Cell division—page 1

Name:

Skill: knowledge

Mitosis

Cut out the descriptions and diagrams for the five stages of mitosis and arrange them in the correct order on page 2 of this worksheet.

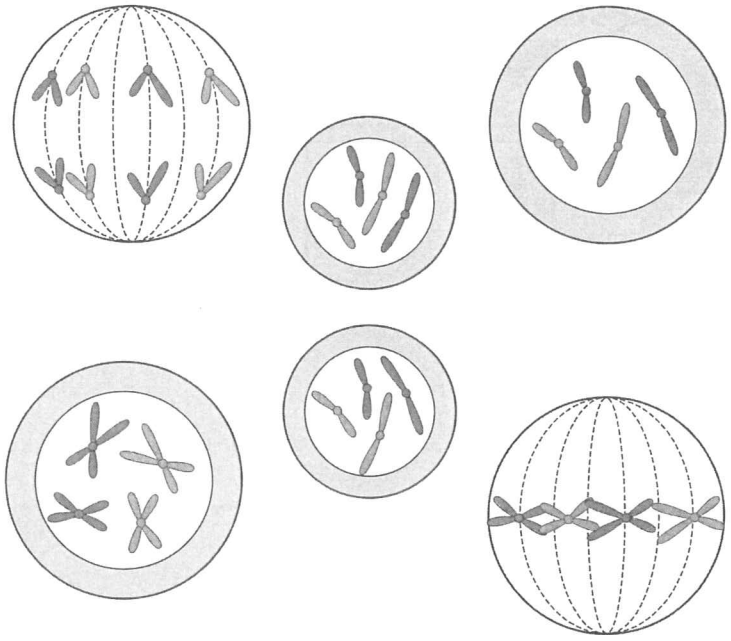
Chromosomes separate and move to the ends of the cell.

Two pairs of chromosomes are visible.

Chromosomes are doubled but attached at a point called the centromere.

Membranes form to produce two daughter cells.

Chromosomes line up along the 'equator' of the cell.



Meiosis

Cut out the descriptions and diagrams for the seven stages of meiosis and arrange them in the correct order on page 3 of this worksheet.

Chromosomes are doubled but attached at a point called the centromere.

Chromosomes separate and move to the ends of each cell.

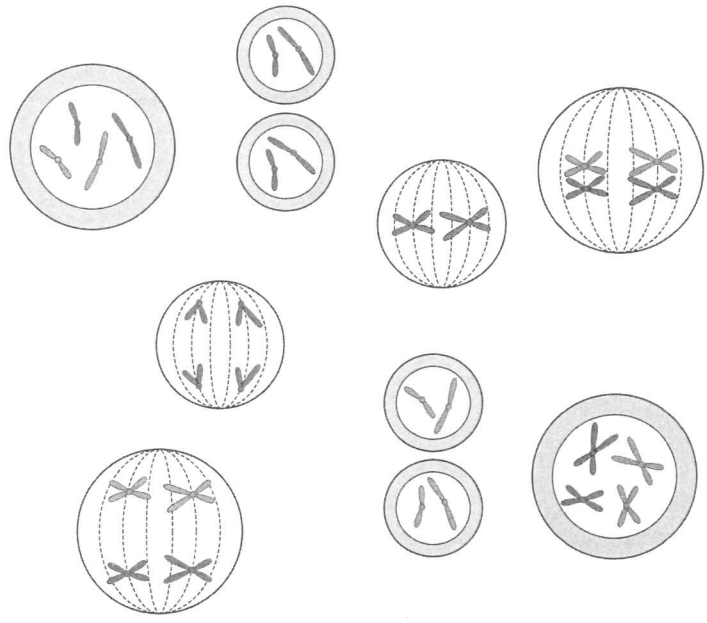
Membranes form to produce two daughter cells.

Chromosomes line up along the 'equator' of the cell.

Homologous chromosomes line up along the 'equator' of the cell.

One of each pair of chromosomes moves to the ends of the cell.

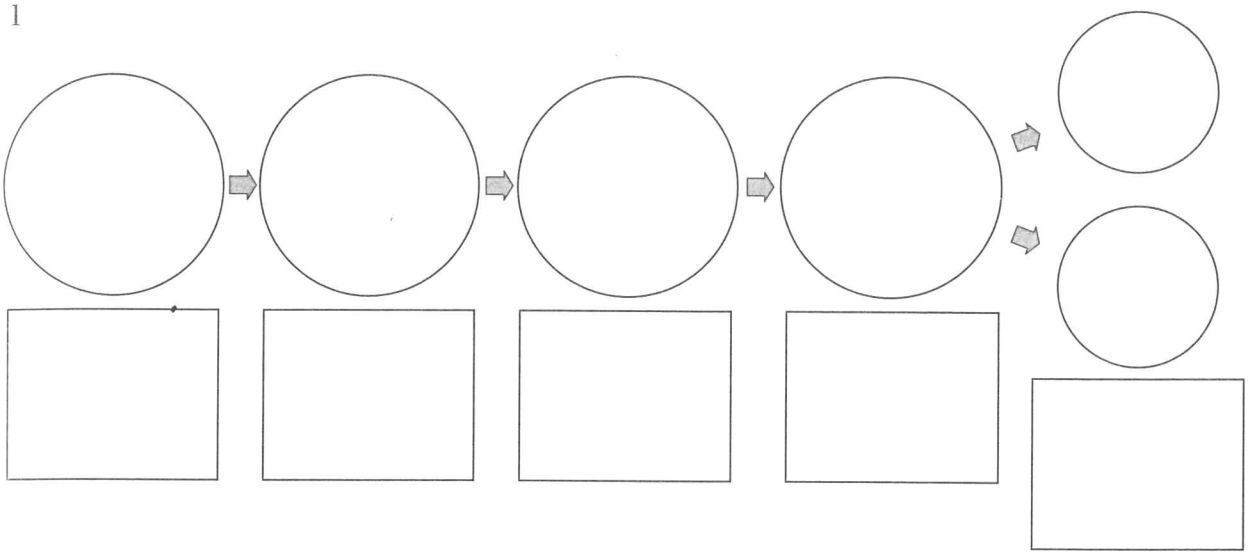
Two pairs of chromosomes are visible.



Cell division—page 2

Mitosis

1



2 Define the following terms:

a homologous pair

b diploid

c haploid

d daughter cell

3 Identify the parts of the body in which mitosis occurs.

4 Outline the purpose of mitosis in:

a multicellular organisms

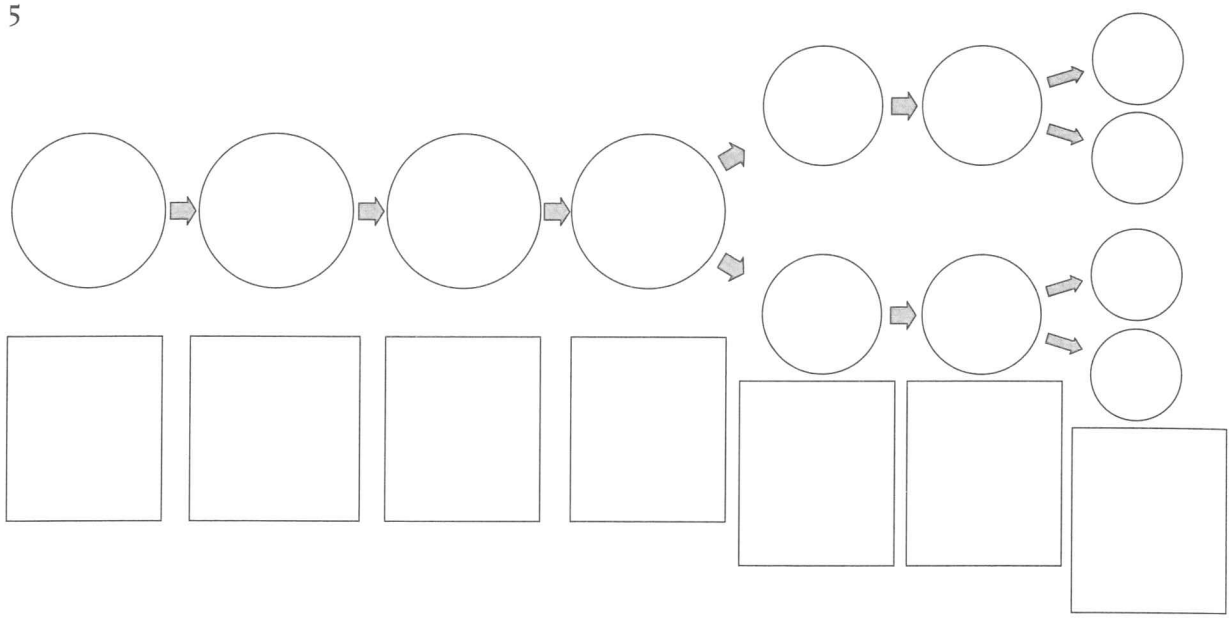
b single-celled organisms.

Cell division—page 3

Name:

Meiosis

5



6 Identify the parts of the body in which meiosis occurs.

_____

_____

7 Outline the purpose of meiosis.

_____

_____

8 What names are given to the daughter cells produced during meiosis:

a in males? _____

b in females? _____

9 Complete the following table to summarise the differences between mitosis and meiosis.

	Mitosis	Meiosis
Number of daughter cells produced		
Number of chromosomes in parent cells of humans		
Number of chromosomes in daughter cells in humans		