

**DNA replication worksheet**

Watch the animations and answer these questions as you go along – bring this worksheet with you next class.....

[http://highered.mcgraw-](http://highered.mcgraw-hill.com/sites/0072437316/student_view0/chapter14/animations.html#)

[hill.com/sites/0072437316/student\\_view0/chapter14/animations.html#](http://highered.mcgraw-hill.com/sites/0072437316/student_view0/chapter14/animations.html#)

**How Nucleotides are added in DNA replication? (Animation)**

1. List the proteins/enzymes involved in the process of replication.
2. How does replication start? Who prevents the unwound DNA from twisting back?
3. Which enzyme is the key player in Replication? What is this enzyme's limitation? How is this limitation overcome?
4. Why do the two strands of the helix have to be elongated by two slightly different mechanisms?
5. Explain the elongation stage of replication – your answer should include a discussion of the leading strand, lagging strand, Okazaki fragments and RNA primer.