

*DNA Structure and Replication: For a statement: "At the end of DNA replication, two DNA molecules are produced, each one consisting of a parental DNA strand and a new DNA strand. This process is known as..."*

*Why wouldnt the answer be conservative replication, because this theory states that a completely new DNA strand is made and the parental strand is unchanged. Isn't this what the question asked for though?*

As we learned in class on Monday, if DNA replication were fully conservative, then when one double helical molecule is replicated--resulting in two helices identical in sequence--one of those helices would be parental DNA in both strands, and the other helix would be newly-synthesized DNA in both strands. Since this is not what the question describes, it wouldn't be conservative replication. As a question of terminology, let's keep some things straight: a molecule of DNA is a double helix, which in turn is composed of two complementary strands. So the strand isn't the same as the molecule, unless we happened to be talking about a single-stranded nucleic acid like most RNA molecules.

*Unique solution ID: #1690*

*Author:*

*Last update: 2009-02-22 17:40*