

19 Genetic engineering – Part 1 —Answers

Answers

Work through these after trying the questions yourself.

19.1 Changes an organism's genes (often by moving a gene in).

19.2 Cuts DNA at a specific sequence, leaving sticky ends.

19.3 Joins pieces of DNA together.

19.4 DNA made by joining DNA from two different sources.

19.5 A vector —to carry the gene into a cell.

19.6 The same restriction enzyme cuts at the same sequence, so it leaves *identical* sticky ends on both the gene and the plasmid. Because these ends are complementary, the gene's ends pair with the plasmid's ends, letting ligase join them into one recombinant molecule.