

Solutions

Each answer shows the steps, then the **result**.

2.1

- Each new molecule keeps one original strand and gains one new strand

2.2

- Unwinds and separates the two DNA strands

2.3

- Adds complementary nucleotides to build the new strand

3.1 C

- one old and one new strand

3.2

(a)

- Helicase unwinds/separates the strands; DNA polymerase adds complementary bases to each template

(b)

- 5'-TTACGG-3'

3.3

- Each original strand acts as a template, and complementary base pairing forces the new strand to match exactly, so both daughter molecules are copies of the original