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Topic: DNA Replication Worksheet

Summary: Students answer questions about DNA replication and label a model of DNA replication.

NGSS Standards:

HS-LS3-1. Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.

Time Length: 10 minutes

Prerequisite Knowledge: Students have been introduced to the concept of DNA structure and what is an enzyme.

Materials:

Class notes or textbook or online textbook

- <https://flexbooks.ck12.org/cbook/ck-12-biology-flexbook-2.0/section/4.3/primary/lesson/dna-structure-and-replication-bio/>

Accommodations: Students with an IEP can take the handout home if they need extra time, work with a partner, and/or answer the odd questions.

Editable DOCX File and Answer Key:

Available at www.ngsslifescience.com

DNA Replication Worksheet

1. What is the purpose of DNA replication? _____

2. When the DNA is unwound, _____ is formed.
3. During DNA replication, why are there many replication forks? _____

4. After the result of DNA replication, one strand is new and one strand is old, this is called _____ replication.
5. The _____ strand has DNA made continuously.
6. The _____ strand has DNA made in short segments call Okazaki fragments.
7. What enzyme unzips (unwinds) the DNA? _____
8. What enzyme attaches new nucleotides to the original DNA strands? _____
9. The diagram on the right is demonstrating DNA replication. Draw in the main enzymes required for DNA replication and label the enzymes, replication fork, new strand, and original strand.

