

SC.912.L.16.3 – DNA Replication – Example 3 Answer

At what point in the cell cycle does DNA replication occur and why?

- A. before a cell divides, to provide each of the two resulting cells with a complete set of DNA instructions**
- B. before a cell divides, to ensure that the DNA will fit into the resulting cells**
- C. during cell division, to ensure that the DNA will fit into the resulting cells**
- D. after a cell divides, to provide each of the two resulting cells with a complete set of DNA instructions**

Answer

A. before a cell divides, to provide each of the two resulting cells with a complete set of DNA instructions

During mitosis, everything in the original cell must make a copy of itself so that the two daughter cells have as much DNA and chromosomes as the original.