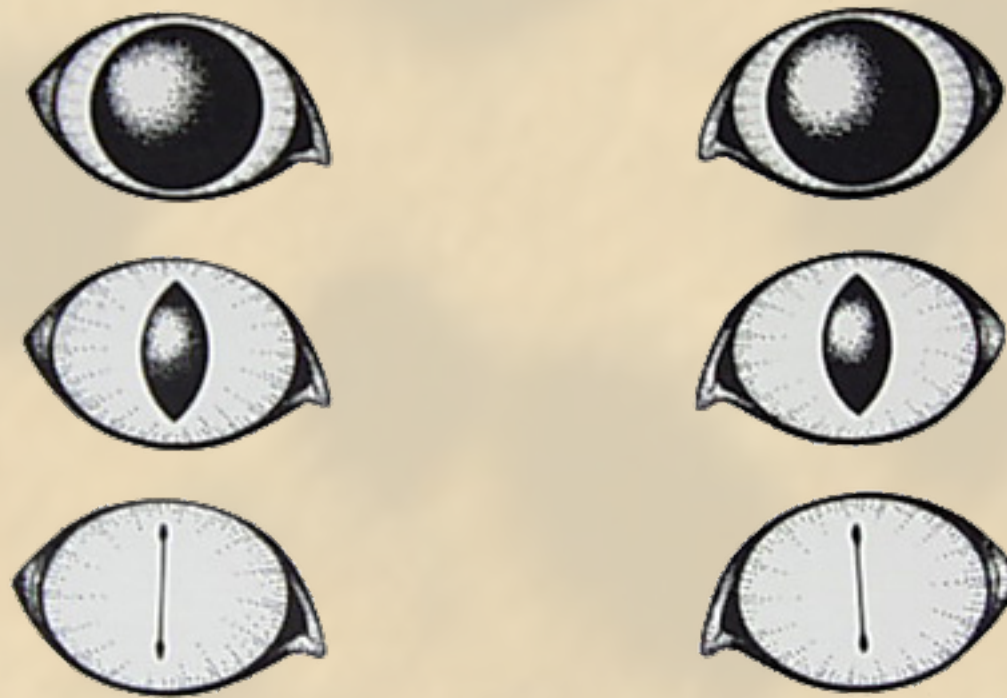


# HOW DO CAT EYES WORK?

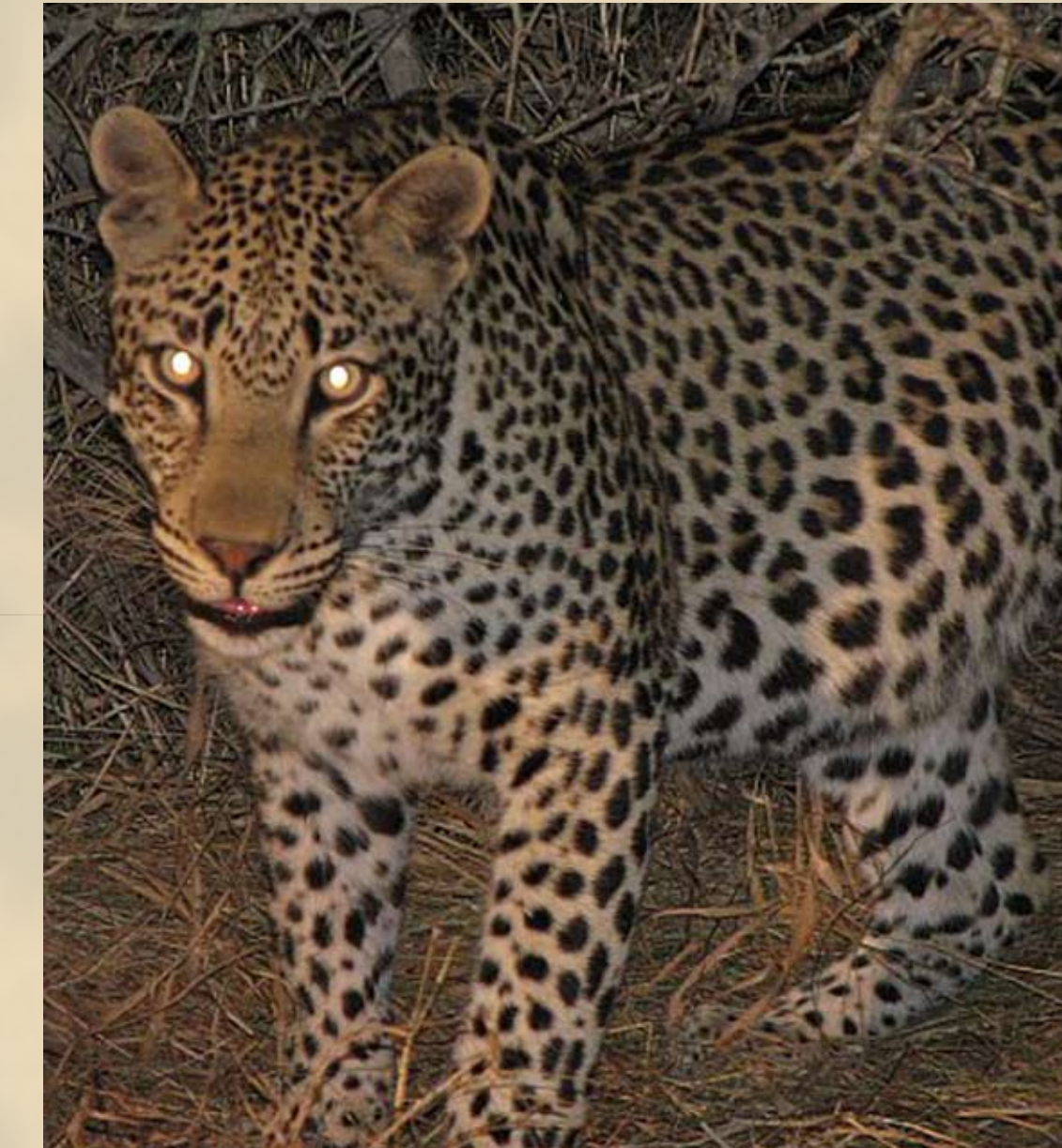


In low light or darkness, the cat pupil is able to open extremely wide. It must also be able to contract to a very small size to protect the retina in bright light. Cats have an elliptical shaped pupil controlled by a shutter-like muscle that dilates it and gives it the slit-like appearance in bright light. The eyes of big cats, like jaguars, appear more circular than other cats when dilated.

Cats, being mainly nocturnal, have large, well adapted eyes that function efficiently in the dark. Their eyes can work in 1/6 of the light needed for human vision.



The diagram to the left shows the stages of pupil dilation.



Have you ever wondered why cat eyes glow in the dark? The *tapetum lucidum* is positioned at the back of the eye and acts like a mirror

reflecting light back to the retina. This increases the amount of light that reaches the retina, and makes the eyes glow when hit by a beam of light.