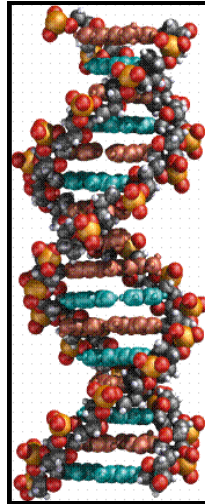
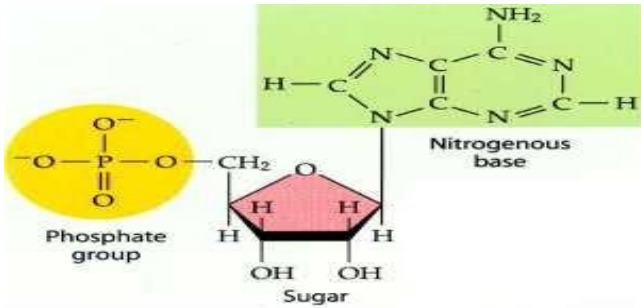


DNA is a nanoscale structure.  
It has a diameter of one to two nanometers

### DNA Molecule



**Nucleotide = nitrogenous base + sugar + phosphate**

Image courtesy of DynamicScience.com.au

10 <sup>n</sup>	Prefix	Symbol	Decimal
10 <sup>24</sup>	<a href="#">yotta-</a>	Y	1 000 000 000 000 000 000 000 000
10 <sup>21</sup>	<a href="#">zetta-</a>	Z	1 000 000 000 000 000 000 000
10 <sup>18</sup>	<a href="#">exa-</a>	E	1 000 000 000 000 000 000
10 <sup>15</sup>	<a href="#">peta-</a>	P	1 000 000 000 000 000
10 <sup>12</sup>	<a href="#">tera-</a>	T	1 000 000 000 000
10 <sup>9</sup>	<a href="#">giga-</a>	G	1 000 000 000
10 <sup>6</sup>	<a href="#">mega-</a>	M	1 000 000
10 <sup>3</sup>	<a href="#">kilo-</a>	k	1 000
10 <sup>2</sup>	<a href="#">hecto-</a>	h	100
10 <sup>1</sup>	<a href="#">deca-</a>	da	10
10 <sup>0</sup>	(none)	(none)	1
10 <sup>-1</sup>	<a href="#">deci-</a>	d	0.1
10 <sup>-2</sup>	<a href="#">centi-</a>	c	0.01
10 <sup>-3</sup>	<a href="#">milli-</a>	m	0.001
10 <sup>-6</sup>	<a href="#">micro-</a>	μ	0.000 001
10 <sup>-9</sup>	<a href="#">nano-</a>	n	0.000 000 001
10 <sup>-12</sup>	<a href="#">pico-</a>	p	0.000 000 000 001
10 <sup>-15</sup>	<a href="#">femto-</a>	f	0.000 000 000 000 001
10 <sup>-18</sup>	<a href="#">atto-</a>	a	0.000 000 000 000 000 001
10 <sup>-21</sup>	<a href="#">zepto-</a>	z	0.000 000 000 000 000 000 001
10 <sup>-24</sup>	<a href="#">yocto-</a>	y	0.000 000 000 000 000 000 000 001

### Genetic Code for Amino Acids

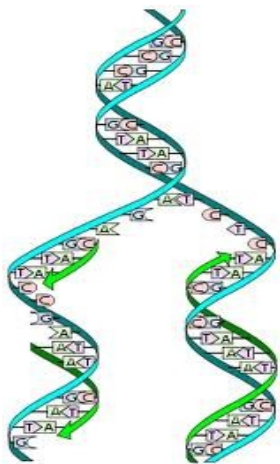
	U	C	A	G	
U	UUU Phenyl-alanine UUC UUG Leucine UUA	UCU Serine UCC UCA UCG	UAU Tyrosine UAC UAA Stop UAG	UGU Cysteine UGC UGA Stop UGG Tryptophan	U C A G
C	CUU Leucine CUC CUA CUG	CCU Proline CCC CCA CCG	CAU Histi-dine CAC CAA Gluta-mine CAG	CGU Arginine CGC CGA CGG	U C A G
A	AUU Iso-leucine AUC AUA AUG Met-thionine	ACU Threo-nine ACC ACA ACG	AAU Aspara-gine AAC AAA Lysine AAG	AGU Serine AGC AGA Arginine AGG	U C A G
G	GUU Valine GUC GUA GUG	GCU Alanine GCC GCA GCG	GAU Aspartic acid GAC GAA Glutamic acid GAG	GGU Glycine GGC GGA GGG	U C A G

### Dihybrid Cross

	B/G	B/g	b/G	b/g
B/G	BB/GG	BB/Gg	Bb/GG	Bb/Gg
B/g	BB/Gg	BB/gg	Bb/Gg	Bb/gg
b/G	Bb/GG	Bb/Gg	bb/GG	bb/Gg
b/g	Bb/Gg	Bb/gg	bb/Gg	bb/gg

### DNA Replication

### Creation of mRNA



A = Adenine  
G = Guanine  
T = Thymine  
C = Cytosine

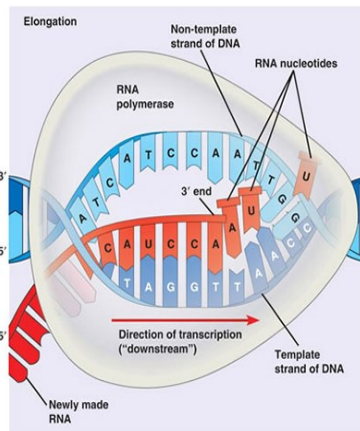


Image courtesy of DynamicScience.com.au

[http://en.wikipedia.org/wiki/DNA\\_replication](http://en.wikipedia.org/wiki/DNA_replication)

### Monohybrid Cross

	A	a
A	AA	Aa
a	Aa	aa