



Name - \_\_\_\_\_

Score - \_\_\_\_\_

# PHASES OF MEIOSIS

Meiosis produces four genetically unique daughter cells, each with half the number of chromosomes (haploid). It occurs in gamete-producing cells. (Produces sperm and eggs in humans)

## Answer Sheet

### STAGE

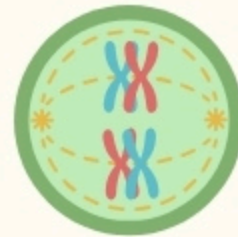
### DESCRIPTION

#### Prophase 1



Homologous chromosomes pair up, and crossing-over (recombination) occurs.

#### Metaphase 1



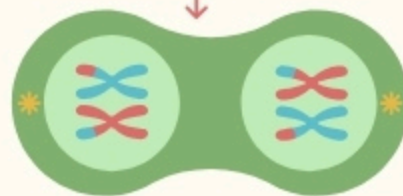
Homologous chromosome pairs line up in the middle; spindle fibers attach to centromeres.

#### Anaphase 1



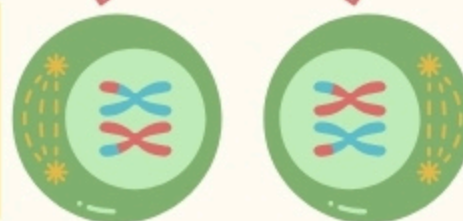
Homologous chromosomes are pulled apart to opposite poles by spindle fibers.

#### Telophase 1/Cytokinesis



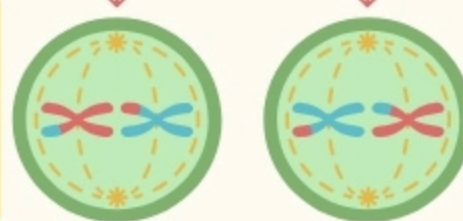
The cell pinches in the middle and divides into two daughter cells.

#### Prophase 2



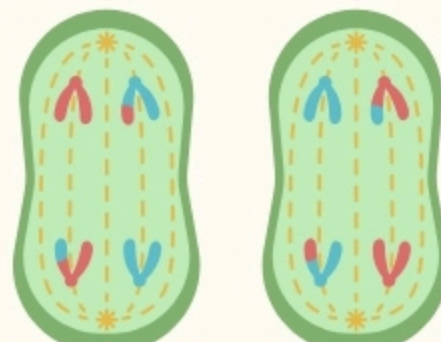
Two daughter cells are formed.

#### Metaphase 2



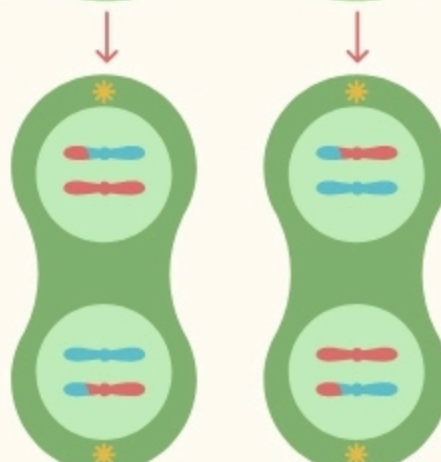
Chromosomes line up in the middle in each daughter cell.

#### Anaphase 2



Sister chromatids are pulled apart—each chromatid is now an individual chromosome.

#### Telophase 2/Cytokinesis



Cells pinch in and divide, producing four haploid granddaughter cells, each with half the number of chromosomes.