

Genes and Chromosomes

- Chromosomes are long lengths of _____, with _____ along them. A _____ is a _____ factor made up of a _____ of DNA that influences a certain _____. It occupies a specific location on a chromosome, called a _____. The entire _____ sequence of the human _____ was sequenced in the _____ project.
- The _____ size differs across species. This is the total _____ of all the DNA in an organism measured in the number of millions of _____ (b.p).

Organism (scientific name)	Organism (common name)	_____ Size (millions of b.p)
	_____ phage	
<i>E. _____</i>		
<i>D. melanogaster</i>		
<i>H. sapiens</i>		
<i>P. japonica</i>		

- The number of _____ is not the same in all eukaryotic organism. Complete the table:

Organism (scientific name)	Organism (common name)	Number of genes
<i>P. _____</i>		

- The various forms of _____ are called _____. They differ by only a few _____. New ones can be formed by _____.

5. _____ anemia arose due to a base _____. This causes the _____ amino acid to change from _____ to _____. This impacts the 3D shape of the hemoglobin _____.

6. Complete the schematic showing how this mutation impacts an individual when the _____ is expressed.

