

4. What is the difference between a leading and a lagging strand?

5. What do you think would happen if the process occurred incorrectly?

6. In the two problems below, show the complementary base pairing that would occur in the replication of the short DNA molecule below. Use two different colored pencils (or different pens, markers, etc.) to show which strands are the original and which are newly synthesized.

Original DNA Strand 1	Original DNA Strand 2	Original DNA Strand 1	New DNA Strand	Original DNA Strand 1	New DNA Strand
A-	T				
T-	A				
C-	G				
A-	T				
A-	T				
G-	C				
C-	G				
T-	A				
G-	C				
G-	C				
T-	A				
C-	G				
A-	T				
T-	A				

Original DNA Strand 1	Original DNA Strand 2	Original DNA Strand 1	New DNA Strand	Original DNA Strand 1	New DNA Strand
T-	A				
G-	C				
C-	G				
G-	C				
G-	C				
G-	C				
C-	G				
A-	T				
G-	C				
C-	G				
T-	A				
T-	A				
A-	T				
A-	T				