

In [biology](#) and [cytogenetics](#), it is called **chromosome** [a](#) (from [the Greek](#), *-chroma*, color and , - - *soma*, body or element) to each of the highly organized structures, formed by [DNA](#) and proteins, which contains most of the [genetic information](#) of a living being.

In cell divisions ([mythosis](#) and [meiosis](#)) the chromosome presents its best known form, well-delineated bodies in the form of X, due to its high degree of compaction and duplication.

In the [interface](#) they cannot be visualized by the optical microscope in a clear way as they occupy discrete [chromosome territories](#). In [eukaryote cells](#) and [arches](#) (unlike bacteria**bacterias**), DNA will always be found in [the](#) form of [chromatin](#), i.e. strongly associated [with proteins](#) called [histones](#) and non-histones. Chromatin, organized in chromosomes, is found in the nucleus of eukaryote cells and is seen as a tangle of thin strands. When the process of duplication and division of the genetic material called ([cariocinesis](#)) begins, this tangle of strands begins a phenomenon of progressive condensation that allows to visualize each of the chromosomes.