

The to eukaryotic  
chromosomes. the  
length of genome



**ASSIGN  
BUSTER**

The RNA containing viral chromosomes are composed of a linear, single-stranded RNA molecule and occur in some animal viruses (e.

g., poliomyelitis virus, influenza virus, etc.); most plant viruses, (e. g., tobacco mosaic virus, TMV) and some bacteriophages. Both types of viral chromosomes are either tightly packed within the capsids of mature virus particles (virions) or occur freely inside the host cell. E.

g. Bacteriophage virus 2. Prokaryotic chromosome: Prokaryotes usually have only one chromosome and it bears little morphologically resemblance to eukaryotic chromosomes. The length of genome is smallest in RNA virus. In this case the chromosome exists as a highly folded and coiled structure dispersed throughout the cells. The folded nature of chromosome is due to the incorporation of RNA with DNA. The interaction of RNA with single molecule of DNA results the looping of DNA molecule causing the reduction of the structure. 3.

Eukaryotic chromosomes: The genetic information of most prokaryotes is stored in a single chromosome but in eukaryotes it is subdivided into many chromosomes and their number depends upon the species of organism. The chromosomal material is called as chromatin. It is amorphous and randomly distributed throughout the nucleus. But when cell prepares for mitosis or meiosis the chromatin condenses and assembles e.

g. In human chromosome length is 5 cm but due to proper packaging it become few ? m in diameter. In plants source of chromosome study is root tips, shoot tips, leaf and flower. In animal's young larvae, salivary glands, bone marrow, gonads etc.

<https://assignbuster.com/the-to-eukaryotic-chromosomes-the-length-of-genome/>

were used for chromosome studies.