

Name:
Student Number:

DNA

1. What is the shape of the structure of DNA?



DNA forms a double helix structure.

2. What is the backbone of DNA made of?

The sugar-phosphate chains are the backbone of DNA.

3. How many hydrogen bonds join Thymine and Adenine?

Two hydrogen bonds join Thymine and Adenine.

4. Why is the order of the base pairs important?

The order of these base pairs create a code for genetic information. These codes are the instructions for making proteins, which direct what a cell does and how an organism develops.

Same and Different (Page 16 – 17)

5. Why do children look like their parents?

Children look like their parents because they inherit information from them in the form of genes.



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6. What two things can affect how you develop?

Inherited information and your environment affect how you develop.

7. Write these cell parts in order of size starting with the smallest:
chromosome, gene, cell, nucleus, DNA

Gene, DNA, Chromosome, Nucleus, Cell.

8. How do genes control your development?

Genes are instructions for making proteins. Each gene is the 'recipe' for making a different protein. This is how they direct what a cell does and how an organism develops / how we develop.

9. Name two types of protein in the human body, and say what they do.

Structural proteins build the body, e.g. collagen.

Functional proteins take part in the chemical reactions of the body, e.g. enzymes.

