

AP Biology DNA Transcription/Translation Worksheet 11-11-09

**TRANSCRIPTION**

\*\*go to biology .com  
\*\*click on biology place  
\*\*close on biocoach  
\*\*click on DNA replication  
\*\*click on concept 5  
\*\*click the review button

1. Explain what a replication fork is and how it is formed and use a diagram in your answer.
  2. Explain what is meant by anti-parallel
  3. Which direction does DNA polymerase work? Is this a problem? Explain
- \*\*click step one

4. Which of the replication forks gets synthesized first?
  5. What is the function of primase in this process?
  6. What does DNA polymerase do once this primase leaves?
  7. What is this new DNA strand called? Why?
- \*\*click step two

8. Explain what happens next to the top strand of the replication fork.
9. What happens when the primase leaves this strand?
10. What is this new DNA strand called? Why?
11. What is another name for this strand?

\*\*click step three  
\*\*click step four

12. Why is the top strand termed discontinuously replicating?
  13. What is the function of DNA ligase?
  14. What does semidiscontinuous mean?
- \*\*click step five

15. What happens next in the top strand of the replication fork?
- \*\*close this window  
\*\*click the practice button and make sure you can synthesize an entire strand of DNA  
\*\*click on concept 6  
\*\*click on the review button

16. Give the functions of the following enzymes and proteins:
  - a. lagging strand
  - b. leading strand
  - c. DNA ligase