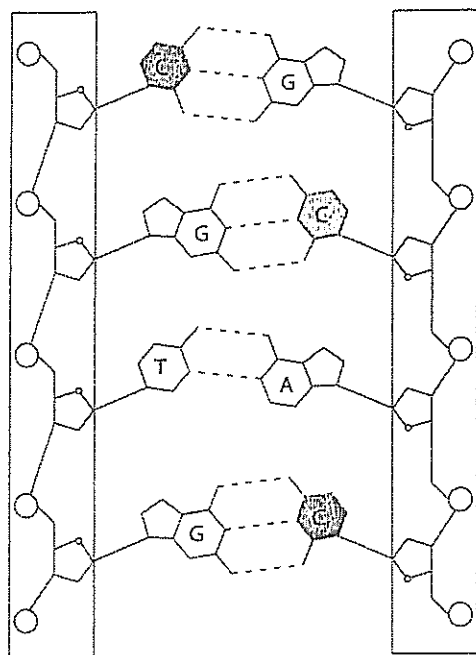


Chapter 17: Worksheet 1

DNA colouring

Unit
2B



Use the key below to colour code the DNA

○ phosphate	G guanine
◡ sugar	C cytosine
A adenine	T thymine

What are the base pairing rules?

_____ = _____

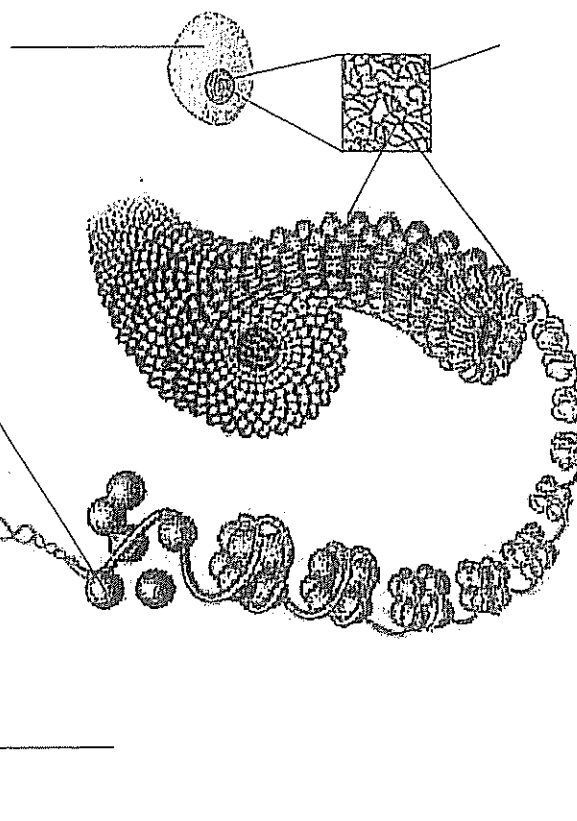
_____ = _____

What does DNA stand for?

On the diagram of DNA above:

1. circle a nucleotide
2. label a sugar-phosphate backbone.

Use page 231 of *Human Perspectives 2A/2B* to label the diagram below.



Explain how such long DNA molecules can fit into the cell nucleus.

DNA REPLICATION

During the interphase of cell division (the period between cell divisions), the DNA molecule undergoes replication - it forms an exact copy of itself. This is so the daughter cell produced will have identical genetic information to the parent cell.

DNA replication occurs as follows:

The two linked chains of the DNA molecule separate. Each separated section contains half of the original information.

These separated sections now serve as a template for the nucleotides that will form the new half.

Because adenine only pairs with thymine and cytosine only pairs with guanine, the new half that form will be identical to the original.

