

## PART 2

*You should spend about 15 minutes in this part.*

Read the text below and correct the underlined errors.

For each question, write the correct word in the space provided on your answer sheet.

### DNA

DNA, also (0) know as deoxyribonucleic acid, is the molecule that contains the genetic information necessary for (9) a organism's growth and operation. DNA is composed of two connected strands (10) calling double helix that wind around one another to resemble a twisted ladder. The phosphate and sugar (deoxyribose) groups make each strand's backbone (11) alternative. Adenine (A), Cytokinese (C), Guanine (G) or Thymine (T) are the four bases that are joined to every sugar.

An organism's DNA has the instructions necessary for (12) their growth, survival, and procreation. To do these tasks, DNA sequences must be translated into instructions that the body can utilise to make proteins, which are complex molecules that (13) performed the majority of bodily processes. A gene is any DNA sequence that carries the information needed to synthesise a protein.

Proteins are made in two steps using instructions found in DNA. The information in a DNA molecule is first read by enzymes, which then translate it into a messenger ribonucleic acid or mRNA, intermediate molecule. After that, the mRNA molecule's information (14) are converted into the "language" of amino acids, which serve as the building blocks of proteins. This language instructs the cell's machinery (15) responsibility for producing proteins on the precise sequence in which to join the amino acids to create a certain protein. There are 20 different kinds of amino acids, and they can be arranged in a vast array of (16) way to create different kinds of proteins, so this is a significant undertaking.

(Adapted from: <https://www.genome.gov/about-genomics/fact-sheets/Deoxyribonucleic-Acid-Fact-Sheet>)

Example:

|   |       |
|---|-------|
| 0 | known |
|---|-------|

|    |  |    |  |    |  |    |  |
|----|--|----|--|----|--|----|--|
| 9  |  | 10 |  | 11 |  | 12 |  |
| 13 |  | 14 |  | 15 |  | 16 |  |

[8 marks]