Internet Assignment: History of DNA

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Hershey & Chase Experiment

Go to:

http://highered.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::535::535::/sites/dl/free/0072437316/120076/bio21.swf::Hershey and Chase Experiment

1. What kind of virus was used in the Hershey-Chase experiment?
2. What was the purpose of the Hershey-chase experiment?
3. What does a phage consist of?
4. Sketch a copy of the phage
5. How do phages infect bacteria
6. Critical Thinking: how do you think a phage recognizes a host cell? In otherwords, what specifically do you think they attach to?
7. What was the purpose of growing phage on a medium containing S-35 labeled amiono acids?
8. When these phage were allowed to infect the bacteria, what was the result?
9. In the 2nd part of the experiment, how was DNA labeled?
10. What was the result of this experiment

# Meselson & Stahl Experiment

Got to:

http://highered.mcgraw-hill.com/olcweb/cgi/pluginpop.cgi?it=swf::535::535::/sites/dl/free/0072437316/120076/bio22.swf::Meselson and Stahl Experiment

1. What did the Meselson & Stahl experiment provide evidence for?
2. What was the purpose of growing bacterial cells on a medium containing a heavy isotope of N, 15N?
3. What was the next step of the experiment
4. After extracting the DNA, what was it dissolved in?
5. Why was this chemical important for the centrifugation step?
6. What happens to DNA when its spun in the tube?
7. Draw the4 tubes and their results

1 2 3 4

F1 generation F2 generation

1. Critical Thinking: Would tubes 1 & 2 be considered positive or negative controls? Explain.
2. What were Meselson & Stahls conclusions?