



LIFE SCIENCES GRADE 12

PRACTICAL TASK 1.1

MEIOSIS

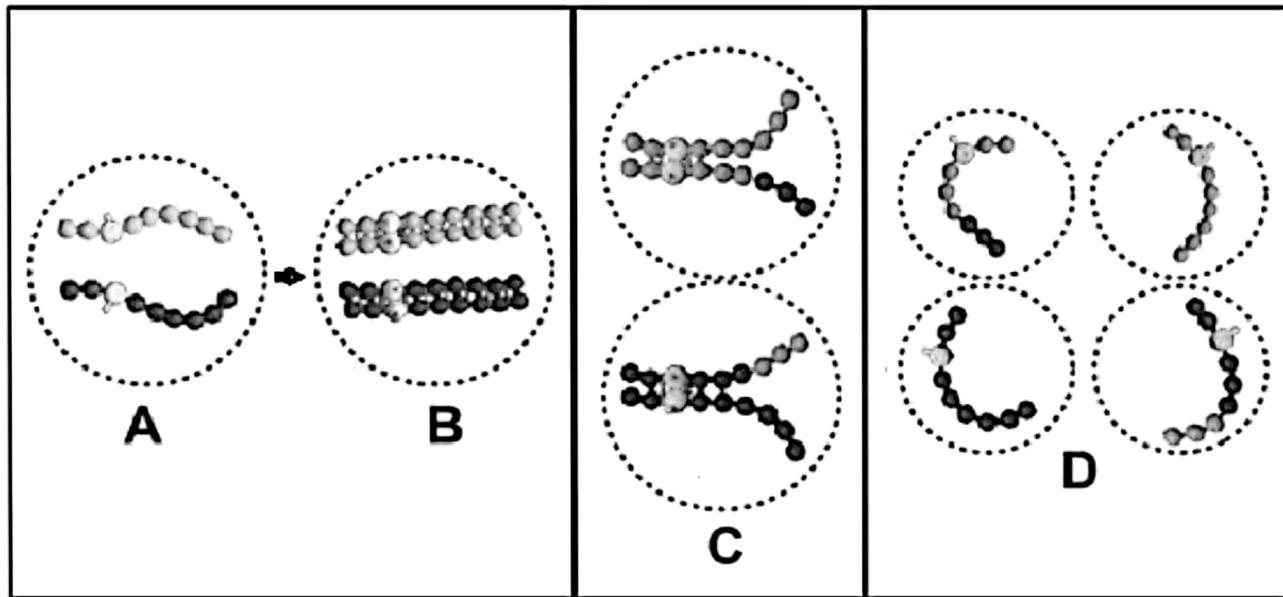
DATE : 21 February 2023

Name: _____

MARKS	
	30

QUESTION 1

The diagrams below represent different processes which learners illustrated by using beads.



1.1 Before meiosis starts, the process illustrated in diagram **A** and **B** takes place .

1.1. Which process is referred to before meiosis starts? (1)
1

1.1. During which phase does this process named in QUESTION 1.1.1 take place? (1)
2

1.2 Phases **C** and **D** represents the same type of phase in meiosis but appears differently.

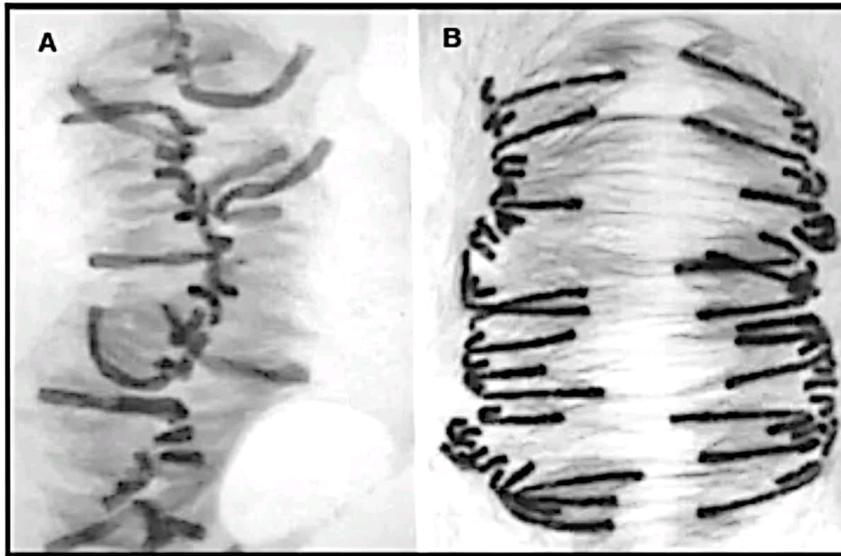
Identify phase:

C _____

D _____ (2)

QUESTION 2

The micrographs below represent two different phases of meiosis.



2.1 Identify phase:

2.1.1 A _____ (1)

2.1.2 B _____ (1)

2.2 Tabulate TWO differences between these two phases. (5)

(7)



QUESTION 3

The table below indicates the chromosome number of THREE different organisms **during** and at the **end** of meiosis.

3.1 A single value is given for each of the THREE organisms. Complete the table by filling in the rest of the values for each species.

(6)

NUMBER OF CHROMOSOMES	HUMAN	EARTHWORM	BROCCOLI
Before meiosis			
Chromosome number	46		
After meiosis I			
Chromosome number		18	
After meiosis II			
Chromosome number			9

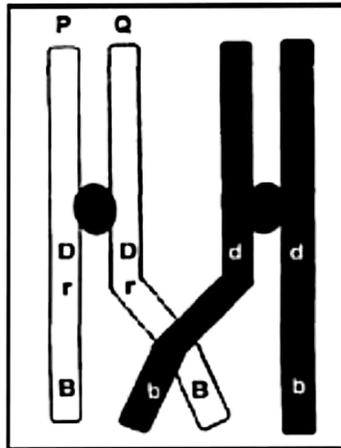
3.2 Draw a bar graph to show the number of chromosomes before meiosis of the human, earthworm and broccoli.

(6)

QUESTION 4

The diagram below represents some structures evident during prophase

I.



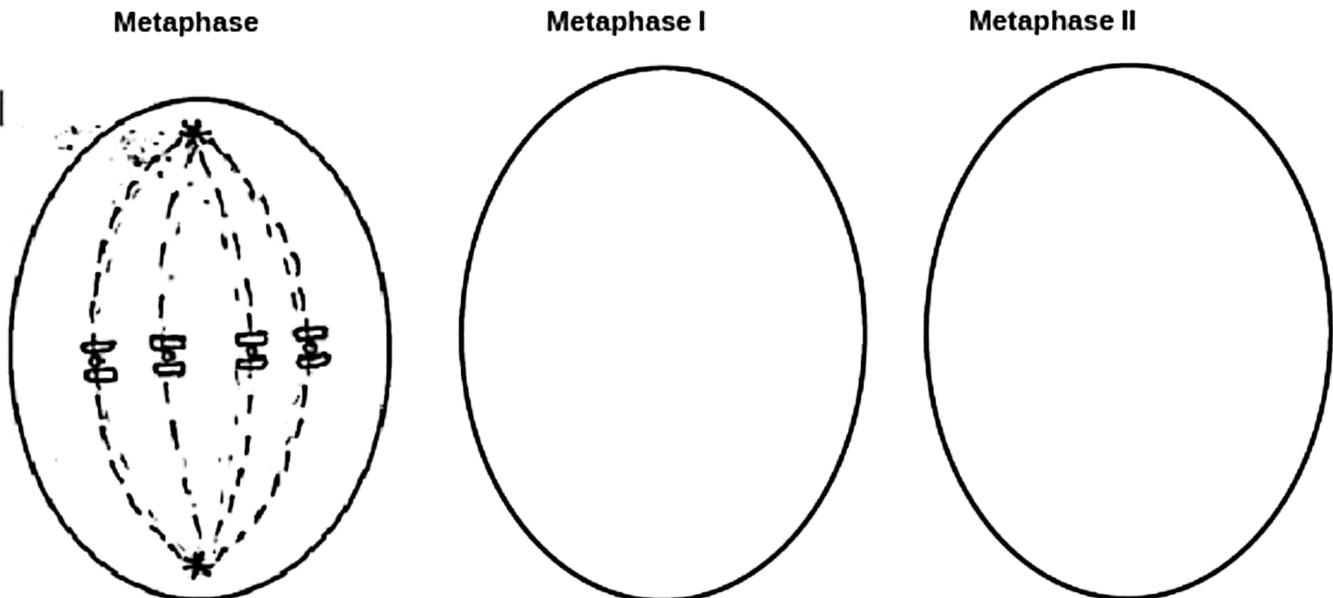
4.1 Give the name of the process represented in the diagram.

(1)

QUESTION 5

5.1 Use the cell drawn below showing metaphase during mitosis, to draw the appearance and the arrangement of the chromosomes during Metaphase I and Metaphase II respectively.

(6)



TOTAL: 30