

DNA Replication and Transcription Middle School Story

Your homework for this week is to show me that you understand the basics of DNA replication and transcription. To do this, you will write an explanation/story that describes the information required below. However, you must write this so that a MIDDLE SCHOOLER can understand it! Your explanation/story must contain the following:

DNA REPLICATION

- WHERE is DNA located in a eukaryotic cell?
- WHY/WHEN does a cell need to copy its DNA?
- WHAT is the basic process by which a cell copies its DNA?

TRANSCRIPTION

- WHERE in a eukaryotic cell does transcription occur?
- WHAT is a gene?
- WHAT are the major differences between DNA and RNA?
- WHY does transcription occur (what is the purpose)?
- WHAT are the basic steps of transcription?
- ANSWER the following question at the end of your story: if a particular gene has the sequence A T C G G T A A C, what would be the sequence of the complementary mRNA that is made during transcription?

Try to make your story as creative as possible! Remember, if you can explain a concept to somebody (especially someone younger than you), then it is the best way to show you truly understand it! Feel free to include pictures in the typed up story if you like, use creative fonts and colors (as long as I can read it!), etc., but make sure the explanation is YOURS!