

## Decode the Message

The genetic material is composed of nucleotides. The sequence of nucleotides in DNA determines the order in which amino acids will be assembled into proteins. Before DNA can be expressed as protein, it must be transcribed into RNA. In this activity, you will transcribe a sequence of DNA bases into an “RNA” message and then translate the RNA message into a “protein” sentence.

**Step 1:** Transcribe the DNA sequence below in to RNA.

**Step 2:** Translate the RNA into a quotation by using Table1.

**DNA Sequence:** AAA AUA CAC AUG CAC AAA TCA ACA TAT CGT ACT CCC GGG

**Table 1.**

RNA	Word	RNA	Word	RNA	Word	RNA	Word	RNA	Word	RNA	Word
UUU	the	CUG	right	GUG	be	UGU	someone	GGG	there	GCC	get
UUC	run	AUU	sit	UAU	track	UGC	expect	AAA	new	GGC	fun
UUG	on	AUC	true	UAG	STOP	UGA	STOP	CCC	to	GCA	today
CUU	are	AUA	smiles	CAU	faults	AGU	reason	CCU	is	AAG	play
CUC	if	AUG	START	CAA	even	GGU	yes	CCA	do	AAC	teach
CUA	over	GUU	do	CAG	shade	GGA	not	CCG	we	AAU	laughs