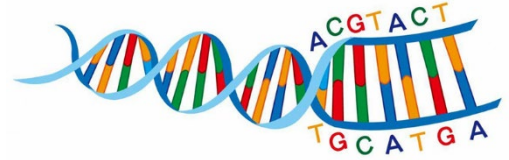


DNA Sequence Bracelets



Materials:

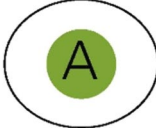
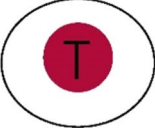
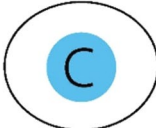
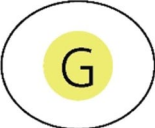
- ❖ Beads (red, green, yellow, and blue)
- ❖ String (elastic string works best)
- ❖ Sequence (below)

Procedure:

1. Find or cut two pieces of elastic or string each about 30cm long.
2. Tie a knot about 5 cm from one end of each string; then tie the two strings together at the knots.
3. Look at the first letter in your sequence and find the right color bead to thread.
4. Thread that bead onto string 1 and thread the bead for the matching base onto string 2.
5. Knot each string after the last bead, and then tie the two new knots together.
6. Now tie the ends of your double-stranded sequence bracelet together.

Sequence bracelets


DNA bases : pairing rules

	pairs with	
	pairs with	

DNA is made up of four units or 'bases', known as A,C,T and G.

Each of the bases binds with one partner: A with T; C with G.

Your sequence bracelet should obey the same rules: look in the circles above to work out which coloured beads you should use.



Human (*Homo sapiens*)

T C T G A G T T C T T A C T T C G A A G G

How is this related to real life?

Just like in DNA, there are four different kinds of units that make up the sequence – red and green, yellow and blue. Your bracelet will contain two strands of beads that match up the same way the units (or bases) in DNA do. That means if you know the sequence of one strand, you can work out the sequence of the other.