

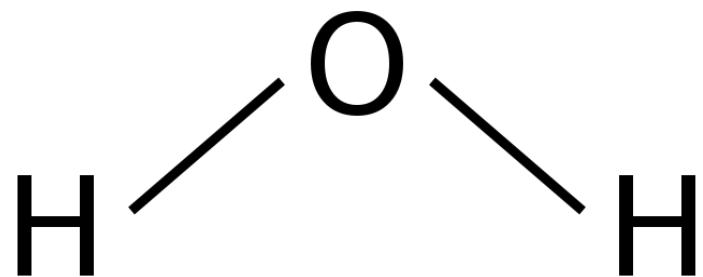
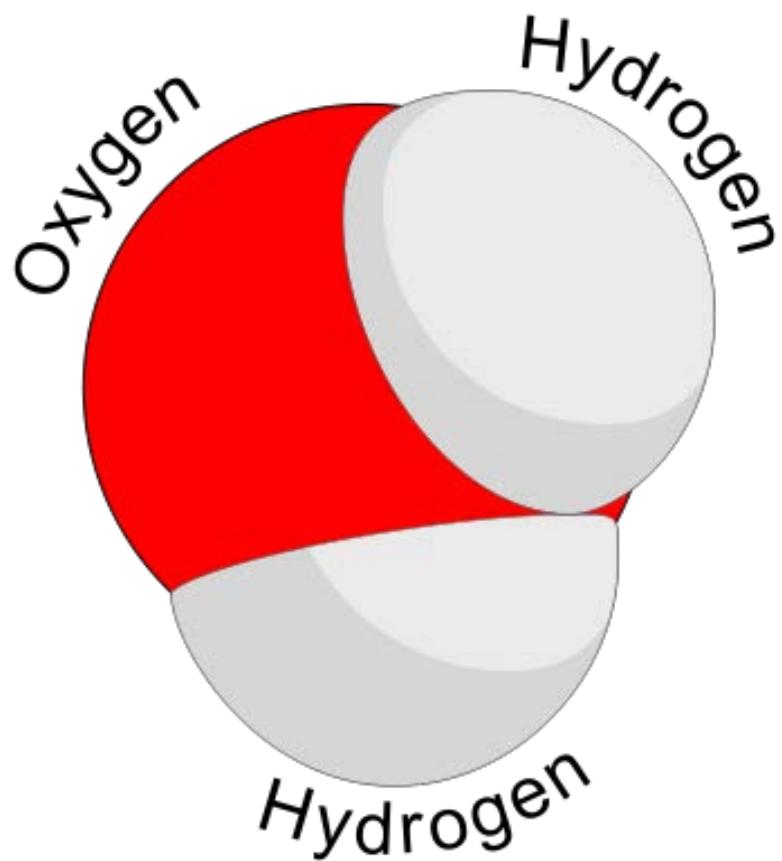
Praying for  
Elements and DNA

# Elements

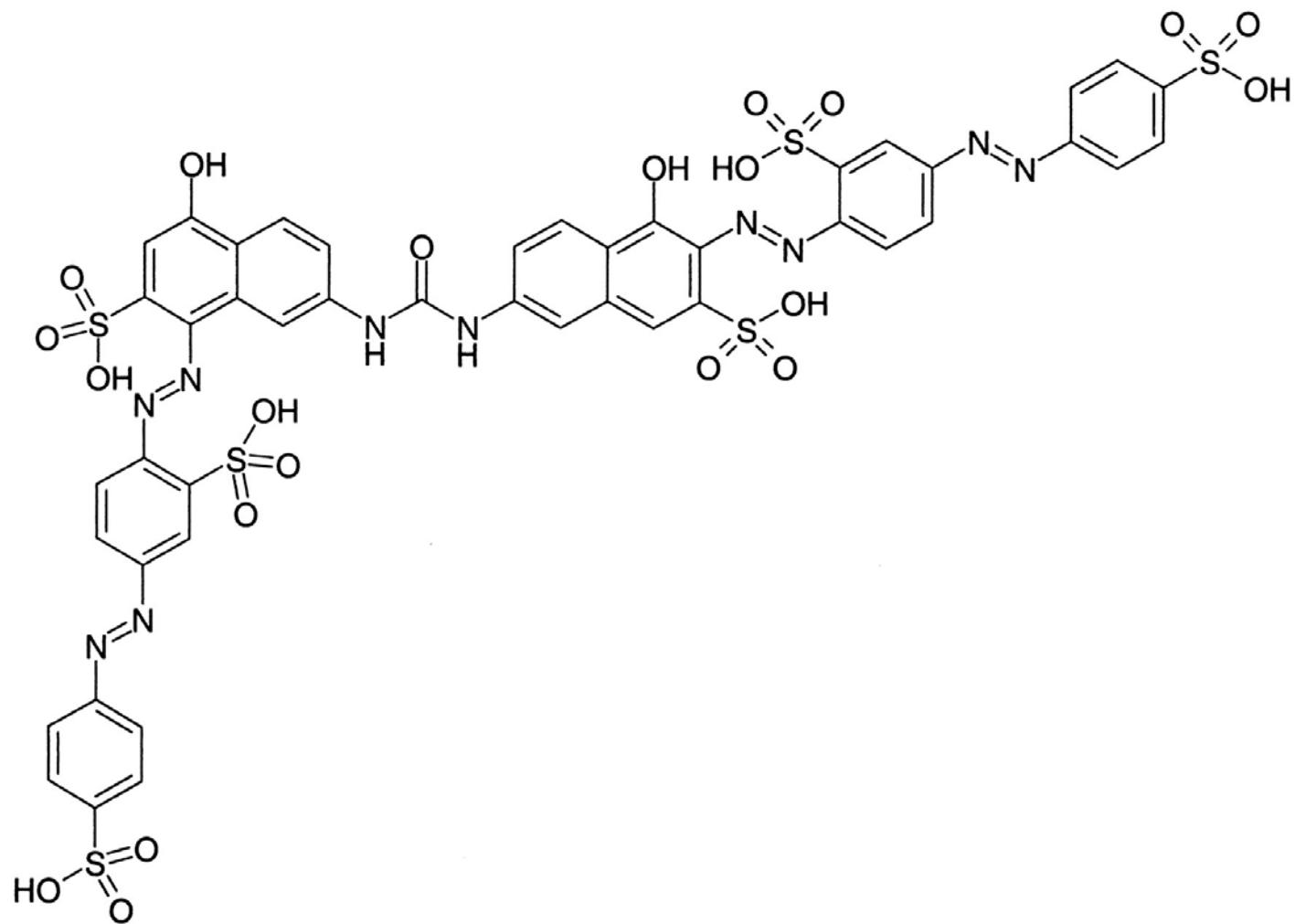
# Periodic Table of the Elements

Periodic Table of the Elements																					
1 1IA 11A																	18 VIIIA 8A				
1 <b>H</b> Hydrogen 1.0079	2 <b>IIA</b> 2A	3 <b>Li</b> Lithium 6.941	4 <b>Be</b> Beryllium 9.01218	5 <b>VB</b> 5B	6 <b>VIB</b> 6B	7 <b>VIIB</b> 7B	8	9	10	11 <b>IB</b> 1B	12 <b>IIB</b> 2B	13 <b>IIIA</b> 3A	14 <b>IVA</b> 4A	15 <b>VA</b> 5A	16 <b>VIA</b> 6A	17 <b>VIIA</b> 7A	2 <b>He</b> Helium 4.00260				
3 <b>Na</b> Sodium 22.989768	12 <b>Mg</b> Magnesium 24.305	3 <b>IIIIB</b> 3B	4 <b>IVB</b> 4B	5 <b>V</b> 5B	6 <b>VIIB</b> 6B	7 <b>VIIIB</b> 7B	8	9	10	11 <b>IB</b> 1B	12 <b>IIB</b> 2B	13 <b>B</b> Boron 10.811	14 <b>C</b> Carbon 12.011	15 <b>N</b> Nitrogen 14.00674	16 <b>O</b> Oxygen 15.9994	9 <b>F</b> Fluorine 18.998403	10 <b>Ne</b> Neon 20.1797				
11 <b>K</b> Potassium 39.0983	20 <b>Ca</b> Calcium 40.078	21 <b>Sc</b> Scandium 44.95591	22 <b>Ti</b> Titanium 47.88	23 <b>V</b> Vanadium 50.9415	24 <b>Cr</b> Chromium 51.9961	25 <b>Mn</b> Manganese 54.938	26 <b>Fe</b> Iron 55.847	27 <b>Co</b> Cobalt 58.9332	28 <b>Ni</b> Nickel 58.6934	29 <b>Cu</b> Copper 63.546	30 <b>Zn</b> Zinc 65.39	31 <b>Al</b> Aluminum 26.981539	14 <b>Si</b> Silicon 28.0855	15 <b>P</b> Phosphorus 30.973762	16 <b>S</b> Sulfur 32.066	17 <b>Cl</b> Chlorine 35.4527	18 <b>Ar</b> Argon 39.948	36 <b>Kr</b> Krypton 83.80			
37 <b>Rb</b> Rubidium 85.4678	38 <b>Sr</b> Strontium 87.62	39 <b>Y</b> Yttrium 88.90585	40 <b>Zr</b> Zirconium 91.224	41 <b>Nb</b> Niobium 92.90638	42 <b>Mo</b> Molybdenum 95.94	43 <b>Tc</b> Technetium 98.9072	44 <b>Ru</b> Ruthenium 101.07	45 <b>Rh</b> Rhodium 102.9055	46 <b>Pd</b> Palladium 106.42	47 <b>Ag</b> Silver 107.8682	48 <b>Cd</b> Cadmium 112.411	49 <b>In</b> Indium 114.818	32 <b>Ge</b> Germanium 72.64	33 <b>As</b> Arsenic 74.92159	34 <b>Se</b> Selenium 78.96	35 <b>Br</b> Bromine 79.904	54 <b>Xe</b> Xenon 131.29				
55 <b>Cs</b> Cesium 132.90543	56 <b>Ba</b> Barium 137.327	57-71	72 <b>Hf</b> Hafnium 178.49	73 <b>Ta</b> Tantalum 180.9479	74 <b>W</b> Tungsten 183.85	75 <b>Re</b> Rhenium 186.207	76 <b>Os</b> Osmium 190.23	77 <b>Ir</b> Iridium 192.22	78 <b>Pt</b> Platinum 195.08	79 <b>Au</b> Gold 196.9665	80 <b>Hg</b> Mercury 200.59	81 <b>Tl</b> Thallium 204.3833	82 <b>Pb</b> Lead 207.2	83 <b>Bi</b> Bismuth 208.98037	84 <b>Po</b> Polonium [208.9824]	85 <b>At</b> Astatine 209.9871	86 <b>Rn</b> Radon 222.0176				
87 <b>Fr</b> Francium 223.0197	88 <b>Ra</b> Radium 226.0254	89-103	104 <b>Rf</b> Rutherfordium [261]	105 <b>Db</b> Dubnium [262]	106 <b>Sg</b> Seaborgium [266]	107 <b>Bh</b> Bohrium [264]	108 <b>Hs</b> Hassium [269]	109 <b>Mt</b> Meitnerium [268]	110 <b>Ds</b> Darmstadtium [269]	111 <b>Rg</b> Roentgenium [272]	112 <b>Cn</b> Copernicium [277]	113 <b>Uut</b> Ununtrium unknown	114 <b>Uuo</b> Ununquadium [289]	115 <b>Uup</b> Ununpentium unknown	116 <b>Uuh</b> Ununhexium [298]	117 <b>Uus</b> Ununseptium unknown	118 <b>Uuo</b> Ununoctium unknown				
Lanthanide Series		57 <b>La</b> Lanthanum 138.9055	58 <b>Ce</b> Cerium 140.115	59 <b>Pr</b> Praseodymium 140.90765	60 <b>Nd</b> Neodymium 144.24	61 <b>Pm</b> Promethium 144.9127	62 <b>Sm</b> Samarium 150.36	63 <b>Eu</b> Europium 151.9655	64 <b>Gd</b> Gadolinium 157.25	65 <b>Tb</b> Terbium 158.92534	66 <b>Dy</b> Dysprosium 162.50	67 <b>Ho</b> Holmium 164.93032	68 <b>Er</b> Erbium 167.26	69 <b>Tm</b> Thulium 168.93421	70 <b>Yb</b> Ytterbium 173.04	71 <b>Lu</b> Lutetium 174.967					
Actinide Series		89 <b>Ac</b> Actinium 227.0278	90 <b>Th</b> Thorium 232.0381	91 <b>Pa</b> Protactinium 231.03588	92 <b>U</b> Uranium 238.0289	93 <b>Np</b> Neptunium 237.04082	94 <b>Pu</b> Plutonium 244.0642	95 <b>Am</b> Americium 243.0614	96 <b>Cm</b> Curium 247.0703	97 <b>Bk</b> Berkelium 247.0703	98 <b>Cf</b> Californium 251.0796	99 <b>Es</b> Einsteinium [254]	100 <b>Fm</b> Fermium 257.0951	101 <b>Md</b> Mendelevium 258.1	102 <b>No</b> Nobelium 259.1009	103 <b>Lr</b> Lawrencium [262]					
Classification		Alkali Metal		Alkaline Earth		Transition Metal		Basic Metal		Semimetals		Nonmetals		Halogens		Noble Gas		Lanthanides		Actinides	

# Water Molecule



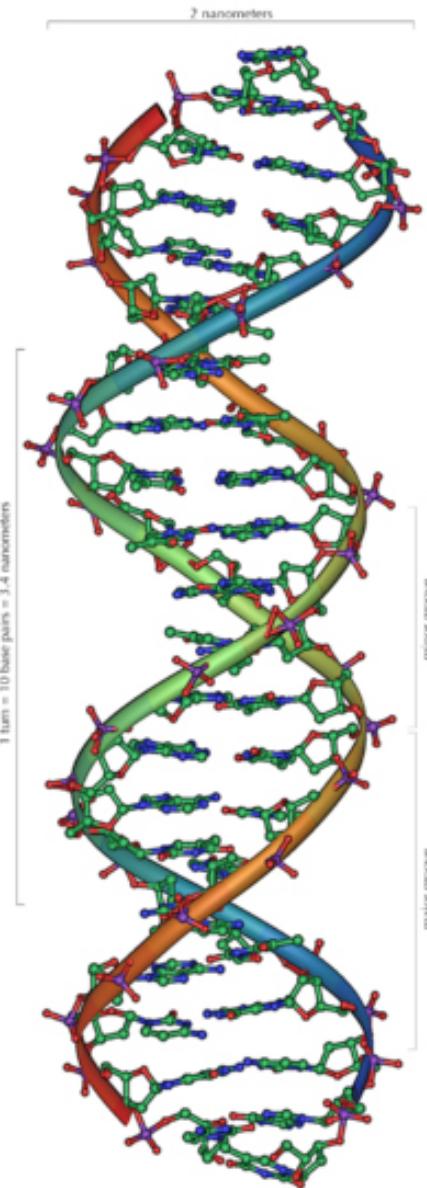
# Insulin Molecule



# Periodic Table of the Elements

DNA

# DNA Molecule



# ACGT

Nucleotides are a kind of organic molecule.

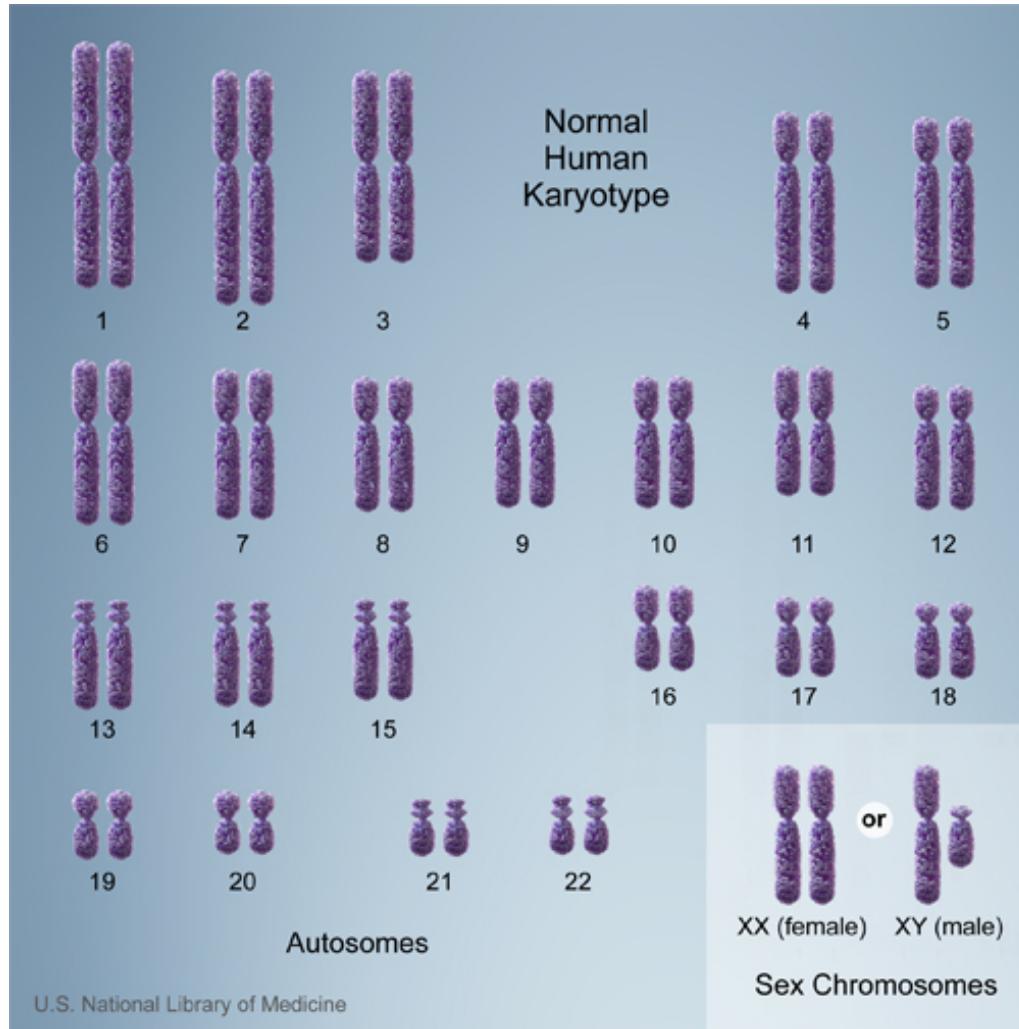
DNA uses four nucleotide bases,  
they form base pairs:

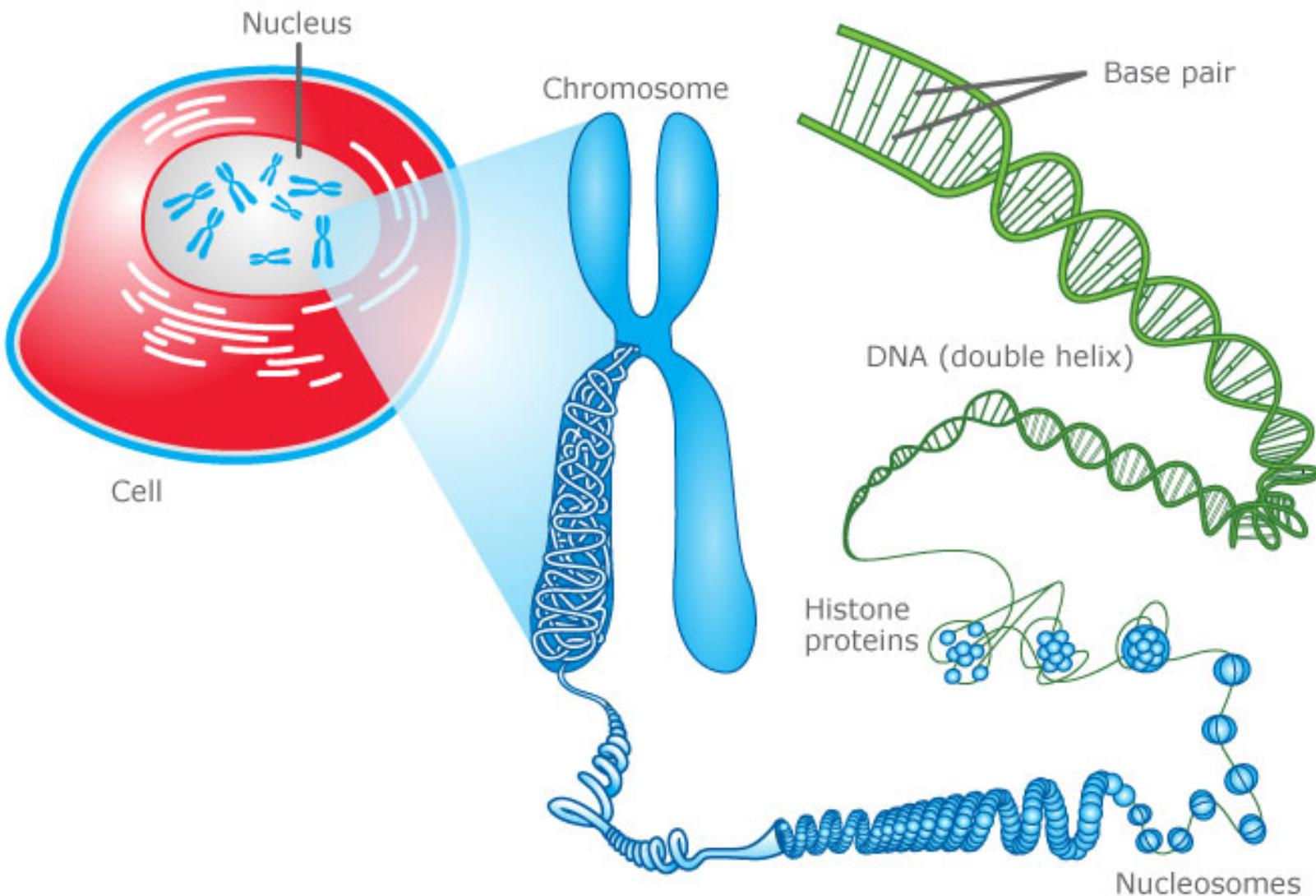
- A – adenine
- C – cytosine
- G - guanine
- T - thymine

The sequence of bases in a portion of a DNA molecule,  
called a gene,  
carries the instructions needed to assemble a protein.

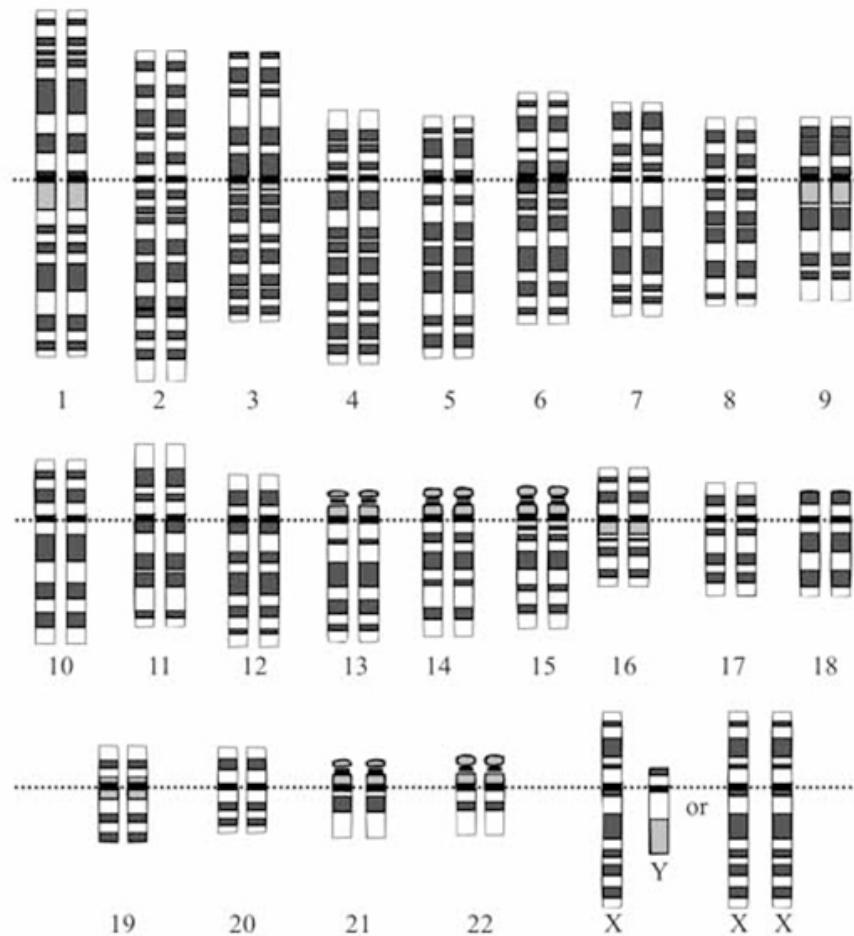


# Human Chromosomes

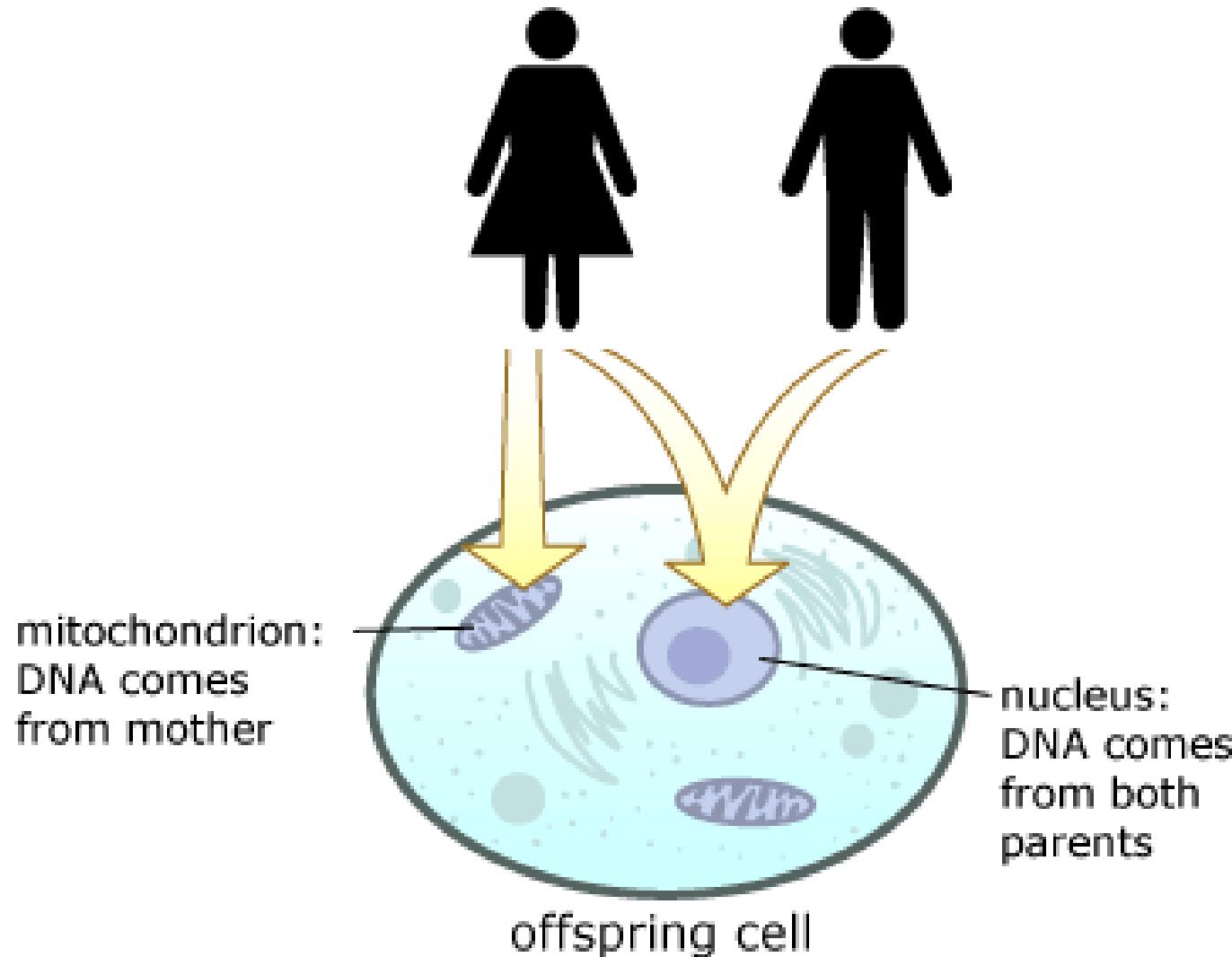




# Human Karyotype



# Mitochondria DNA



# Mitochondria DNA

