Do cats see in the dark?

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Q. Can cats see in the dark?

A. Cats cannot see in total darkness, but they can see much better in semidarkness than we, or many other animals, can. This ability is due to the structure of the cat's eye.

For the size of his head, a cat has extremely large eyes. The eyeball is formed by several layers of tissue. The white part, called the 'sclera,' is made of tough fibrous tissue rich in blood vessels, which transport oxygen and nutrients to the contents of the eye. The clear outer portion that covers the eye is the 'cornea.' This is made up of extremely thin layers of cells arranged in a unique fashion so the cornea is transparent. The cornea allows light to enter unaffected into the eye.

The cat can open his iris (the colored portion of his eye) very wide to let in as much light as possible.

An animal's retina (the back of the eye) is composed of two major types of light-sensitive cells called 'rods' and 'cones.' Rods are responsible for magnifying light impulses. The cat has an increased number of rods. In humans, 4 out of 5 light-sensitive cells in our retinas are rods, in cats, 25 out of 26 cells are rods.

Cats also have a highly developed reflective area in the back of their eyes called the 'tapetum lucidum.' A number of animals, such as deer and raccoons also have this tapetum lucidum. That is what makes their eyes 'glow' at night when our car headlights shine in their faces.

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