

a

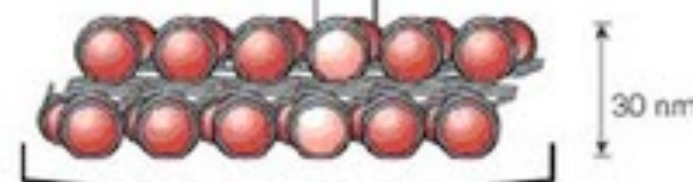
Short region of
DNA double helix



"Beads on a string"
form of chromatin



30-nm chromatin
fibre of packed
nucleosomes



Section of
chromosome in an
extended form



Condensed section
of chromosome



Entire mitotic
chromosome



rough strain
(nonvirulent)



mouse lives

smooth strain
(virulent)



mouse dies

heat-killed
smooth strain

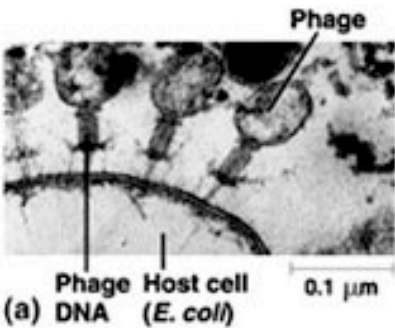


mouse lives

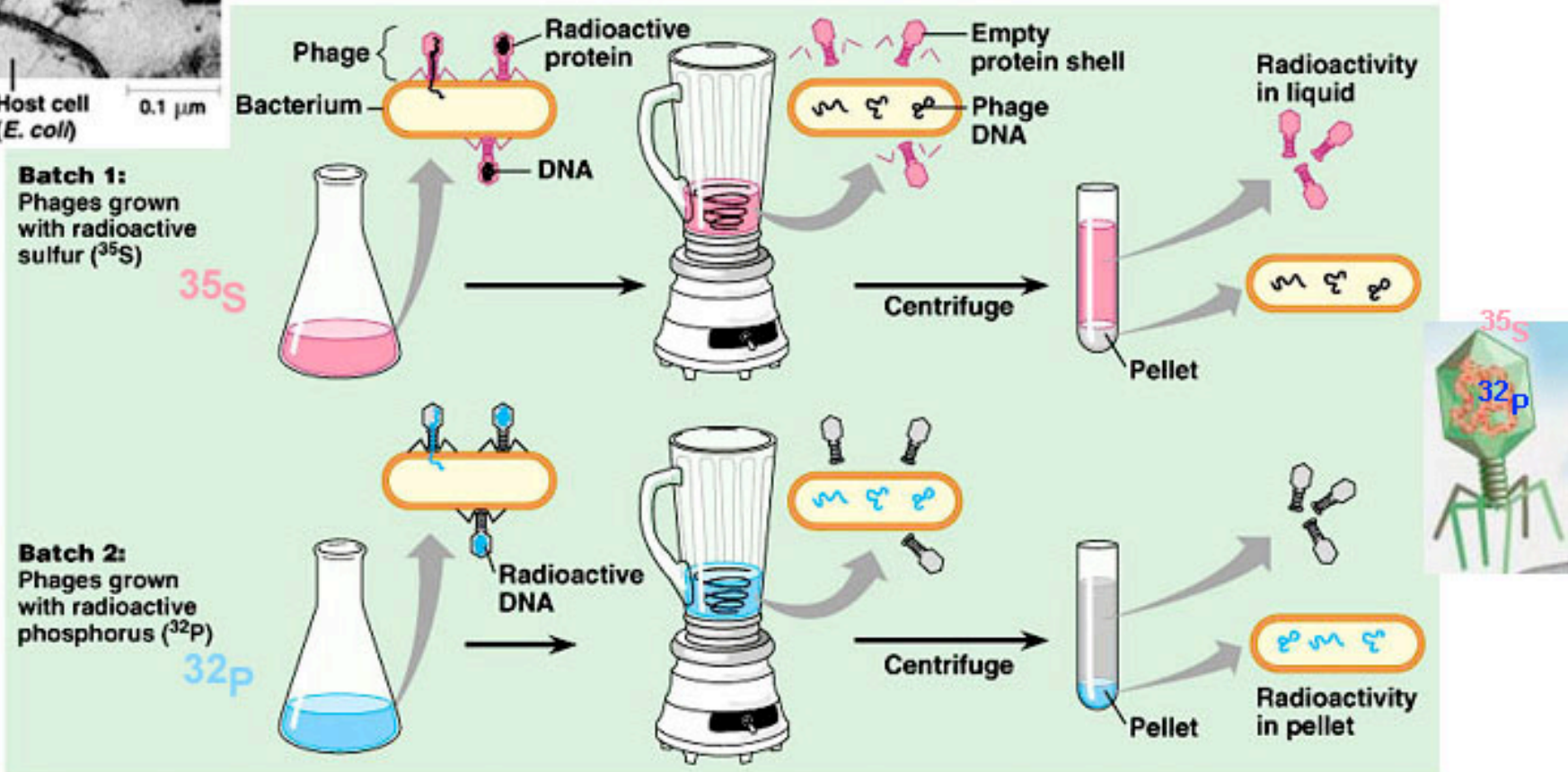
rough strain &
heat-killed
smooth strain



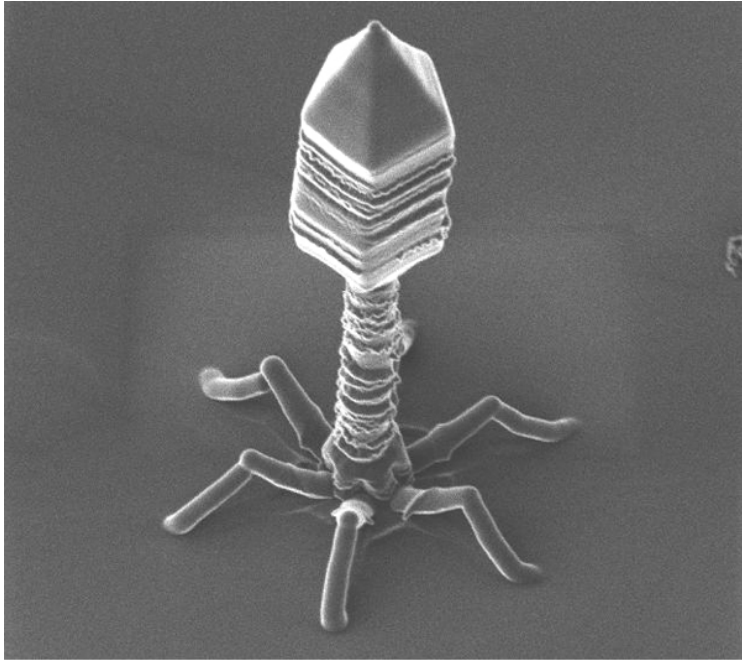
mouse dies



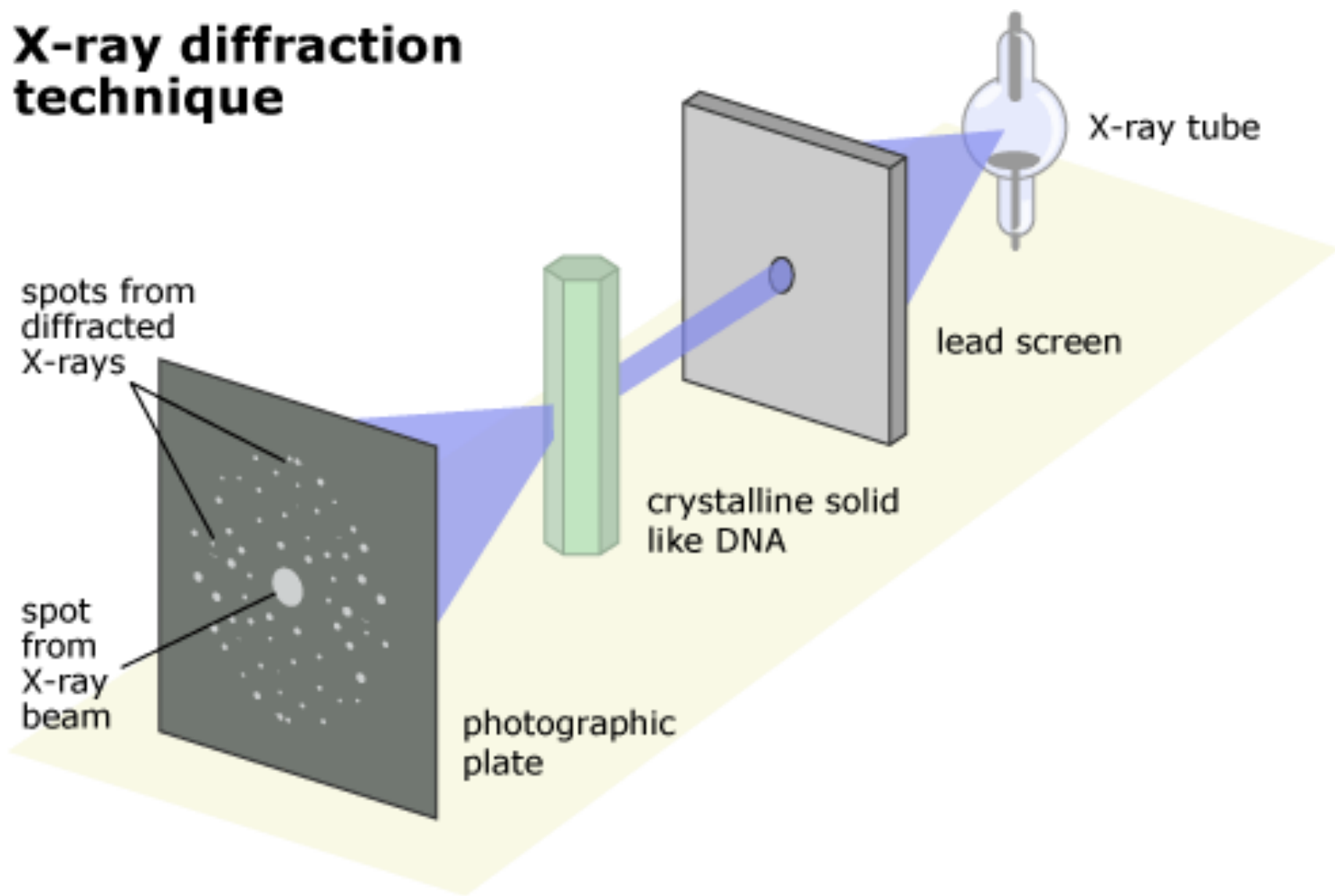
- 1 Mix radioactively labeled phages with bacteria. The phages infect the bacterial cells.
- 2 Agitate in a blender to separate phages outside the bacteria from the cells and their contents.
- 3 Centrifuge the mixture so bacteria form a pellet at the bottom of the test tube.
- 4 Measure the radioactivity in the pellet and the liquid.

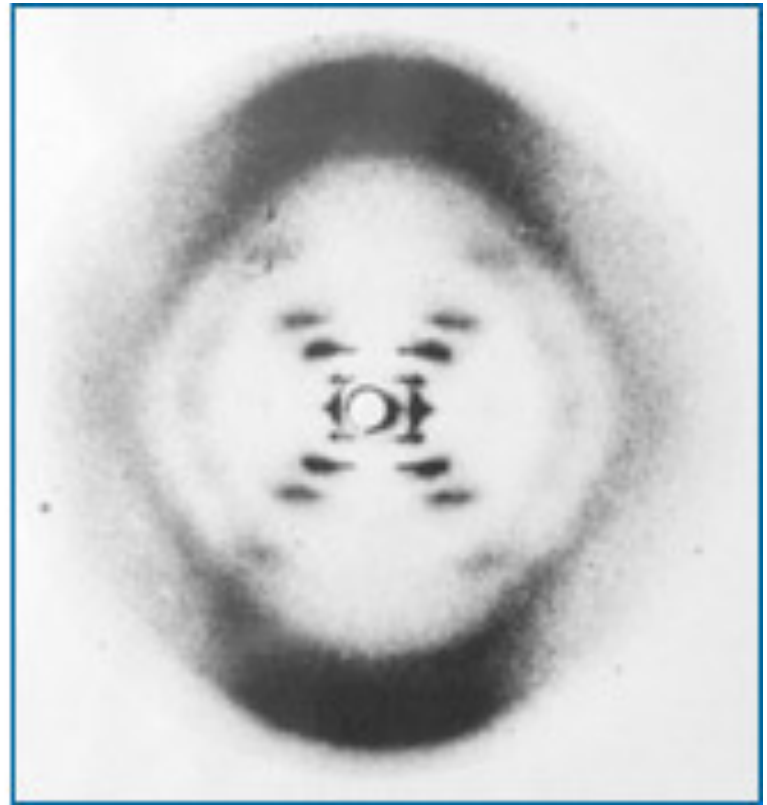
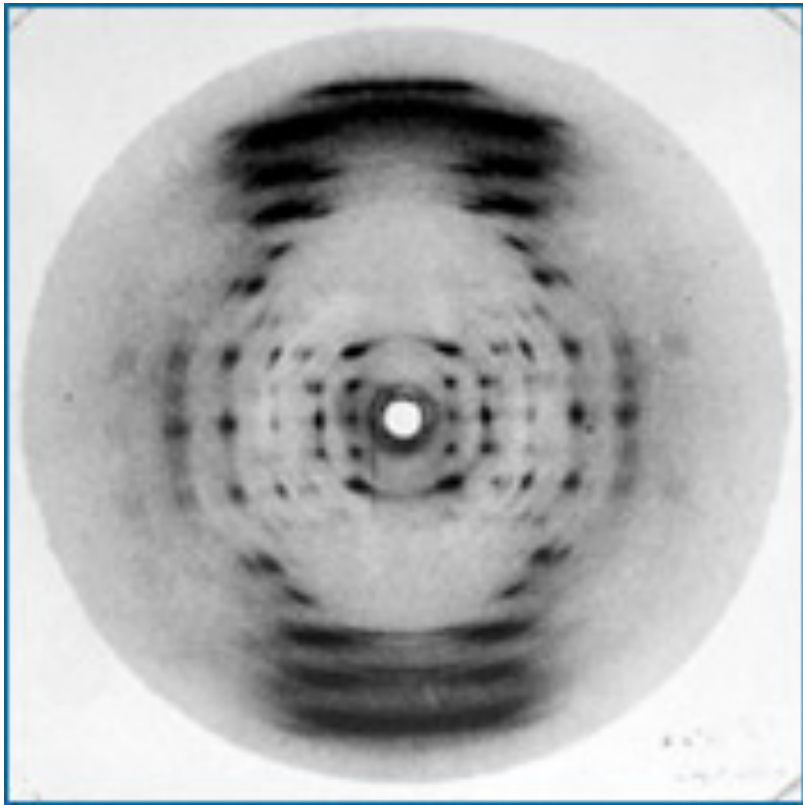


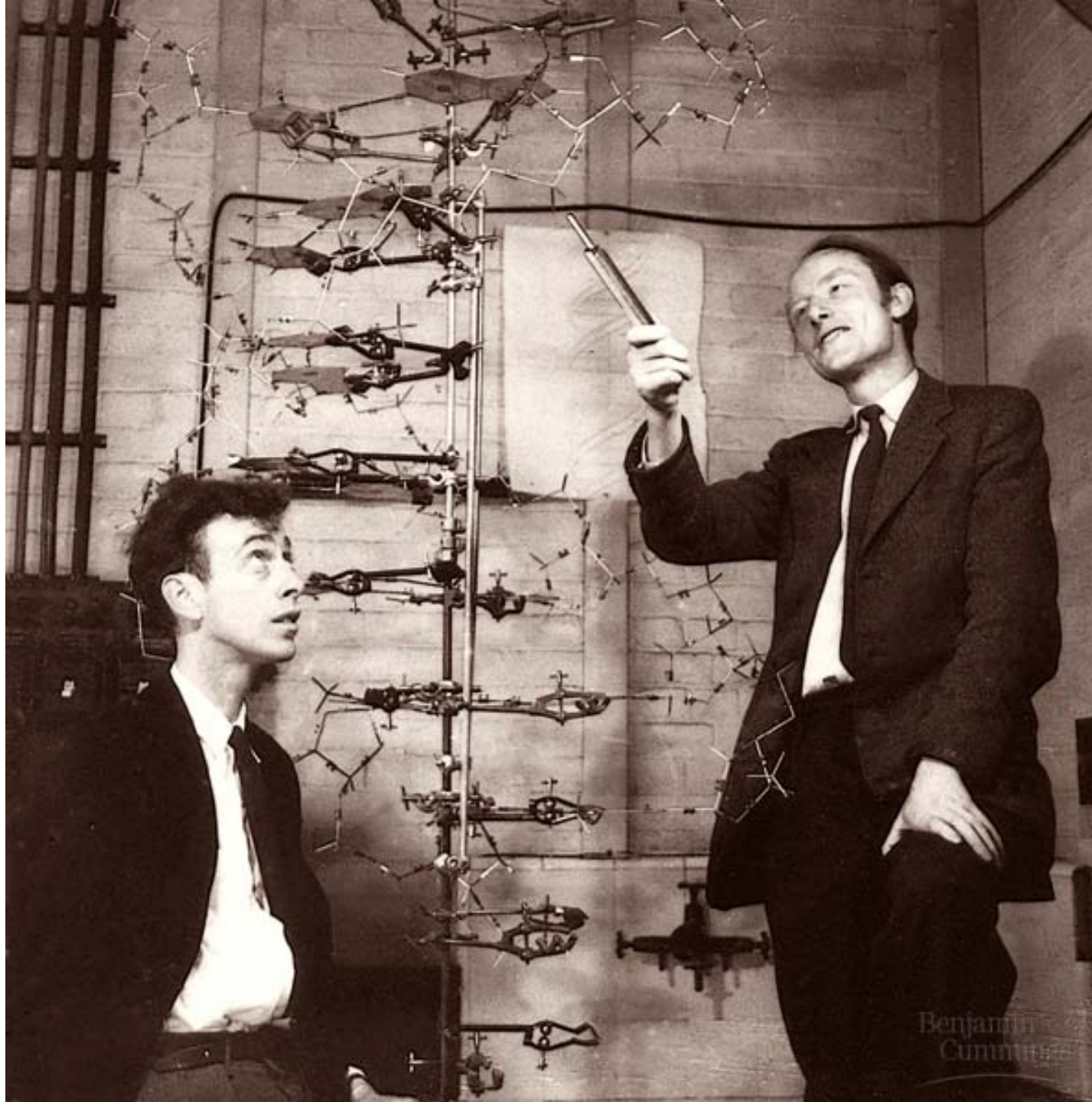
(b) The experiment showed that T2 proteins remain outside the host cell during infection, while T2 DNA enters the cell.



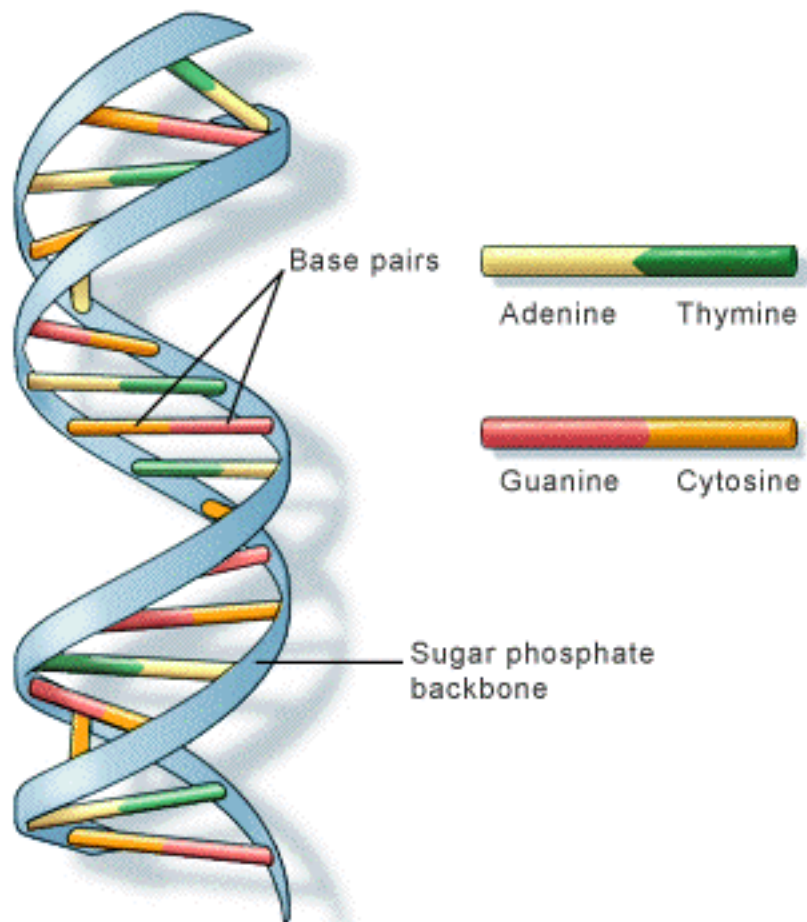
X-ray diffraction technique



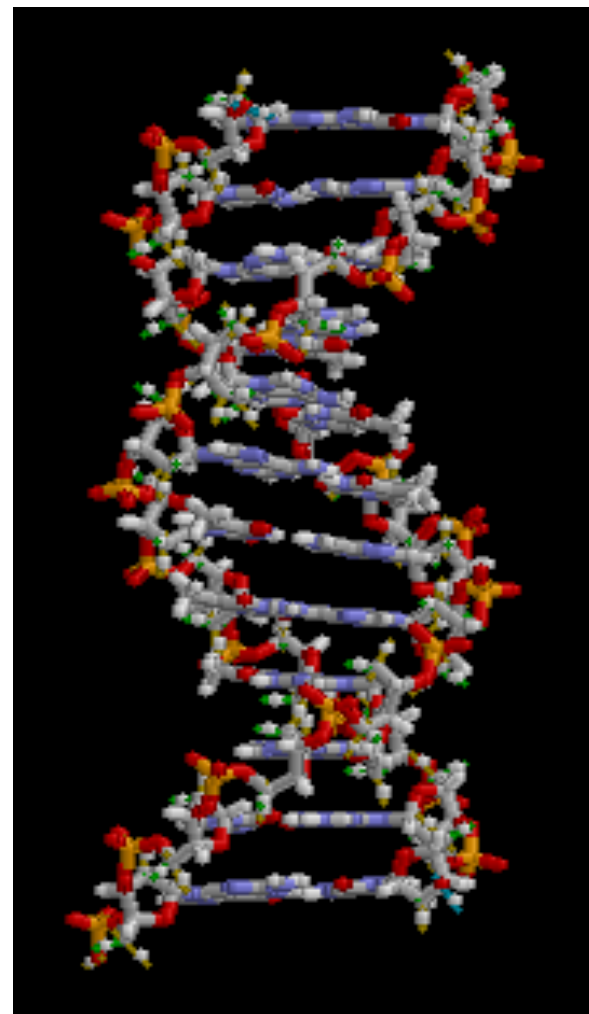


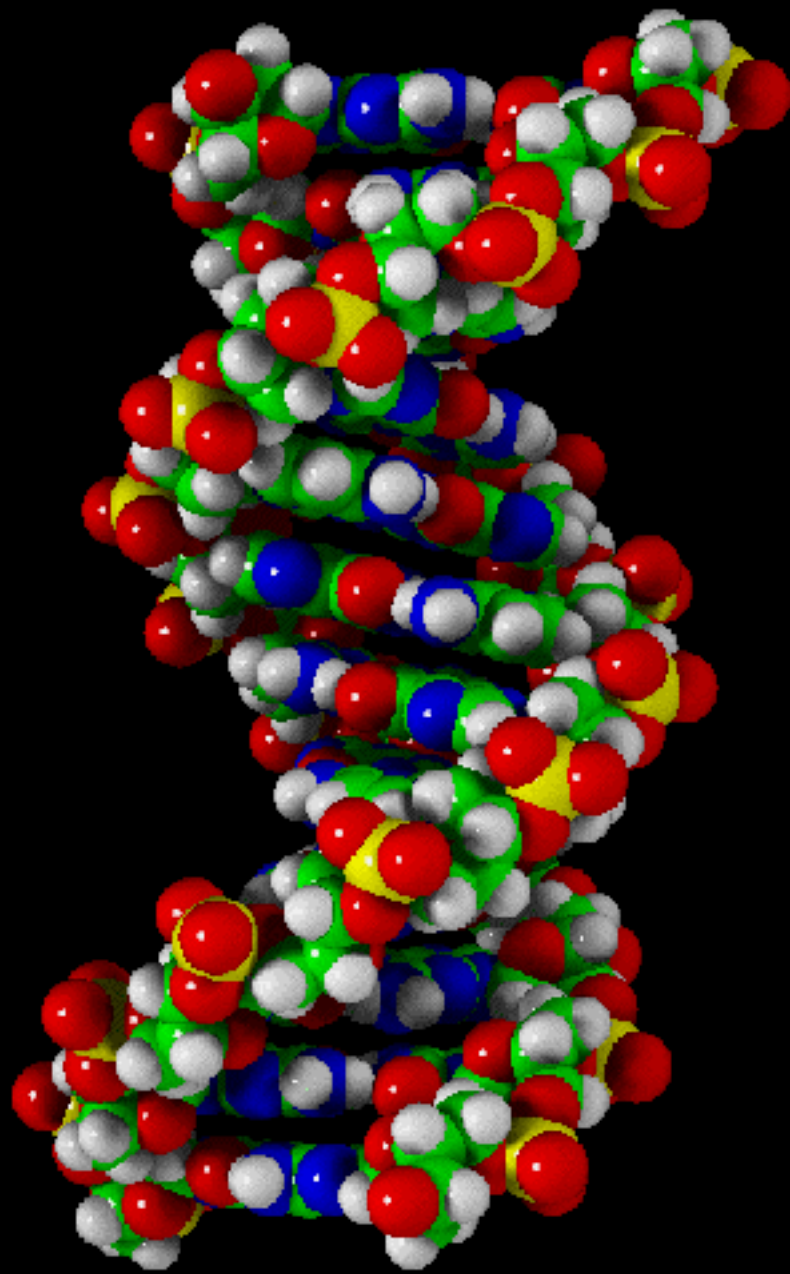


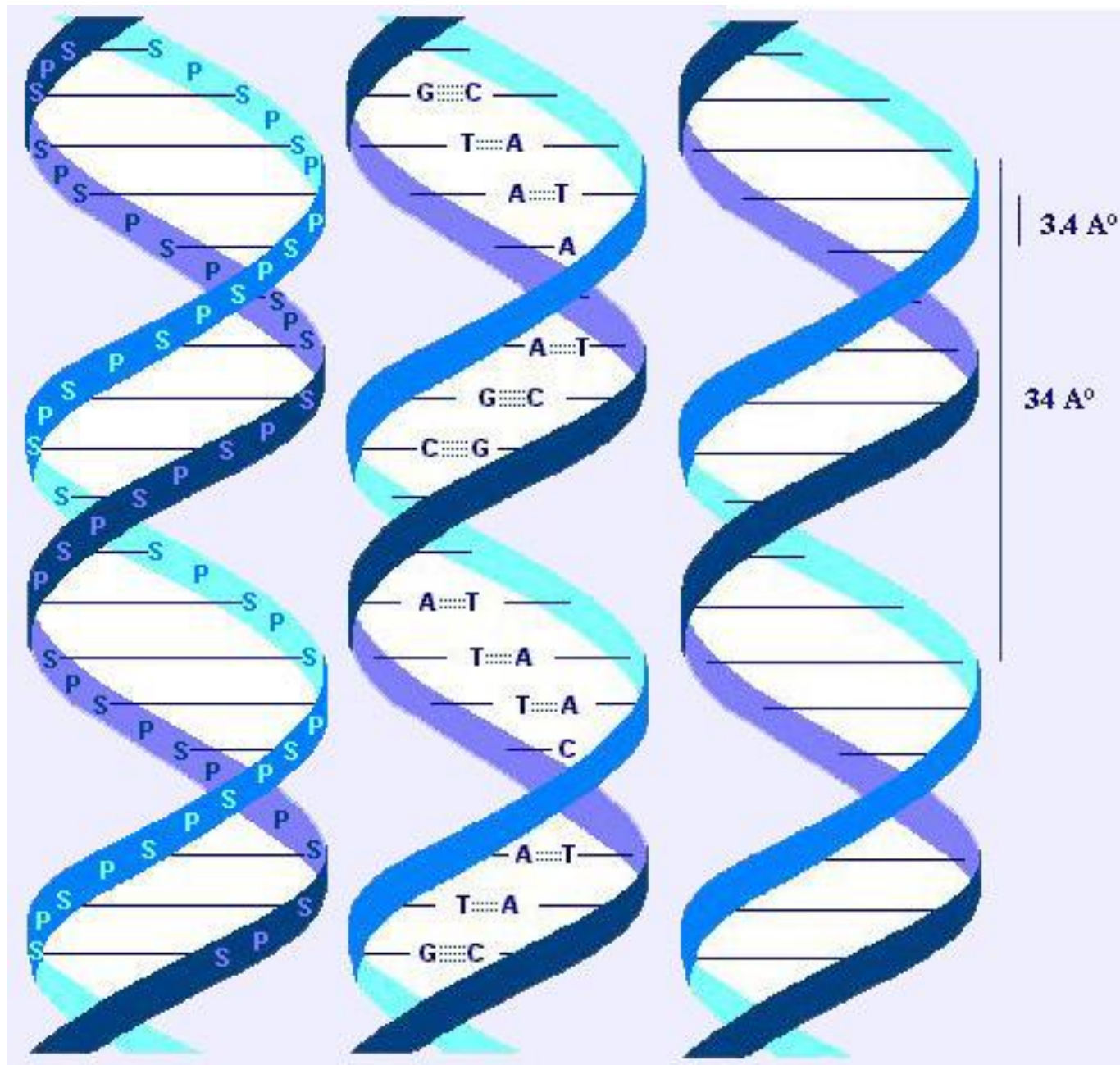
Benjamin Franklin
Cunningham

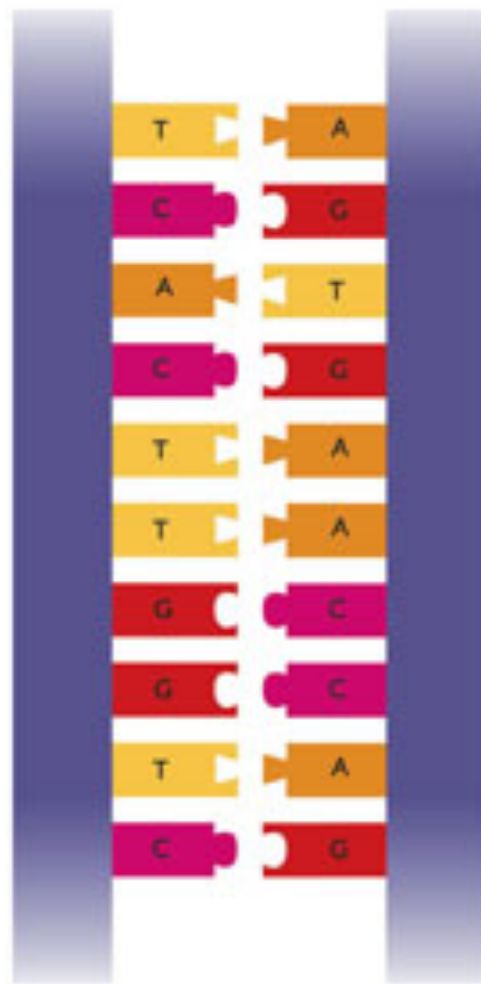


U.S. National Library of Medicine

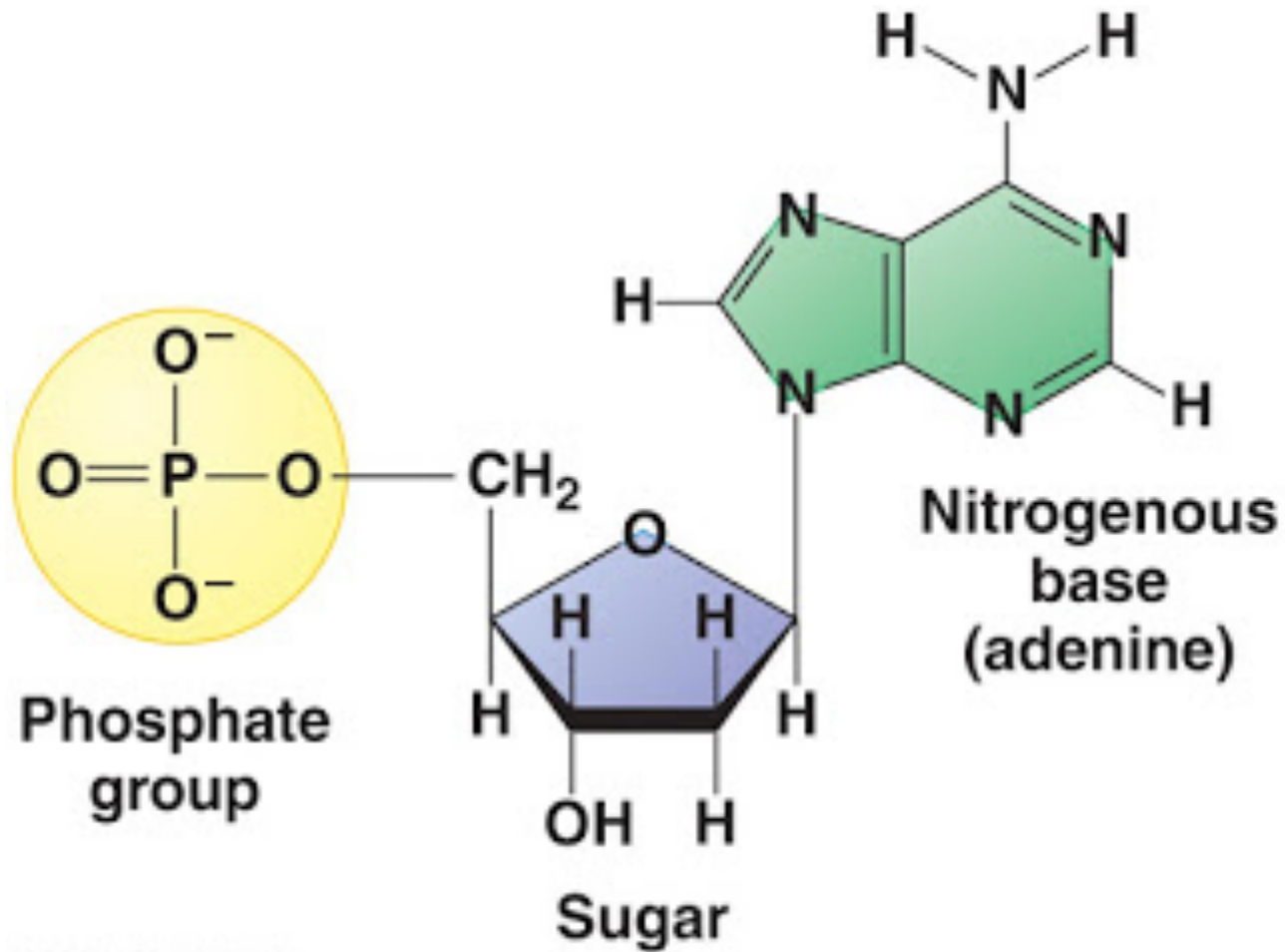




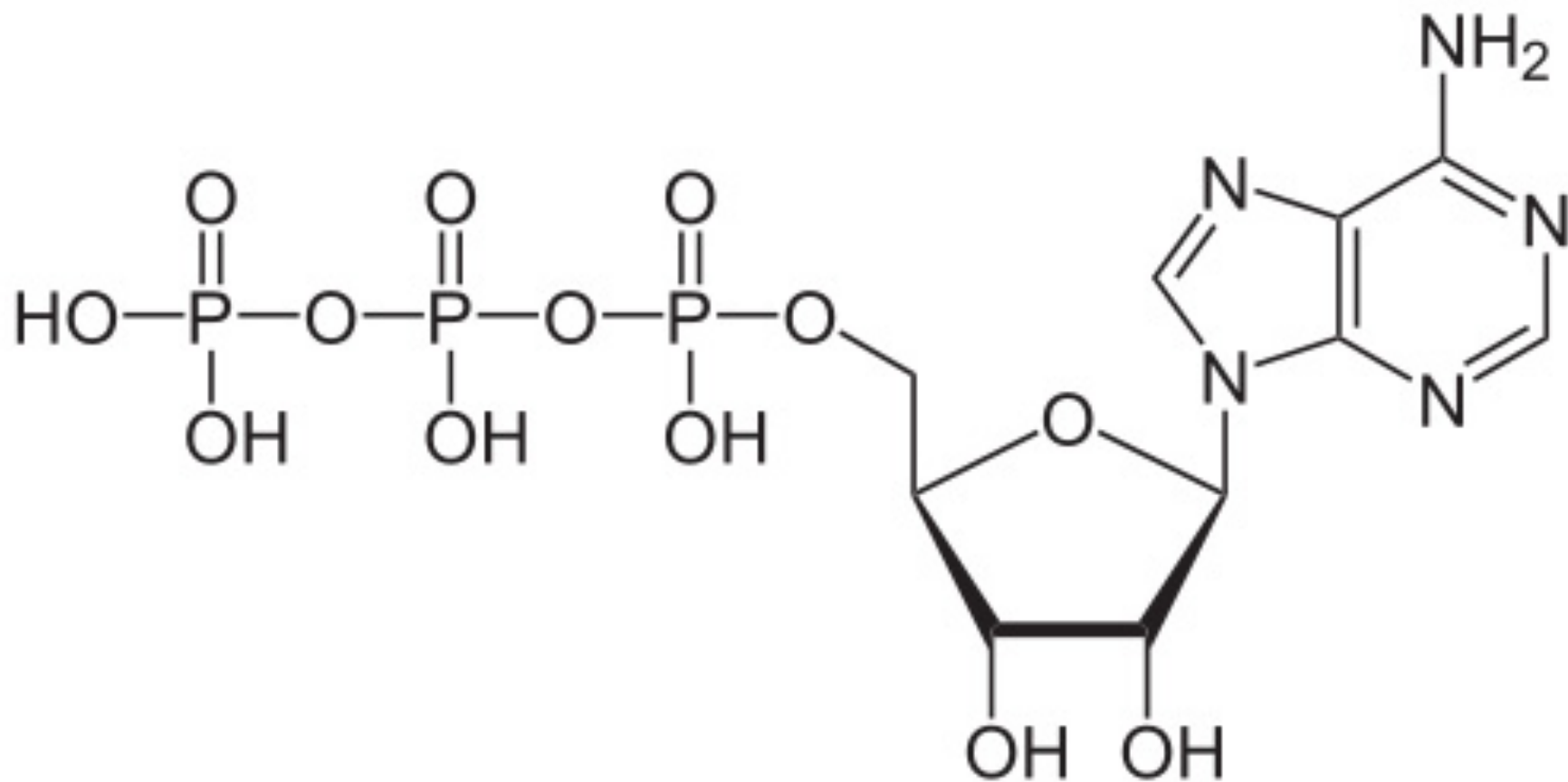


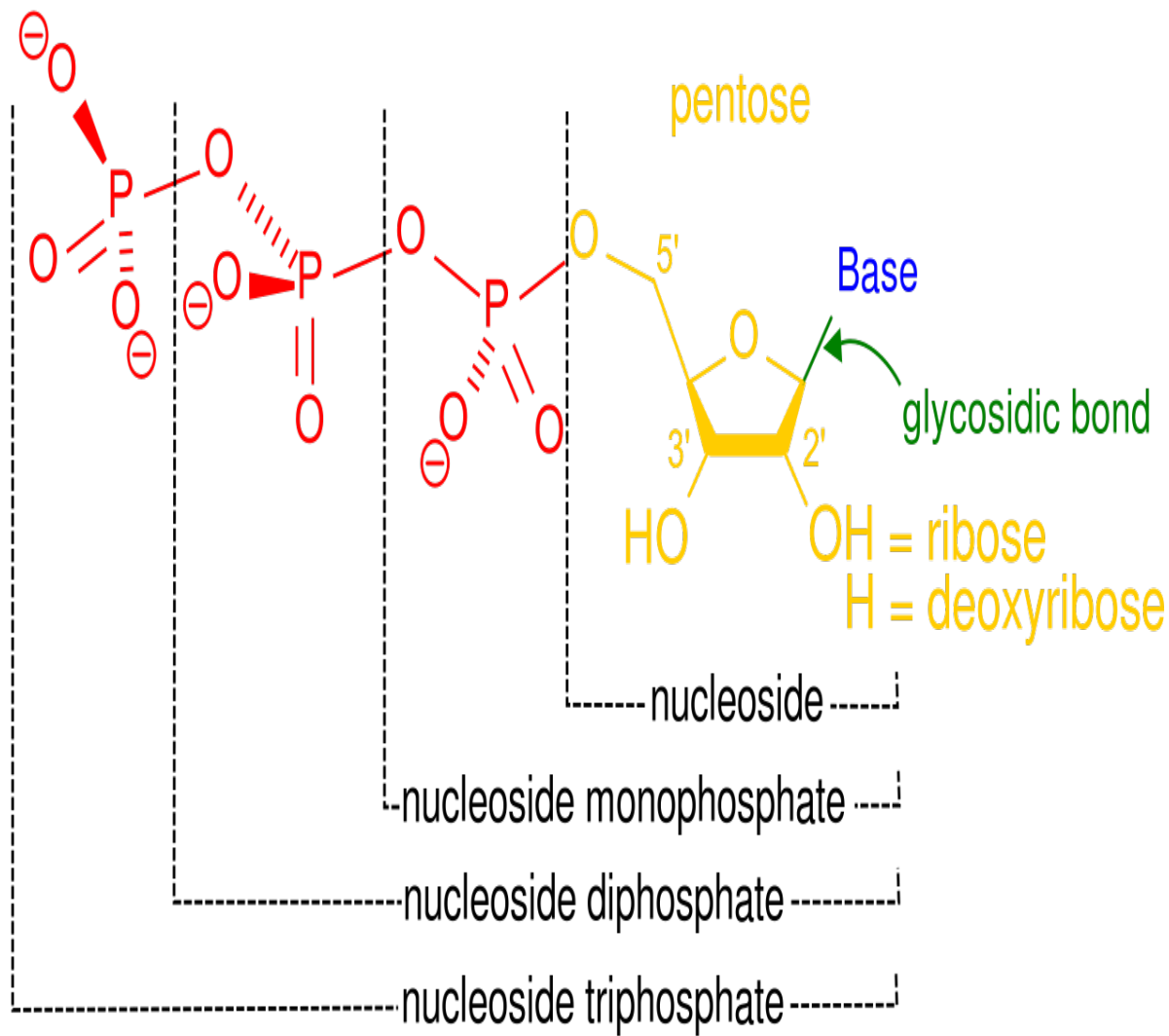


Nucleotide

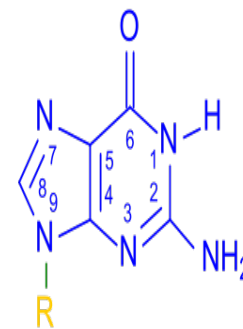
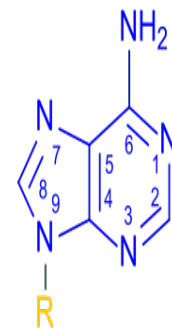


Nucleoside Triphosphate

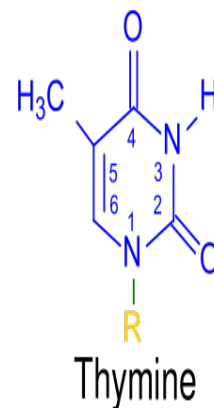
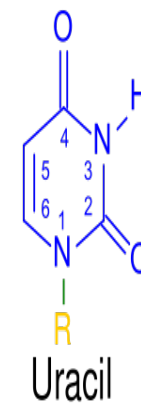
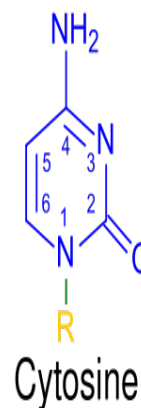




Purines



Pyrimidines



Purines

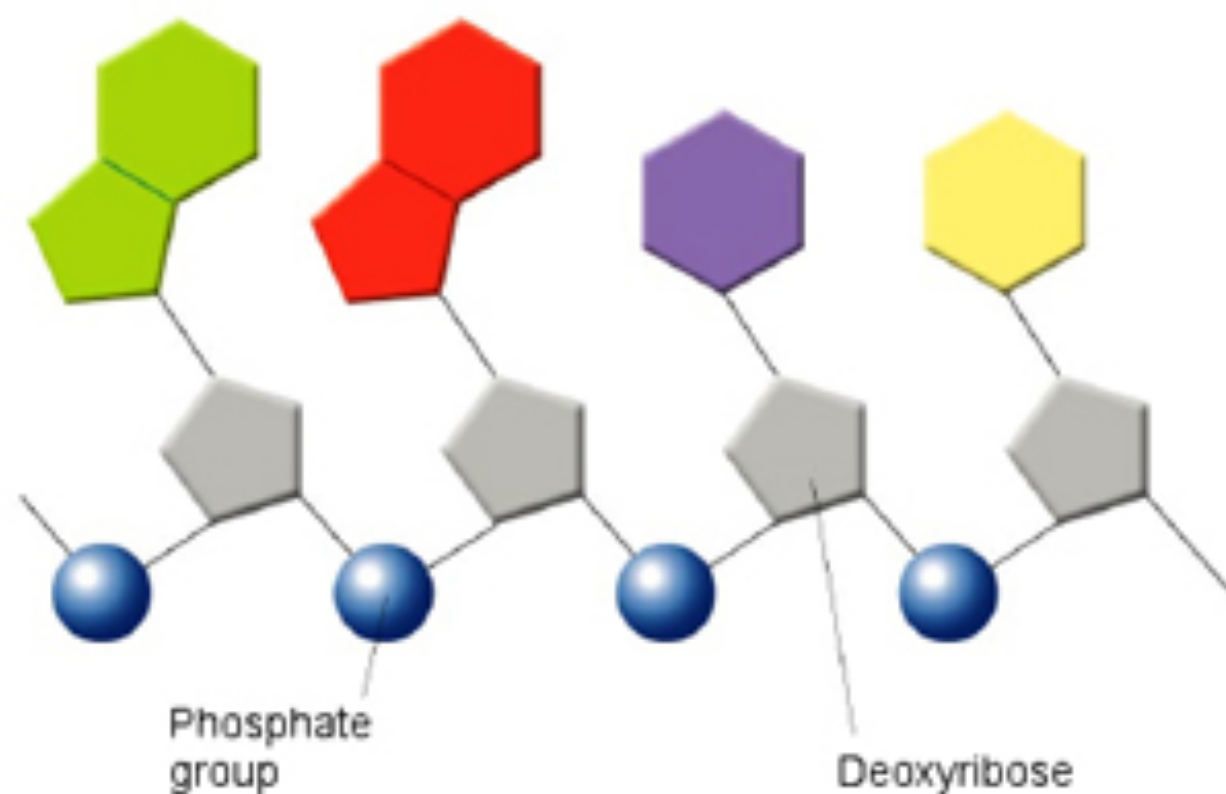
Adenine

Guanine

Pyrimidines

Cytosine

Thymine



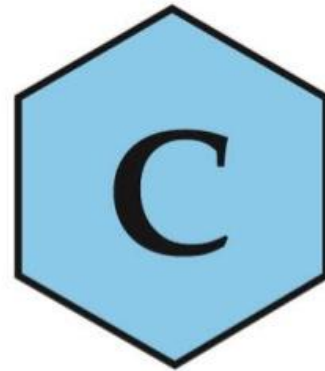
Chargaff's Rules



=

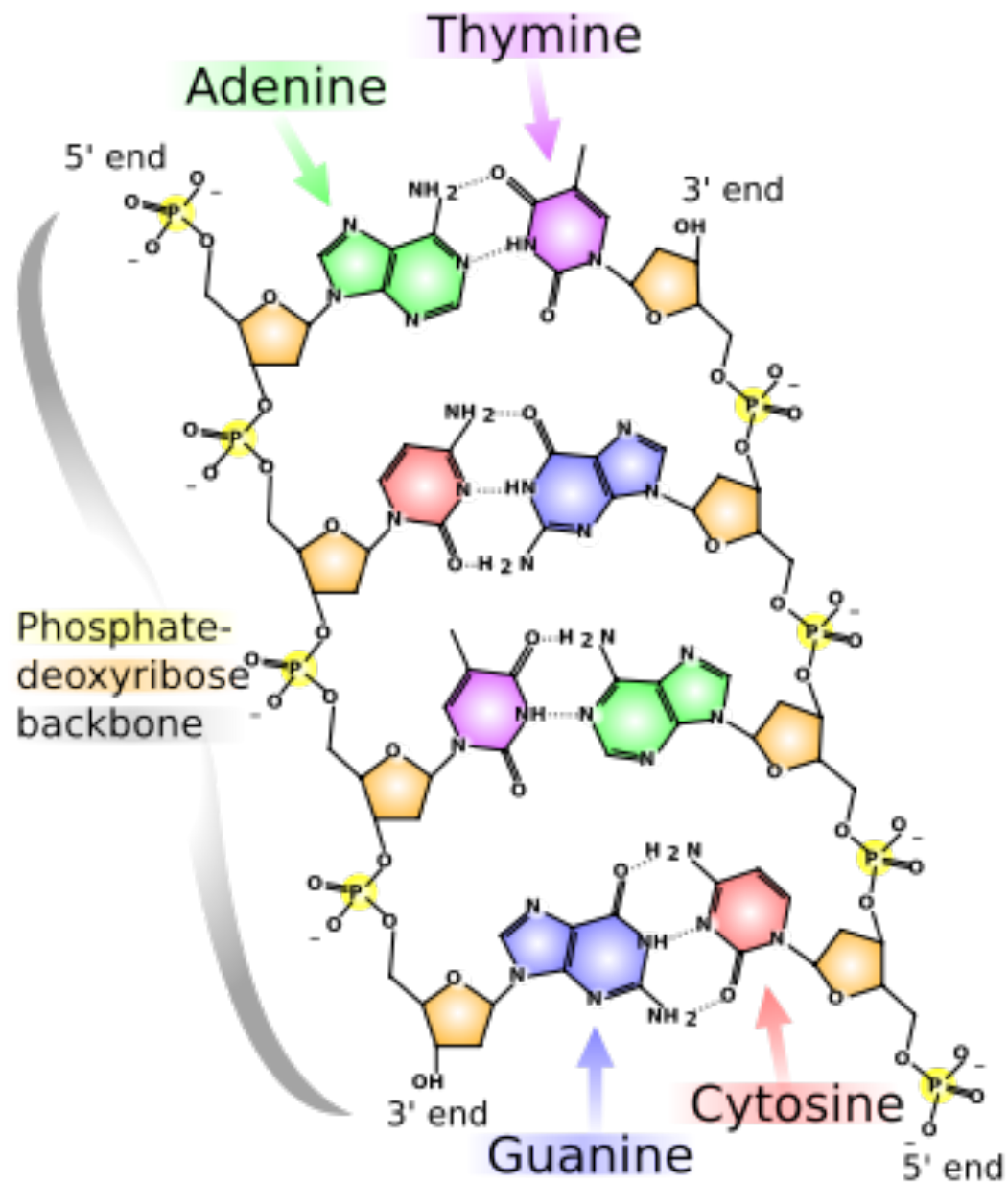


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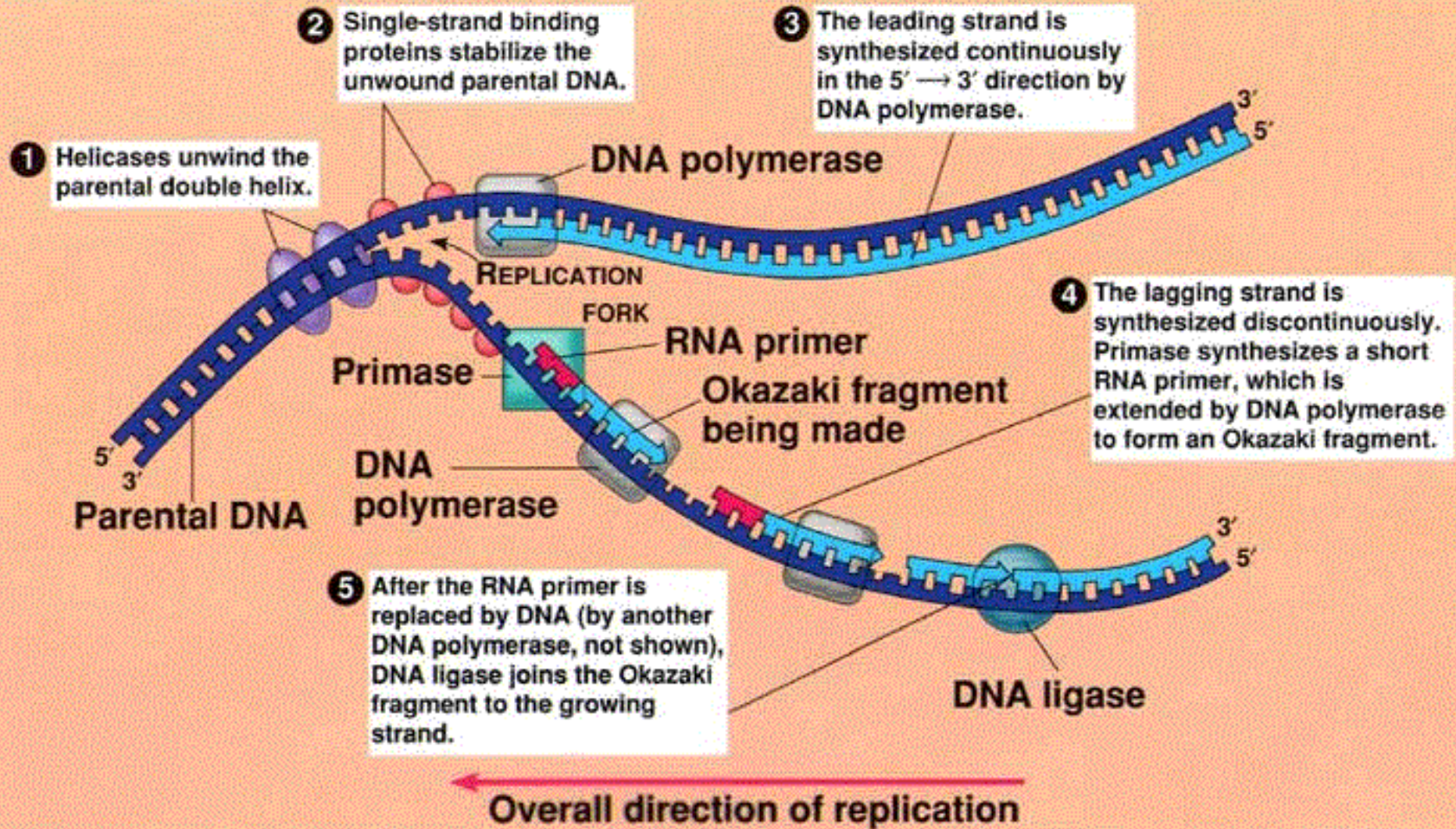


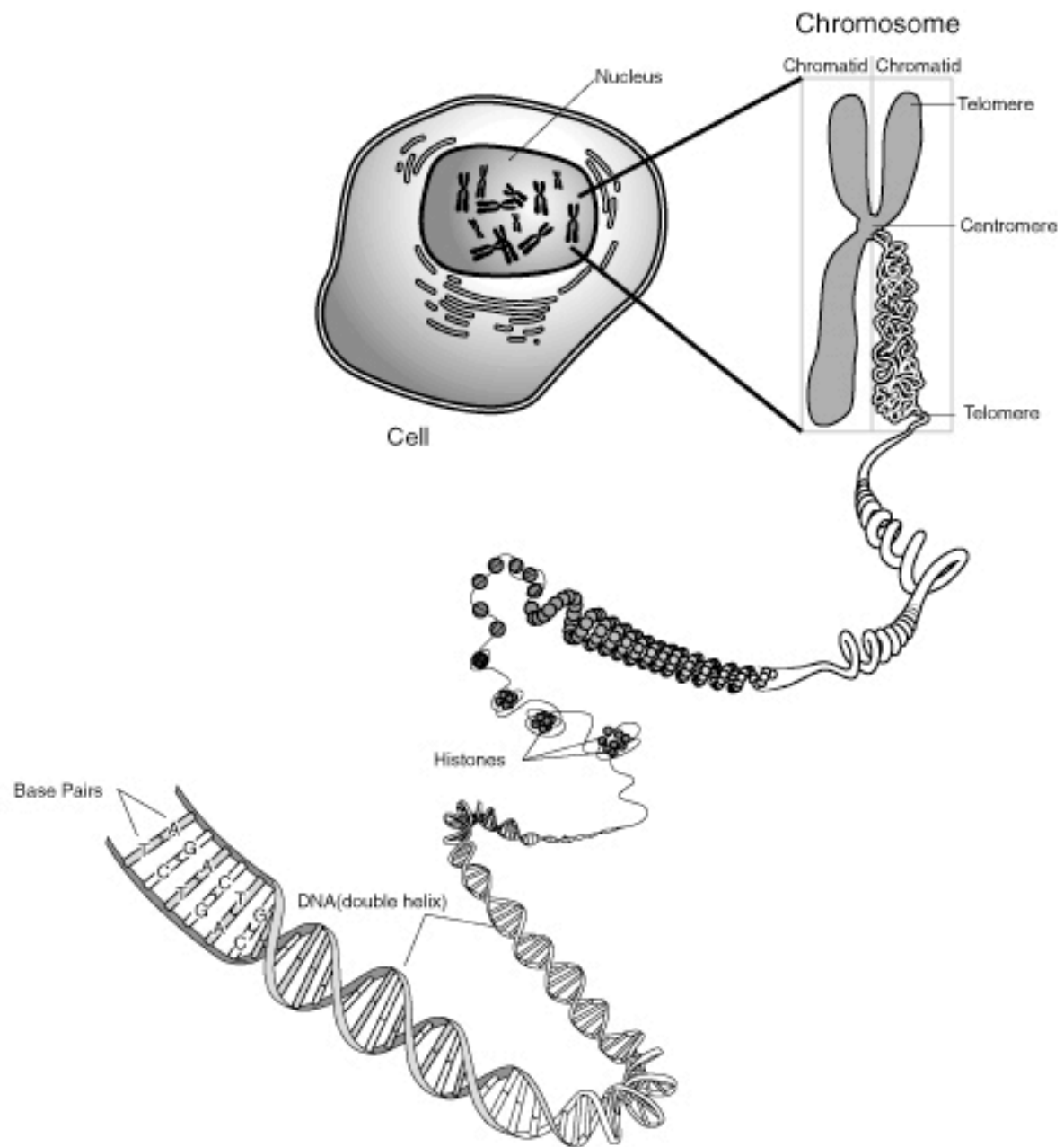
Purines

= Pyrimidines



A SUMMARY OF DNA REPLICATION





a

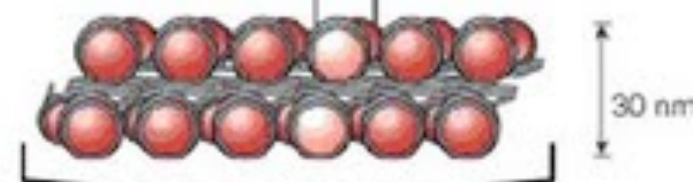
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Section of
chromosome in an
extended form

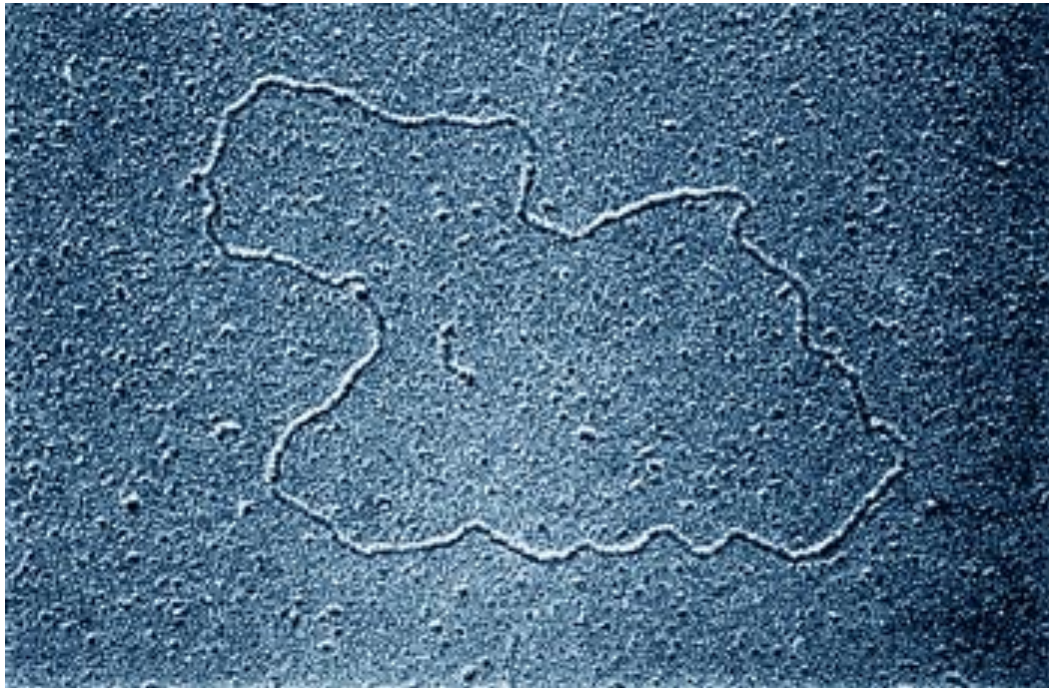


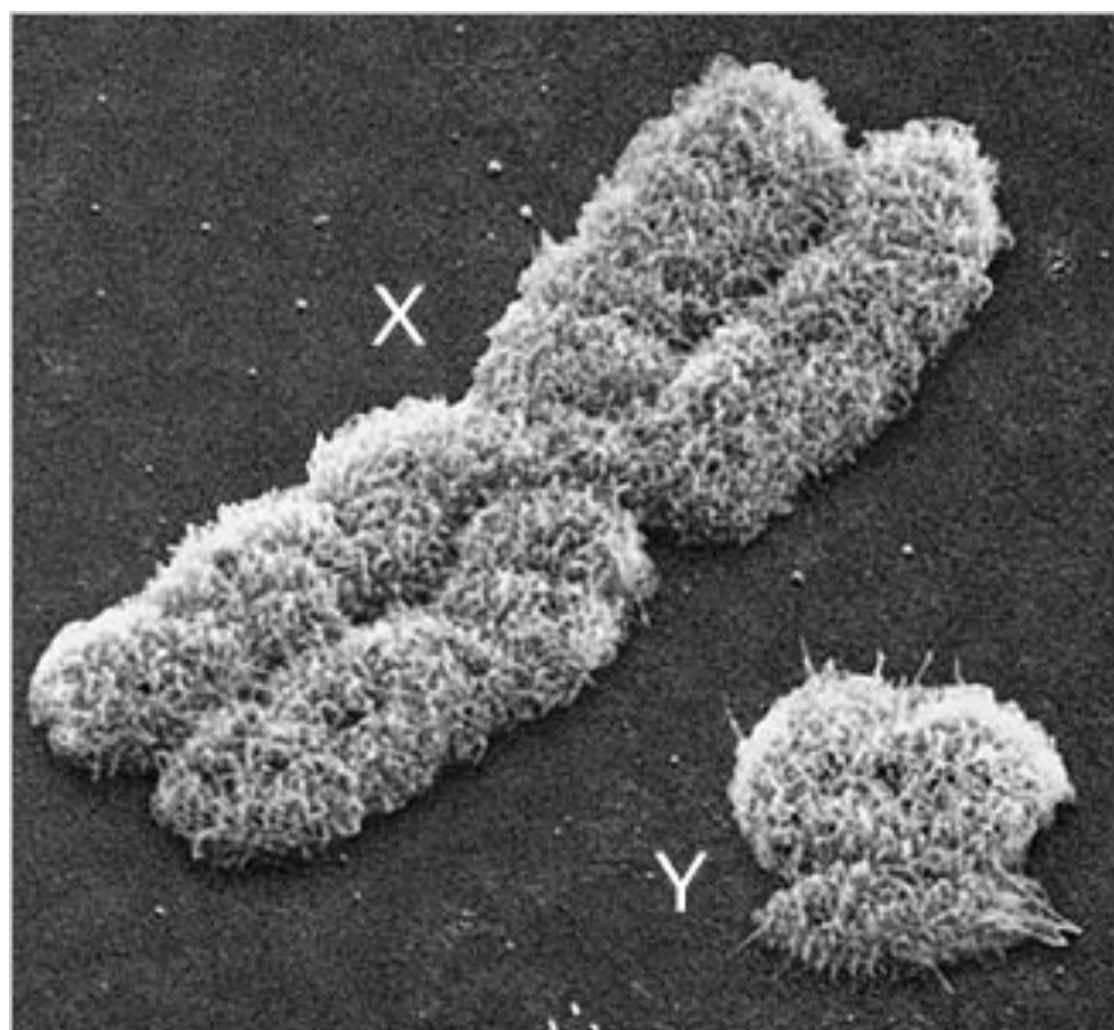
Condensed section
of chromosome

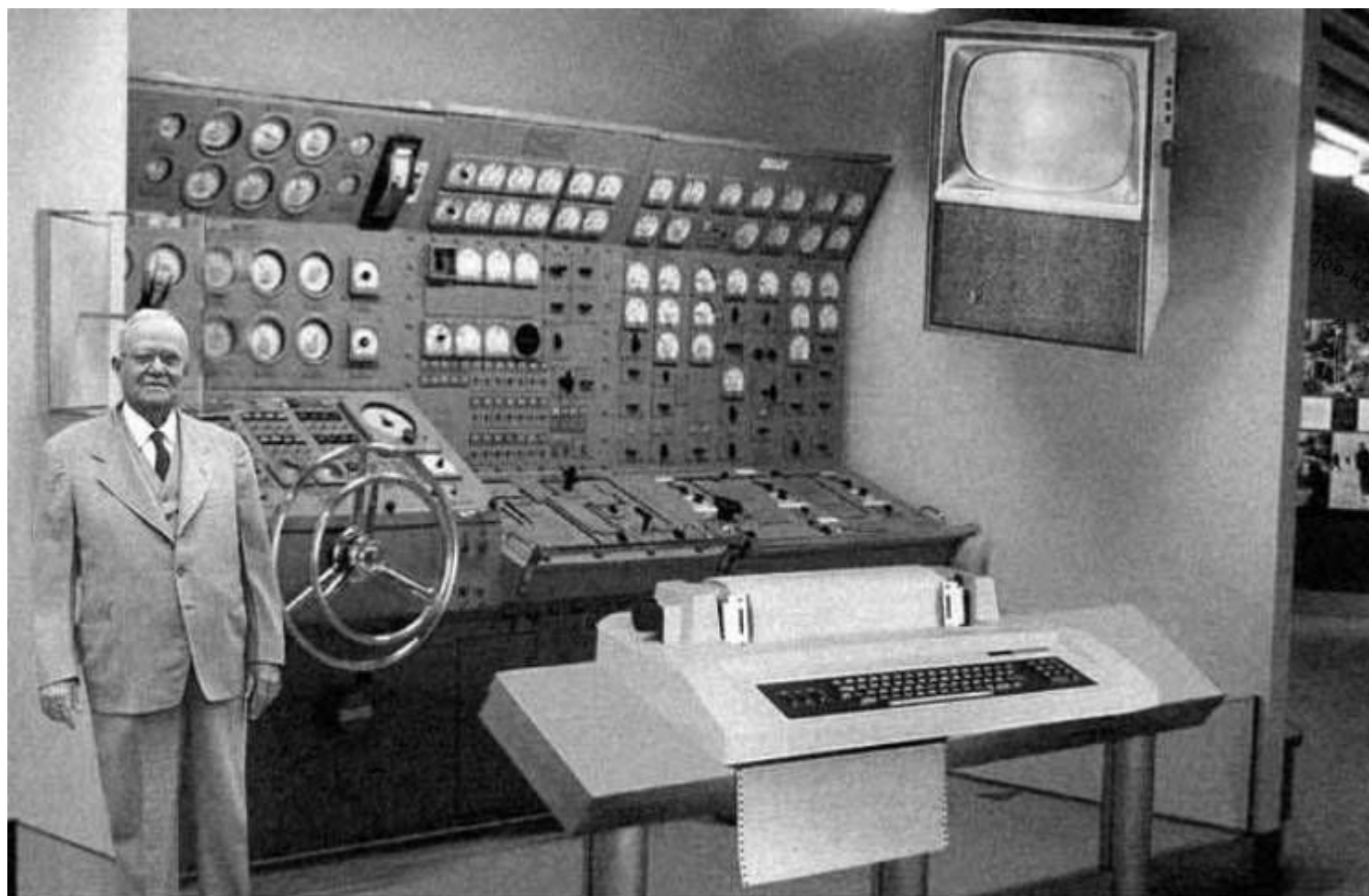


Entire mitotic
chromosome



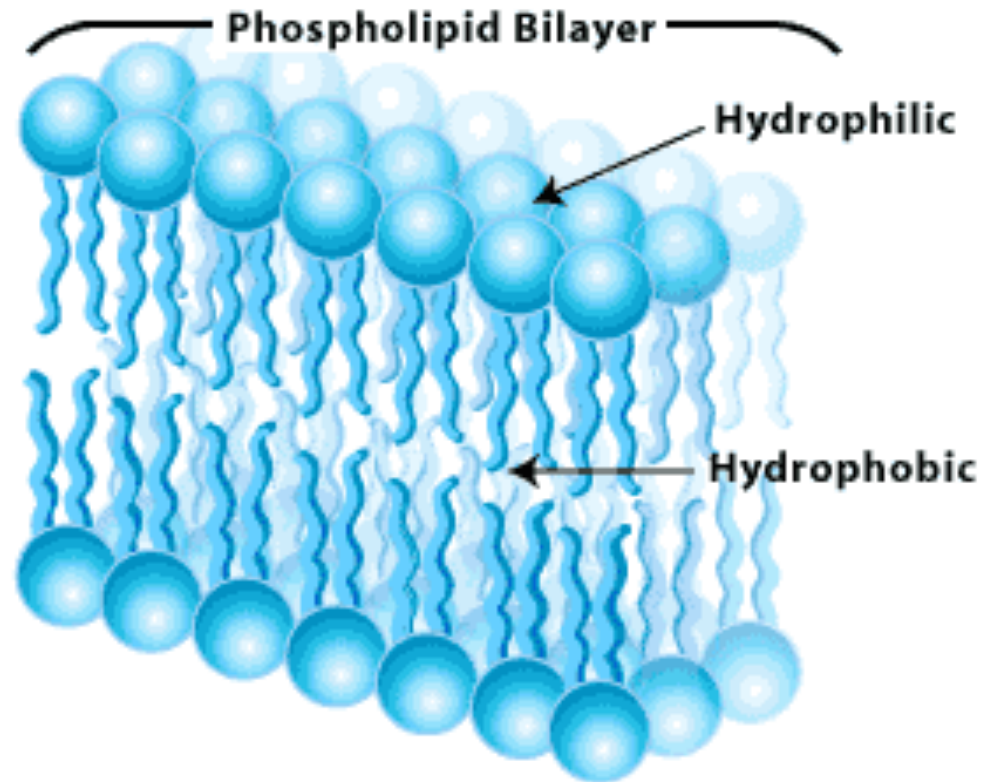




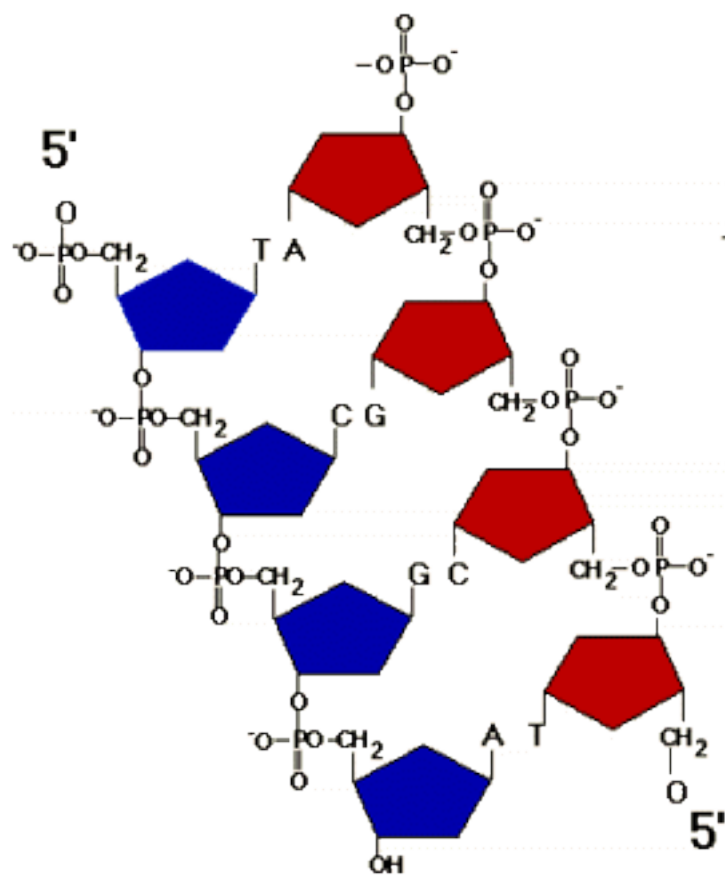


Scientists from the RAND Corporation have created this model to illustrate how a "home computer" could look like in the year 2004. However the needed technology will not be economically feasible for the average home. Also the scientists readily admit that the computer will require not yet invented technology to actually work, but 50 years from now scientific progress is expected to solve these problems. With teletype interface and the Fortran language, the computer will be easy to use.

Self Organization



DNA



RNA

