

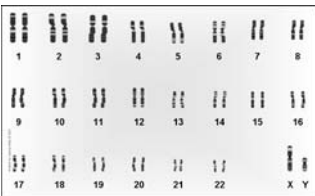


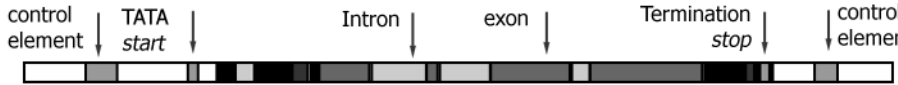
## Molecular Biology Review

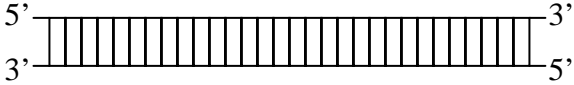
### A. Representations

a 

b 

c 

d 

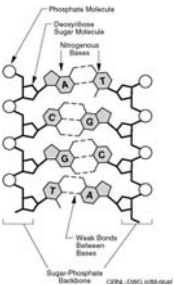
e 

f 
$$5' \text{ AACGCAAGGCACTTCACCAGGCTTGTATATATAAAATGTCGTGATGCTTCTATGCCAAAGTAAAAGGCAACACTTGAAGATTTTCGTTGTAGGCC3'}$$
  

$$3' \text{ TTGCGTTCGGTGAAGTGGTCCGAACATATATATTTACAGCACTACGAACATACGGTTTCATTTTCCGTTGTGAACCTTCTAAAGCAACATCCGG5'}$$

g 
$$P_A^+ A^+ N^+ P_N^+ P_{XYZ}^+ O^+$$

h 
$$\frac{P_A^+ A^+ N^+ P_N^+ P_{XYZ}^+ O^+}{P_A^+ A^- N^+ P_N^+ P_{XYZ}^+ O^+}$$

i 

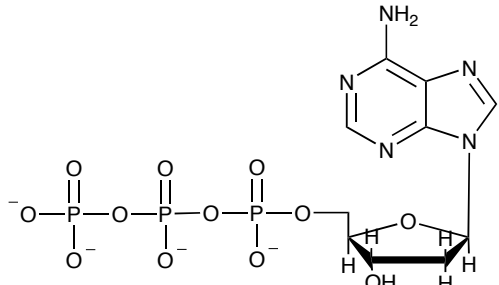
j 

Image credits:  
 (a) Courtesy of NASA, adapted by OCW.  
 (b) Courtesy of the National Human Genome Research Institute, adapted by OCW.  
 (c) Courtesy of the National Cancer Institute, adapted by OCW.  
 (d) Courtesy of OCW.  
 (i) Courtesy of the U.S. Department of Energy Human Genome Program  
 (j) Courtesy of OCW.

All other images are by the author.

1. What molecule is represented in each figure?
2. In figure e, what do vertical lines represent?
3. How do all these representations relate to each other?
4. What does the mutant nomenclature (m1, m2, etc) mean in terms of representations above?

