**DNA Replication Poster HL**

Produce a poster on A3 paper to explain the process of DNA Replication. Follow the points below:

1. Explain the role of each of the following enzymes
   * helicase,
   * DNA gyrase,
   * single strand binding proteins,
   * DNA primase
   * DNA polymerase III,
   * RNA primase,
   * DNA polymerase I and
   * DNA ligase
2. Include an explanation of Okazaki fragments and
3. Explain how deoxynucleotide triphosphates are involved.
4. State that DNA replication occurs in a 5´ to 3´ direction.
5. State that in eukaryotic chromosomes, replication is initiated at many points.

**Help sources**

* Use Kognity and the Oxford textbook to help you.
* This video [**DNA replication.**](http://youtu.be/dKubyIRiN84?t=1m40s)gives a good explanation of the process.  
  It includes the coiling of DNA? the enzyme DNA gyrase and single strand binding proteins.
* [**This is an excellent  3D animation of DNA replication from YourGenome**](http://youtu.be/TNKWgcFPHqw)

Beware of the enzyme DNA primase, in this video called 'primase'

Be sure to annotate your diagram of the DNA replication fork and all its enzymes with the details from this video.