

■ **Characteristics of Primates**

1. Primates have hair on all or some part of their faces and bodies.
2. Primates generally have large braincases in rounded skulls.
3. Enlargement and increasing complexity of brain is one of the distinctive features of primates. The part of the cerebral hemispheres of the brain, particularly the areas concerned with sight is developed. Brain development supports the excellent hand-eye coordination that is characteristic of primates.
4. Primate eyes are also large and have stereoscopic vision. Eyes are located in the front of the head, producing a large area of overlapping vision that gives excellent depth perception.
5. Primates have evolved a reduced muzzle.
6. The diurnal primates have color vision which helps them to detect motionless objects, such as prey or predators by their color contrast, on the other hand, nocturnal primates lack color vision.
7. Relative reduction in the sense of smell.
8. Hands and feet possess grasping ability. Each hand and feet has 5 digits. Most of them have flat nails on their digits. Tactile pads with sensory nerve fibres are present at the end of digits.
9. The thumb and the great toe or one of them is opposable. Although the degree of this opposition varies among the species. All other primates grasp better with their big toes than their thumbs.
10. The position of the foramen magnum has shifted toward the centre of the base of skull in the advanced group of primates.
11. They are homoeothermic i.e. they have the ability to maintain a constant body temperature is a characteristic feature of primates.
12. Primates have at least 3 types of teeth. Most of the living families are consistent in their dental formulas, which have 2 incisors, 1 canine (fang-like in the males of some species), 2 or 3 premolars, and 2 or 3 molars in each quadrant of the jaw.
13. Primates have clavicles (collar bones) that help to support their arms, aiding in climbing trees.

14. The middle ear of primates is protected inside a bony structure.
15. Tails vary from non-existent to quite long. The most noteworthy are the prehensile tails of some New World monkeys.
16. All non-human primates are quadrupedal.
17. Ischial callosities ease this posture for most Old World monkeys and for gibbons.
18. Most primates have a single pair of mammary glands in the female and a pendulous penis in the males. The testes are descended into scrotum.
19. The typical female reproductive cycle is menstrual, not a "heat," but climatological conditions may produce a breeding season. Males generally will mate at any time, not just in a specific breeding season (prosimians are often exceptions). In some species, females exhibit sexual swellings that indicate readiness to mate (often in species whose females compete for males).
20. Longer gestation period.
21. Longer postnatal growth,
22. Longer life span.