

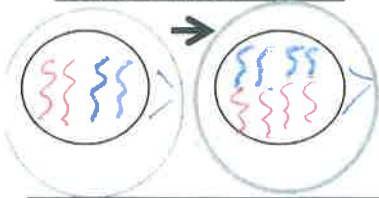
I CAN explain and describe how animal & plant cells produce more cells.

Name _____
Period _____ Date _____
Cell Cycle NOTES

CELL CYCLE occurs in **SIX** steps.

1st Step: (first stage) The cell **RESTS** and **GROWS**.
Chromosomes & organelles are **COPIED** (# doubles)

INTERPHASE



This ends this first stage of the cycle.

MITOSIS (second stage)

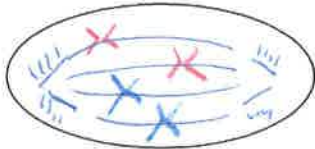
2nd step (1st phase):

MITOSIS begins



PROPHASE

The **NUCLEAR** membrane dissolves.



CHROMOSOMES condense—shorten and thicken.

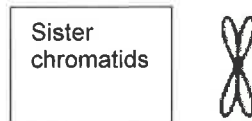
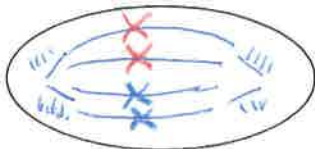
FIBERS attach at the centromere.



3rd step (2nd phase):

CHROMOSOMES line up on the equator.

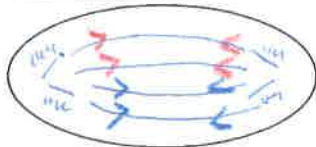
METAPHASE



4th step (3rd phase):

Chromosomes **SEPARATE** and are pulled to opposite sides of the cell by the spindle fibers.

ANAPHASE



5th step (4th phase):

The nuclear membrane forms around the 2 sets of chromosomes forming two new **NUCLEI**
Chromosomes unwind, the spindle fibers disappear.

TELOPHASE



MITOSIS ends

↑ pinching inward

6th step (third stage) :

The **CYTOPLASM** splits in two.

CYTOKINESIS

The cell membrane moves inward to create two separate identical cells. These cells two new cells are called daughter cells.

