

SC.912.L.16.3 – DNA Replication – Example 6 Answer

A scientist puts nucleotide chains of UUUUUU in a test tube under conditions allowing protein synthesis. Soon the test tube is full of polypeptide chains composed only one the amino acid phenylalanine. What does this experiment indicate?

- A. The amino acid phenylalanine is composed of uracil.**
- B. UUU codes for the amino acid phenylalanine.**
- C. Protein synthesis malfunctions in test tubes.**
- D. Most proteins contain only one type of amino acid.**

Answer

B. UUU codes for the amino acid phenylalanine.

UUU coded for the amino acid phenylalanine to be created (synthesized) in the test tube. Each three DNA nucleotides codes for one amino acid.