

"Decoding DNA"

Student Worksheet

DNA is the Code of Life. See if you can break this code and solve the message that is hidden in the strands of DNA.

- Use the key to color your worksheet, then use the "Decoder Sheets" posted around the classroom to solve the puzzle.
- Don't forget to answer the question at the end of the riddle!

Key

Color the 4 amino acids as follows:

Adenine (A): yellow; **Cytosine (C):** blue; **Guanine (G):** red;
Thymine (T): green

CCG	AAT	ATC	GTC	CCT	TTC
_____	_____	_____	_____	_____	_____

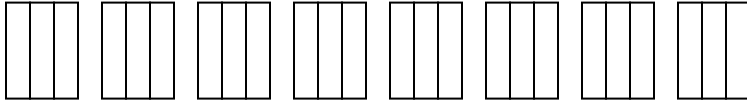
TCA	CCG	TTA	TTA	GGC	TTC	AGT	TTG
_____	_____	_____	_____	_____	_____	_____	_____

GGC	CCG	TTG	TTC	GGT	ACG	AGT	CCC	ATC	TTC
_____	_____	_____	_____;	_____	_____	_____	_____	_____	_____

AAT	ACG	TTA	ACA	AGT	GAC	CCC	CCG	GGC	GGC
_____	_____	_____	_____	_____	_____	_____	_____	_____	_____

GGT	ACG	AGT	CCC
_____	_____	_____	_____

ACA AGT GAC TCA GAT TTC GGC TTG



_____.

Question

This riddle is referring to DNA. What does the riddle mean? Explain.

Decoder Sheet

A =

--	--	--

B =

--	--	--

C =

--	--	--

D =

--	--	--

E =

--	--	--

F =

--	--	--

G =

--	--	--

H =

--	--	--

I =

--	--	--

J =

--	--	--

K =

--	--	--

L =

--	--	--

M =

--	--	--

N =

--	--	--

O =

--	--	--

P =

--	--	--

Q =

--	--	--

R =

--	--	--

S =

--	--	--

T =

--	--	--

U =

--	--	--

V =

--	--	--

W =

--	--	--

X =

--	--	--

Y =

--	--	--

Z =

--	--	--

Directions for Teacher:

1. Copy 10 of the Decoder Sheets.
2. Color them as follows: (b=blue, g=green, r=red, y=yellow)

A – yyg	N - ybr
B – yyb	O - yrg
C – yyr	P - gbr
D – ggy	Q - gyb
E – ggb	R - gby
F – ggr	S - ryg
G – bby	T - rgb
H – bbg	U - ryb
I – bbr	V - ggg
J – rry	W - = bbb
K – rrg	X - yyy
L – rrb	Y - yby
M – ygb	Z - rgr
3. Laminate them and hang them around the room for the students to view.

Answer to the Riddle: *"I am the Riddle of Life; know me and you will know yourself."*