

Make a bracelet that carries some of the code for an organism, such as a robin, squirrel, flowering plant or hornet.

Just like in DNA, there are four different kinds of units that make up the sequence - red, 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.

Asian Hornet (*Vespa velutina*)

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



This gene makes a toxin that is found in the venom of the Hornet. It can cause an allergic reaction in humans.

Why do you think the hornet has this gene? What does it use its venom for?

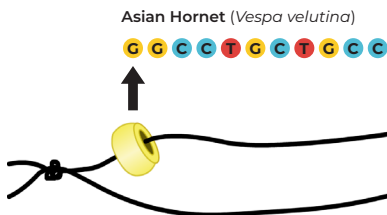
- 1 Choose one DNA sequence to make.



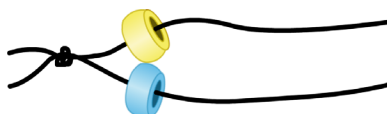
- 2 Find or cut two pieces of elastic each about 30 cm long.



- 3 Tie a knot about 5 cm from one end of each string; then tie the two strings together at the knots.

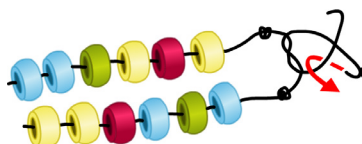


- 4 Look at the first letter in your sequence and find the right colour bead to thread.



- 5 Thread that bead on to string 1 and thread the bead for the matching base on to string 2 (see the **pairing rules** sheet for guidance).

Keep threading beads according to your sequence until you've finished the sequence on your card.



- 6 Knot each string after the last bead, and then tie the two new knots together.



- 7 Now tie the ends of your double-stranded sequence bracelet together. You've finished! Congratulations!