

Activity 1: Write Your Name in DNA

Activity Description

The children will create a colorful chain made out of the four DNA nucleotides, while learning about DNA and how all the information about each and every one of us is encoded into this simple language. They will use an encoder to translate from the English alphabet into codons to write their names or initials into their chain.



What do you need?

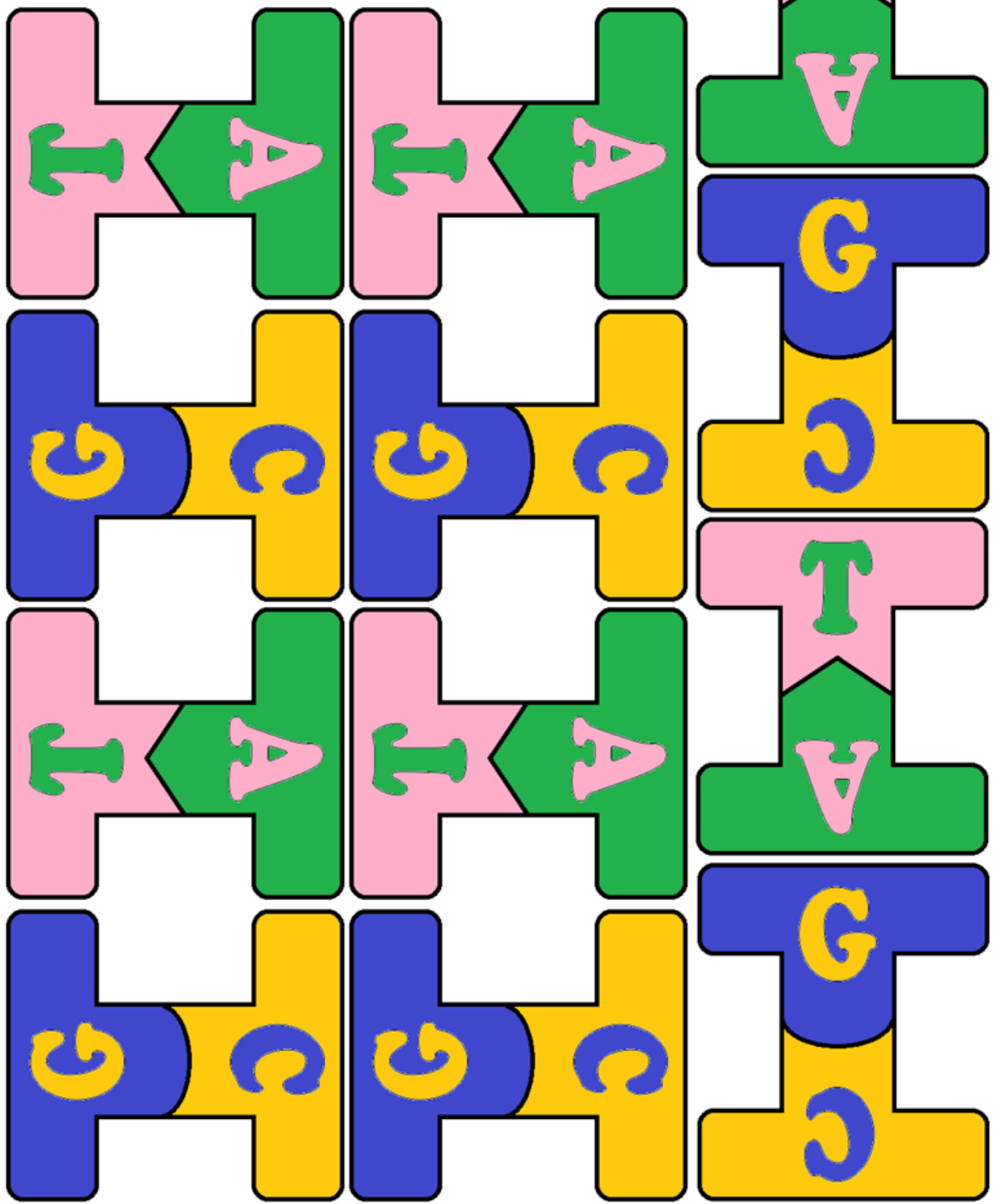
- Colorful printed DNA letters (see attachment #1)
- Scissors and tape
- Stickers and markers for decoration
- String or ribbons
- DNA encoder (see attachment #2)
- Translation page (see attachment #3)

How does it work?

1. Write your name on the translation page and translate it into DNA letters using the encoder.
2. Choose, cut out and arrange the DNA base pairs as needed.
3. Tape them together, forming a straight chain, or tape them to a string to make a hanging decoration.
4. Use the stickers and markers for decoration!



Attachment #1: DNA letters



Attachment #2: DNA encoder

DNA CODE

Codon	English	Codon	English	Codon	English	Codon	English
AAA	a	CAA	q	GAA	G	TAA	W
AAC	b	CAC	r	GAC	H	TAC	X
AAG	c	CAG	s	GAG	I	TAG	Y
AAT	d	CAT	t	GAT	J	TAT	Z
ACA	e	CCA	u	GCA	K	TCA	1
ACC	f	CCC	v	GCC	L	TCC	2
ACG	g	CCG	w	GCG	M	TCG	3
ACT	h	CCT	x	GCT	N	TCT	4
AGA	i	CGA	y	GGA	O	TGA	5
AGC	j	CGC	z	GGC	P	TGC	6
AGG	k	CGG	A	GGG	Q	TGG	7
AGT	l	CGT	B	GGT	R	TGT	8
ATA	m	CTA	C	GTA	S	TTA	9
ATC	n	CTC	D	GTC	T	TTC	0
ATG	o	CTG	E	GTG	U	TTG	space
ATT	p	CTT	F	GTT	V	TTT	.(period)

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AAA	a	CAA	q	GAA	G	TAA	W
AAC	b	CAC	r	GAC	H	TAC	X
AAG	c	CAG	s	GAG	I	TAG	Y
AAT	d	CAT	t	GAT	J	TAT	Z
ACA	e	CCA	u	GCA	K	TCA	1
ACC	f	CCC	v	GCC	L	TCC	2
ACG	g	CCG	w	GCG	M	TCG	3
ACT	h	CCT	x	GCT	N	TCT	4
AGA	i	CGA	y	GGA	O	TGA	5
AGC	j	CGC	z	GGC	P	TGC	6
AGG	k	CGG	A	GGG	Q	TGG	7
AGT	l	CGT	B	GGT	R	TGT	8
ATA	m	CTA	C	GTA	S	TTA	9
ATC	n	CTC	D	GTC	T	TTC	0
ATG	o	CTG	E	GTG	U	TTG	space
ATT	p	CTT	F	GTT	V	TTT	.(period)

Attachment #3: Translation Pages

Write your name or any word you want in the upper row. Then use the second row to translate your word into DNA codons!

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