Homework activity WATCHING A MOVIE! View the movie - The Race for the Double Helix (1987)

“Satisfaction comes not from knowing the solution, but from knowing why it’s the solution”

1. What was James Watson’s primary motivation for studying nucleic acids?
2. Watson won a fellowship from the National Foundation for Infantile Paralysis as a result of very promising scholarship while completing a Ph.D. at the University of Indiana. To what English university did he go to work after receiving this fellowship?
3. When being interviewed by the director, he decided to have Watson work with one of the older Ph.D. candidates, who was nicknamed the “bright hope”. Who was that?
4. What did the director of the lab mean when he said that he hoped Watson’s new research partner “would fulfil his early promise before he gets late”?
5. Rosalind Franklin was changing jobs just about the time Watson was meeting his new research partner. To what college did she go to start this new research job?
6. How did Watson get Rosalind Franklin’s data on DNA?
7. Why weren‘t Watson and Crick successful at building the first model?
8. How did the director of Watson‘s lab view Watson and his partner’s research attempt on DNA?
9. One of the critical segments of evidence was obtained when Watson and his partner attended a formal dinner party (not the costume party). Who did they meet at the party and what was the evidence that he told them?
10. Why were Watson and Crick in such a hurry to complete the second model?
11. Who was Linus Pauling and what was wrong with his DNA model?
12. A look at one of Franklin‘s pictures provided the team with the necessary information about the number of bases and the angle of the molecules. Explain how this information was obtained.
13. Crick provided the insight about the direction of travel in each DNA chain. Explain what he said about this.
14. Which member of the team figured out how the bases attach to the deoxyribose sugars?
15. When they had all the pieces of the puzzle, they celebrated by going to a nearby pub. (February 27, 1953) What did they tell the other patrons that they had discovered?
16. It took Watson and Crick about a month to build the second model. The paper was submitted to Nature on April 4, and was published April 23. How much actual lab research had Watson and his teammate done to complete the model?
17. What did Crick mean when he said, about the DNA molecule, “It never dies, Jim” near the end of the film?
18. When was the Nobel Prize awarded? Why wasn‘t Franklin awarded a share of the Nobel Prize?
19. What did you learn from the movie that you didn’t previously know?