



# Letters

## 'Teaching Biology Around Themes' Draws Questions from Students

Dear Editor:

Referring to your article titled "Teaching Biology Around Themes; Teach Proteins and DNA Together" (February 1992) by Susan Offner, our 10C Biology class recently completed Dry Lab #1 questions. Looking at this exercise we are given an original DNA strand following the composed nucleotide, AATGCCAGTGGTTCGCAC. In question #8 your instructions say to add a "G" after the third nucleotide, in

DNA it looks like, AATGGCCAGTG GTTCGCAC, now when changed to RNA, UUACCGGUCACCAAGCGUG. In your answer sheet for #9 you have LEU, ALA, VAL, THE, LYS, ARG, when it should be LEU, PRO, VAL, THE, LYS, ARG. So instead of having PRO you have ALA in your answer sheet.

Our teacher is holding our test grades, pending confirmation that this error has been made. Please realize the

effect this mutational event might have on our lives.

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Editor's note:

The author has provided the correct answer to Dry Lab #1, Question #8. It should be UUACCGGUCACCAAG CGUG.

## Recent Data Takes Human Gene Mapping a Step Further

Dear Editor:

This chart is provided as a follow-up to Susan Offner's excellent article "A Plain English Map of Human Chromosomes" (February 1992).

As students focus on examples of genes mapped on each human chromosome, a larger framework is helpful to understand the estimated total size of the genome. Let students ask how much has been identified and how far do we have to go.

The data shown are taken from *Science* in their annual report on progress in gene mapping.

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Human Gene Mapping—1991

Chromosome Number	Estimated Number of Genes	Genes Mapped	Disease-related Genes Mapped
1	4150	236	43
2	3950	131	18
3	3200	72	16
4	3050	84	22
5	2900	82	15
6	2750	115	14
7	2700	128	16
8	2250	59	15
9	2200	63	17
10	2200	75	11
11	2200	142	33
12	2050	117	17
13	1800	28	6
14	1750	65	12
15	1650	59	12
16	1400	71	12
17	1350	121	18
18	1250	22	4
19	1150	104	20
20	1050	42	11
21	900	39	4
22	950	71	18
X	2350	202	93
Y	1000	16	1
Total	50,200	2,144	448

Source: *Science*, Oct. 11, 1991.