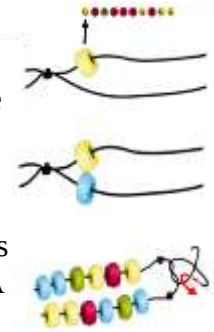
Crystal Jelly, (*Aequorea victoria*): Green fluorescent protein (GFP)

GTGAAGGTGATGCAACATACGG

About this gene: This sequence is part of a gene in Crystal Jellyfish that encodes for a protein which causes fluorescence. This protein turns a brilliant shade of bright, glowing green when expressed in UV light.

<u>*Instructions*</u>: 1. Tie 2 pieces of string together.
2. String the bead that matches the first letter of your sequence onto 1 strand, colors vary –see "Base Pairing Rules".
3. On the opposite strand, string on the matching pair for your first bead.
4. Keep threading beads until your double stranded sequence is complete. Tie off the ends, and congrats! You've made a DNA sequence bracelet!



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Base Pairing Rules

A Pairs with T

C Pairs with G

DNA has four units or 'bases', known as A, C, G and T. Each base binds with only one partner: A with T; C with G. Your sequence bracelet should follow the same rules: look in the circles above to work out which colored beads you should use.

Tropicana Hybrid Tea Rose, (*Rosa Tropicana):* Glyceraldehyde-3-phosphate dehydrogenase (GAPDH)

GGTAACCTAAAGGGAATCCTCG

About this gene: This sequence is part of a gene called GAPDH which is important for metabolism as it breaks down sugars (glucose) and helps turn them into energy.

<u>*Instructions*</u>: 1. Tie 2 pieces of string together.
2. String the bead that matches the first letter of your sequence onto 1 strand, colors vary –see "Base Pairing Rules".
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Javan Spitting Cobra, (Naja sputatrix); LNTX neurotoxin

ACACCTGATGTTACCTCTACGG

About this gene: This sequence is part of a gene in the Javan Spitting Cobra that encodes for a powerful neurotoxin found in its venom.

<u>*Instructions*</u>: 1. Tie 2 pieces of string together.
2. String the bead that matches the first letter of your sequence onto 1 strand, colors vary –see "Base Pairing Rules".
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