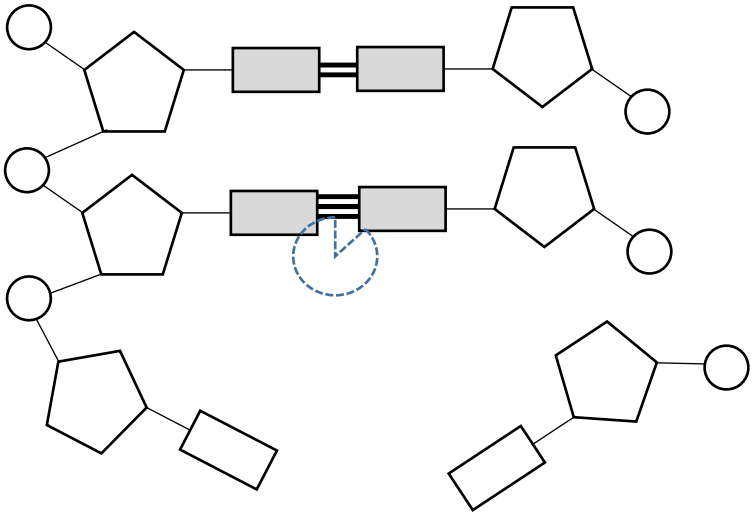
DNA REPLICATION (SL)



1. Draw the missing bonds. Name the type of bond you drew. _____.
2. Label the bases shaded gray. Name the type of bond between them. _____-_____.
3. Label one circle and one pentagon. Together, they form the _____-_____ backbone.
4. Recall that DNA replication takes place during ___ phase of the _____ _____ . This in preparation for cell _____.
5. The steps for replication are simple. Firstly, _____ enzyme separates DNA into two separate strands by breaking the _____ bonds between _____ _____ _____. Then free _____ _____ are added to the _____ strands by _____ _____ enzyme.
6. DNA replication is _____- _____ because half of each new molecule came from the original molecule. This was discovered by 2 researchers named _____ and _____ using isotopes of _____.
7. DNA replication can take place artificially in the laboratory. This is called the _____ chain _____. It _____ small samples of DNA, so that they can be used for purposes such as determining _____ and who might have committed a crime. In this process, the DNA is _____, which breaks the _____- _____. Then _____ enzyme from _____ is used. It does not _____ at high _____ because this organism evolved by _____ vents. The process is repeated as many times as needed.

