



Chromosomes and Mitosis

1 Where in the cell are chromosomes found?

In the DNA

In the nucleus

In the Cytoplasm

[1 mark]

2 How many cells are made through the process of mitosis

1

2

4

[1 mark]

3 The cell cycle consists of a number of stages. Order the events in the list below. The first one has been done for you.

1	The cytoplasm and cell membrane divides
2	One of the daughter cells starts the cell cycle all over again
3	The cell grows and increases the amount of subcellular structures such as mitochondria and ribosomes
4	The cell duplicates its DNA, forming X-shaped chromosomes
5	The chromosomes line up along the centre of the cell and cell fibres pull the two arms of each chromosome to opposite sides of the cell
6	Membranes form around the groups of chromosomes at opposite poles of the cell, forming new nuclei
7	Two new daughter cells are produced

[6 marks]

GCSE Biology

4 Which statement about human cells is correct?

- The haploid number of chromosomes is 23 and the diploid number is 46
- The haploid number of chromosomes is 46 and the diploid number is 23
- The diploid number of chromosomes is 24 and the triploid number is 36

[1 mark]

4 Mitosis is a vital process in human bodies. Give two reasons we need the new cells generated from mitosis

- 1)
- 2)

[2 marks]

[Total 11 marks]