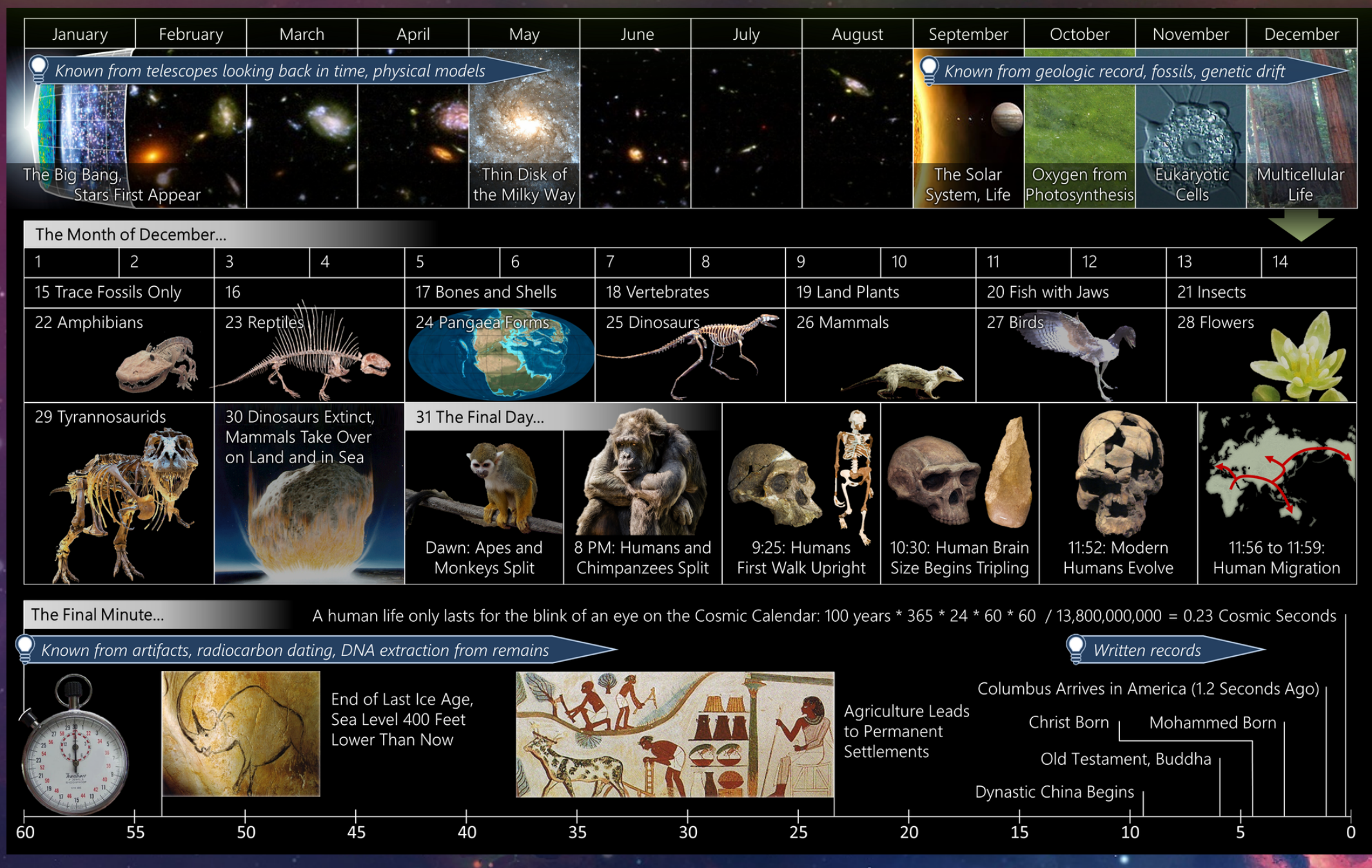


COSMIC CALENDAR



Cosmic calendar is a way to visualize the chronology of universe. It starts with the Big Bang and ends with our first steps on the Earth. It is displayed on the scale of the Earth's year if one day lasted 37.8 million Earth's years. At this scale, there are 437.5 years per second and 1.575 million years per hour. The concept was popularized by Carl Sagan in his book *The Dragons of Eden* and on his television series – *Cosmos*.

| Date | Bya (Billion Years Ago) | Event |
|---------------|-------------------------|---|
| 14 Sep | 4.1 | First known remains of biotic life (discovered in 4.1 billion-year-old rocks in Western Australia). ^{[5][6]} |
| 21 Sep | 3.8 | First Life (Prokaryotes) ^{[7][8][9]} |
| 30 Sep | 3.4 | Photosynthesis |
| 29 Oct | 2.4 | Oxygenation of Atmosphere |
| 9 Nov | 2 | Complex Cells (Eukaryotes) |
| 5 Dec | 0.8 | First Multicellular Life ^[10] |
| 7 Dec | 0.67 | Simple Animals |
| 14 Dec | 0.55 | Arthropods (ancestors of insects, arachnids) |
| 17 Dec | 0.5 | Fish and Proto-amphibians |
| 20 Dec | 0.45 | Land Plants; Ordovician–Silurian extinction events |
| 21 Dec | 0.4 | Insects and Seeds |
| 22 Dec | 0.36 | Amphibians; Late Devonian extinction |
| 23 Dec | 0.3 | Reptiles |
| 24 Dec | 0.25 | Permian–Triassic extinction event; 57% of all biological families and 83% of all genera die |
| 25 Dec | 0.23 | Dinosaurs |
| 26 Dec | 0.2 | Mammals; Triassic–Jurassic extinction event |
| 27 Dec | 0.15 | Birds |
| 28 Dec | 0.13 | Flowers |
| 30 Dec, 06:24 | 0.065 | Cretaceous–Paleogene extinction event, non-avian dinosaurs die out ^[11] |

