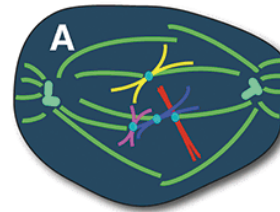


CELLS alive! - Mitosis Phase Worksheet

(Match the picture to the phase & tell what's happening now.)

Interphase(1) (G)

Cell copies its DNA in preparation for mitosis



A) Prometaphase

Prophase (F)

Replicated chromosome condenses into chromosome

Then, microtubules disassemble. The building block of these

microtubules are used to grow the mitotic spindle



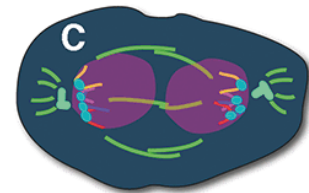
B) Interphase (2)

Prometaphase (A)

The nuclear envelopes breaks down so there is no

longer a recognizable nucleus. Some mitotic spindle fibers attach to kinetochores.

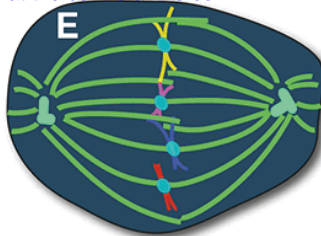
Other spindle fibers elongate by overlapping each other at the centre



C) Telophase

Metaphase (E)

Spindle fibers align all chromosomes in one plane at the centre of the cell.

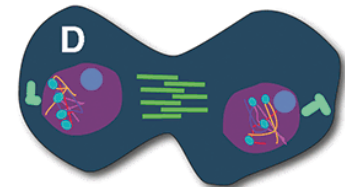


E) Metaphase

Anaphase (H)

Spindle fibers shorten, the kinetochores separate,

and the chromatids are pulled apart and begin moving to the cell poles

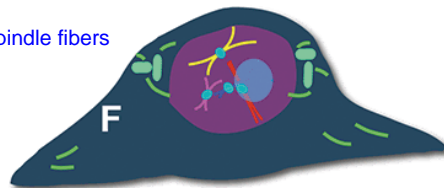


D) Cytokinesis

Telophase (C)

Daughter chromosomes arrive at pole and spindle fibers

that pulled them apart disappear



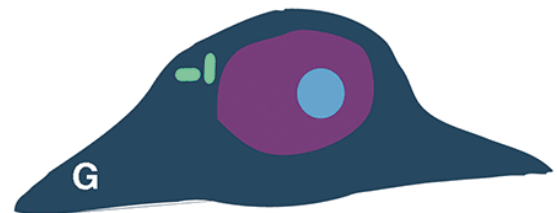
F) Prophase

Cytokinesis (D)

Spindle fibers not attached to chromosomes

begin breaking down the overlapping portion is left.

Here, the contractile ring cleaves the cell into two daughter cell. The microtubules then reorganizes into a new cytoskeleton

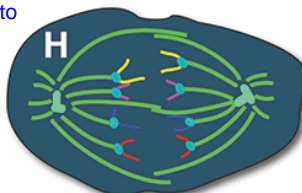


G) Interphase

Interphase(2) (B)

The process of the cell splitting is done

and now 2 copies of the cell is made.



H) Anaphase