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- **Paleontological (fossil) evidence** was also given for evolution. The dead remains of the organisms are known as fossils. For example, Archaeopteryx possess features of both reptiles and birds. This concludes birds evolved from reptiles. There are two methods for finding the age of the fossils- one is carbon dating and other is by digging. In digging method, the deeper the fossil is, the older it is. **Biogenetic law** states that stages of development of an animal embryo are same as adult animal stages.
- **Vestigial organs** are rudimentary in nature. They have lost their function through evolution. For example, appendix in humans, muscles of ears, wisdom tooth etc.

Evolution by Stages

Evolution can take place in stages also. For example, evolution of eyes. Flatworms have rudimentary eyes, whereas insects possess compound eyes. In the last humans have binocular vision.

Evolution of feathers is also an example of evolution by stages. For example, dinosaurs have feathers but unable to fly. But later on birds used feathers for flying.

Molecular Phylogeny

It is also an evidence for evolution. According to this, changes in DNA during reproduction are the basic events of evolution. Organisms which are related to each other most distantly, they will have greater differences in their DNA.

Evolution by artificial selection

Artificial selection selects special phenotypic characters to produce organism with enhanced characteristics. For example, plants which are disease or insect resistance. Artificial selection can be used to produce different cabbage varieties such as broccoli, cauliflower, red cabbage etc.

Human Evolution

Excavating, fossils, time dating and determination of DNA sequences are used to study human evolutionary relationships. Study of human evolution indicates that all of us belong to a single species that evolved in Africa and then spread across the world in stages.

Stages of human development are as follows-

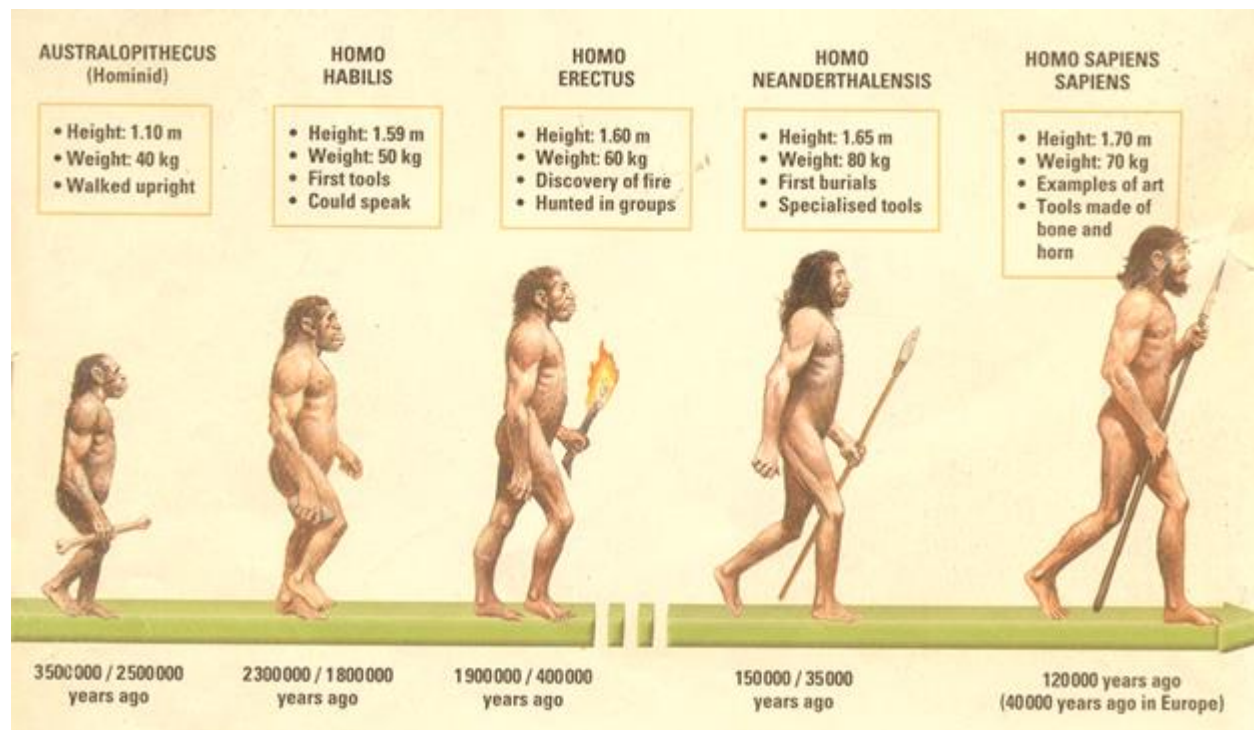


Fig. 6. Stages of human development