Designing An Animal With Central Dogma

KhanLab-BayArea iGEM 2026

Step 1: Design Your DNA Sequence!

Choose **three trait cards** (including at least one species card!) to design your animal. Then write down the DNA sequence and corresponding traits below.

Trait			
DNA			

Remember, don't show any other group your traits!

Step 2: Convert DNA to RNA!

Convert the given DNA strand into RNA by using complementary base pairing rules:

- A with U
- T with A
- C with G
- G with C

RNA Sequence
_____

Now that you've encoded your RNA sequence, string the colored fruit loops in the correct order to create your RNA bracelet.

Base Color Table

This is also on the screen!

A	U
C	G

Now, trade your RNA bracelet with another group! It's time to decode your partner's RNA sequence.

Step 3: Decode RNA Into Protein

Use the **Base Color Table** on the screen to convert the group's bracelet back into RNA bases.

Partner's RNA Sequence

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Now, use the **RNA Trait Table** from the screen to figure out the other group's animal. Draw it below!