Cat vision is designed for detecting motion, which comes in handy when looking for prey. There are 2 different types of receptors in the eye: rods and cones. Cones are used for detecting color and rods for detecting motion. Cats have more rods in their eyes and so they can't see color very well. While humans can see the full spectrum of color, cats can only see the purples, blues, yellows and greens. Reds, oranges and browns are likely seen as purple or grays. However, cats can see 6-10 times better than humans at night. This is because at the back of their eye, behind the retina there is a reflective lining called the tapetum. This lining reflects light back across the retina, which causes double the amount of light, allowing cats to see in near darkness. That's why cats' eyes look like they glow at night.

Cats have the largest eyeballs of all mammals with respect to body mass. Cats have a field of view of about 200 degrees.

Cats have about 500 taste buds.

Humans have about 8,000 taste buds.

Cats can't taste sweet flavors.

Humans can taste sweet, sour, salty, and bitter.

Since cats have a limited diet range they don't need to be able to taste a variety of things. Genetic testing has shown that cats lack a gene that would produce the sweet taste buds, which explains their special niche as a carnivore. Plants' taste appeal comes from their high sugar content and since cats can't taste the sugar, they would largely stay away from them.

Cats are 14 times more sensitive to smell than humans.

Cats have twice as many smell cells as humans.

Cats have a specialized organ on the top of their mouth, called the vomeronasal organ or the Jacobson's organ.

This is a bundle of olfactory nerves that allows the cat to store scent memories.

When a cat smells something interesting, he will pick up that smell on his tongue and then touch it tongue to the Jacobson's organ on the roof of his mouth. The Jacobson's organ will store it and analyze it so that the cat will remember it the next time he catches that scent.

Cats can hear at 60,000 hertz.

Humans, at birth, can hear at 20,000 hertz and that gets worse as we age.

Cats can swivel their ears and because of this they can pinpoint prey within three inches when it is about one yard away.

Humans can hear a lion's roar at 2 miles.

Cats purr at 26 hertz, which is the same as a diesel engine.

Cats' whiskers are used for navigation and sensation.

The top two rows of whiskers can be moved independently for more precise details.

The whiskers give them information about air movements and air pressure as well as whatever they touch.

Whiskers can feel vibrations in the air that allows cats to know not only where an object is, but also its size and shape without ever touching it.

Whiskers are a type of vibrissae that are found all over a cat's body, including its eyebrows, inside the front legs and along the back legs.