DNA Questionnaire 2 responses

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| DNA Structure(old) |
| No |
| Nope |
| None. |
| This was a very enlightening read. I would have had the difficulty I had in Cell Biology if my teacher had explained 5' to 3' in this fashion. I would like to inquire, however, on the concept of hairpin structure. I have looked up several hairpin structures and none of them are DNA palindromes, which I'm assuming SQ18 was trying to hint at. |
| I'm having trouble interpreting Chargaff's data. I've figured out that recovery is the sum of the fractions of all the nucleotides, but what does recovery mean in terms of DNA? Why doesn't the sum of all the nucleotides not equal 1? Would it be that there is something else that is unaccounted for? |
| none |

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| PS3 |
| Could you go over problem 1? I was reading through but it is hard to figure out which tube is the one with the single strand based on the given data, is there any specific patterns I should be looking for? |
| For question 4, what is a single strand of spaghetti supposed to represent in the model? Or is this a literal representation of the length of a genome if it were unwound? |
| I am stuck on problem 2. Would you mind going over it?  I divided the 3 billion base pairs by the 23 chromosomes, and got about 130 million base pairs on one chromosome. Then, I divided it by 0.68 nm because I multiplied 0.34 nm by 2 because I assumed that was length of a base pair (I think my assumption might be wrong). After I converted that number to meters, it was 0.1918 meters, which did not make sense to me at all. I thought it would be higher. |
| I have yet to finish problem 2 and 4. I have completed 1 and part of 2. Nothing really stands out to question. |
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| not yet |

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| DNA Structure(new) |
| I'm comfortable with most this subjects. Would you mind going over the biological roles for palindromic sequences? |
| Confident |
| Could you go over the palindromic sequences and how they form hairpin structures? I think I understand them, but a short review would help. I'm specifically concerned about how the sequence has to match the next 5' to 3' strand. However, I'm confused as to how they form hairpin structures. |
| As I said in old business, I am confused about the biological roles of palindromic sequences. I mean I get that they help with protein binding and stuff but the hairpin structure thing confused me. |
| What is the difference between destructive and constructive interference? I know that one creates nodes and the other creates antinodes but how does that affect a double split experiment or how DNA is imaged? |
| Need to get better with DNA palindrome |

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| mini-article extent |
| yes I have |
| Yes |
| Yes |
| Yes |
| Yes |
| Yes |

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| mini-article |
| I was able to look up a little more information about Density-Gradient Centrifugation, so far I don't have any questions. |
| I'm having trouble following the procedure in the last paragraph and deciphering the figure. Specifically the last sentence is confusing. What exactly does the article mean by "at equilibrium"? q |
| None. |
| Really just learning more about the solvents and processes of Density Gradient Centrifugation. I am still working on this. |
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| none |

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| misc |
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| None. |
| See you in class tomorrow! |
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| none |