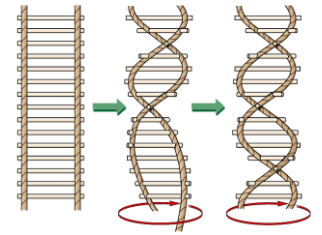


DNA NOTES (Biology)

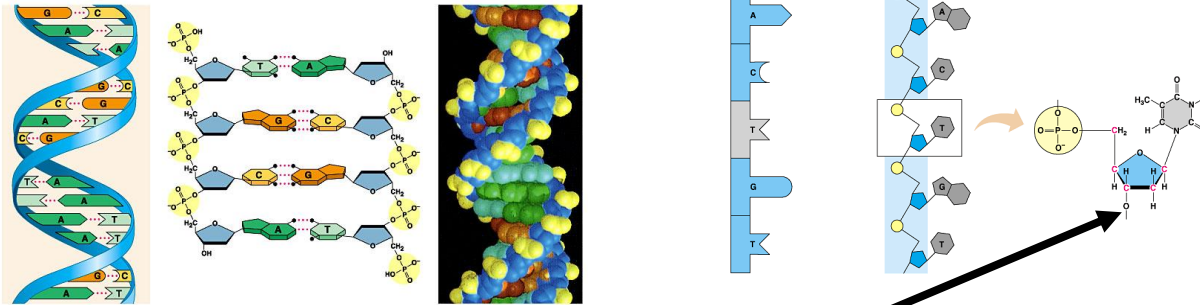


I. DNA cell **Location** = _____

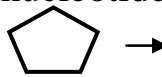
II. DNA **Purpose** = _____ for making the parts of living cells and organisms

III. DNA **structure** (shape) = _____

- In 1953, James _____ and Francis _____ worked out the three-dimensional structure of DNA.
- They discovered that DNA consists of ___ chains twisted around each other like a “winding _____”.
- Each DNA chain is made by connecting “building block” subunits called _____



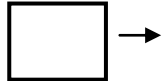
- Each nucleotide has 3 parts that form an ___-shape



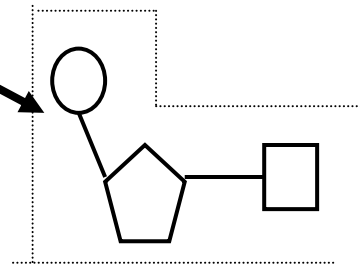
1. _____



2. _____



3. _____



- DNA has four kinds of N-bases: _____
- The genetic CODE = the _____ of the N-base letters along one strand
- **One human** blueprint contains ~ _____ total N-base letters
- _____ bonds between N- bases hold the 2 DNA strands together

–Each base always pairs with a _____ partner = **Base-Pairing Rules:**

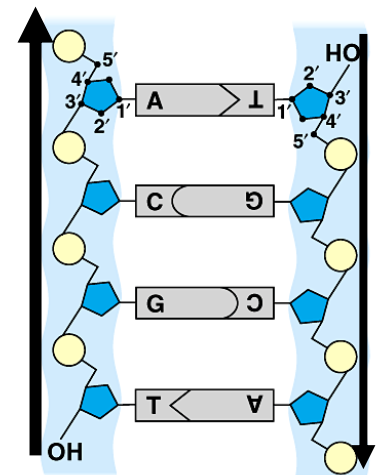
–A pairs with ___ (___Hydrogen bonds)

–G pairs with ___ (___Hydrogen bonds)

Given 1 DNA strand = A T C A G T

Fill in new strand → _____

- DNA diagram skills:
- ✓ Outline 1 **nucleotide**
- ✓ Label some **covalent** and **hydrogen** bonds
- ✓ Circle the sugar-P **backbones**



- Each strand of the double helix is oriented in the opposite direction = _____