

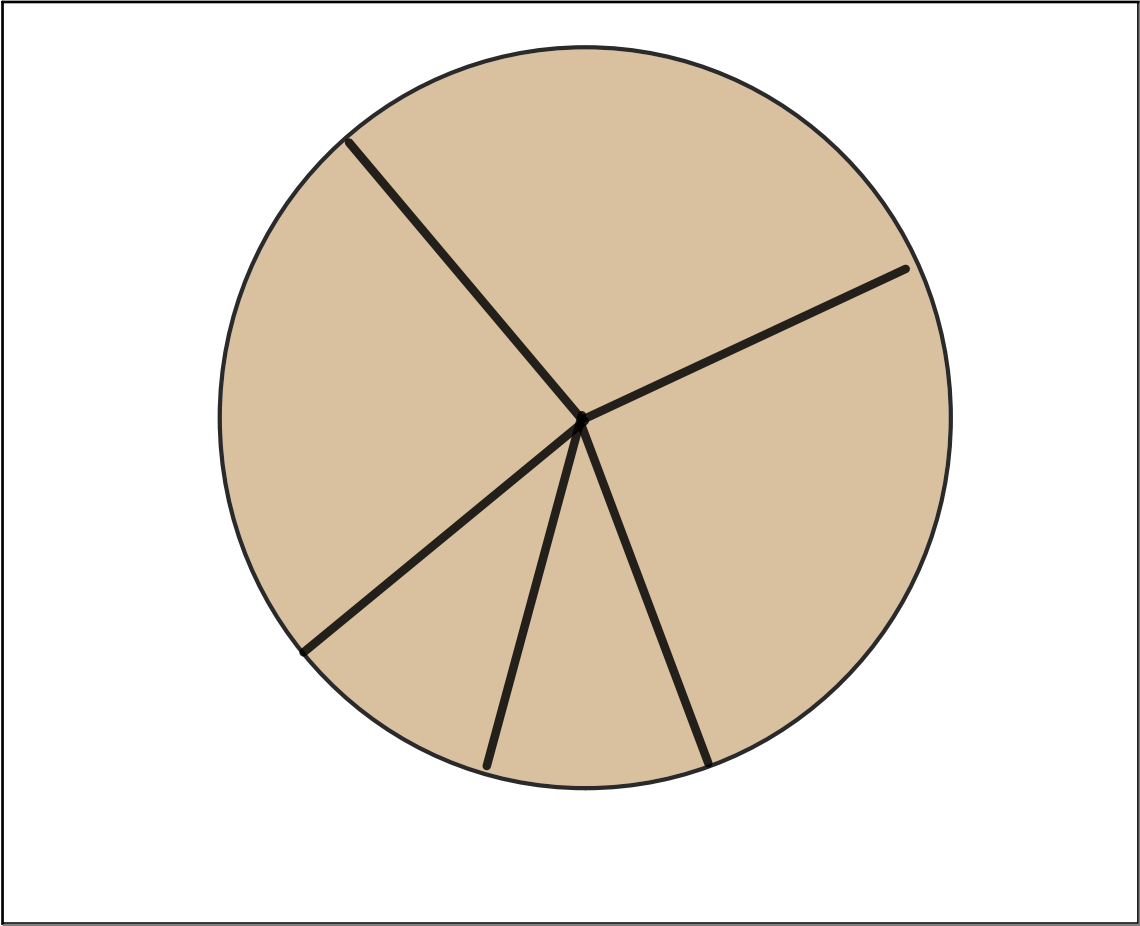
# Notes on Chapter 6-2

Nov 11 - 7:20 AM

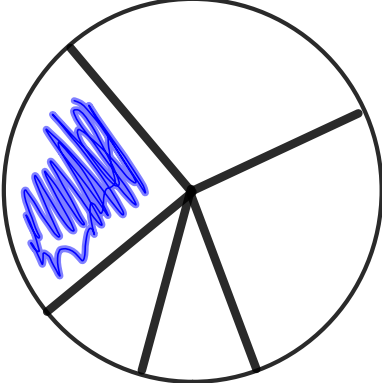
Cell Cycle is the cell divison on a eukaryotic cell.

Cell cycle- a repeating Sequence of cellular growth and divison during the life of an organism.

Nov 10 - 2:31 PM

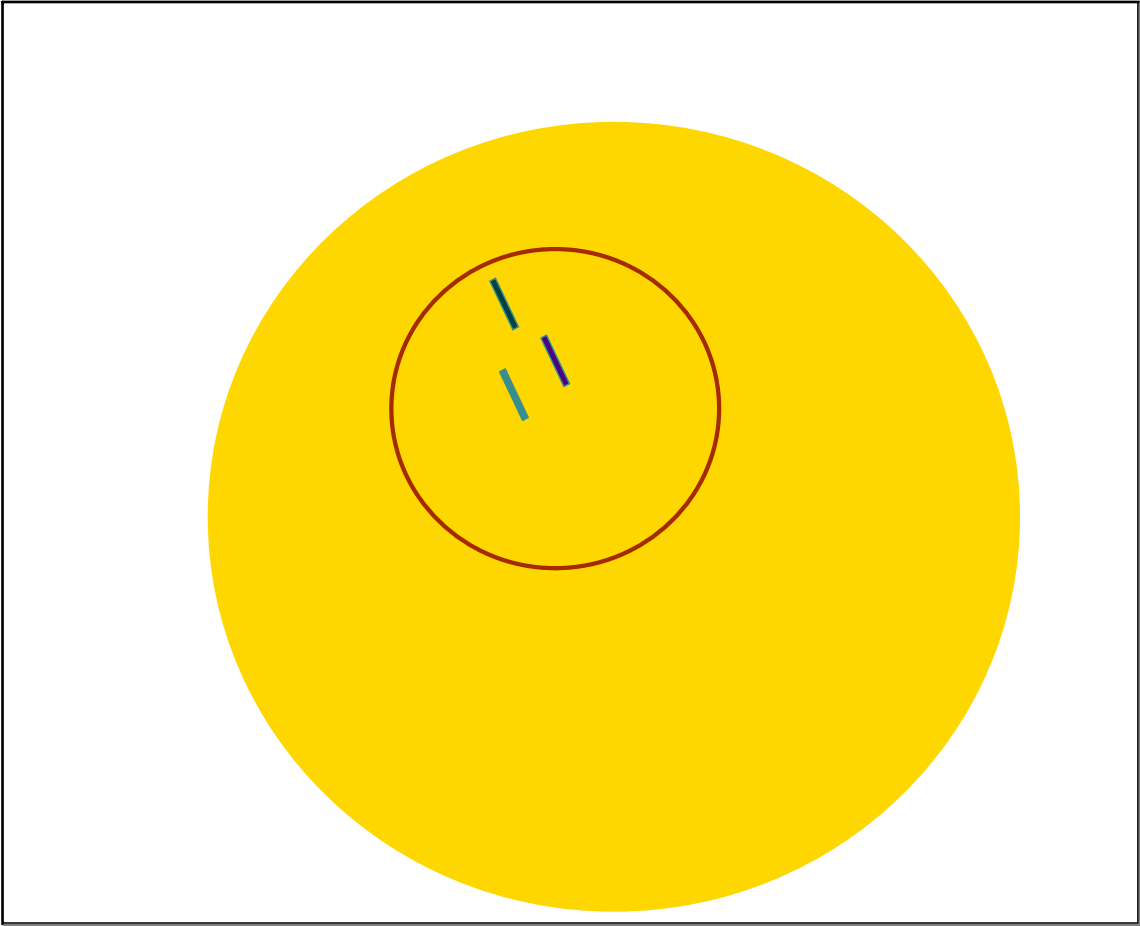


Nov 10 - 2:39 PM

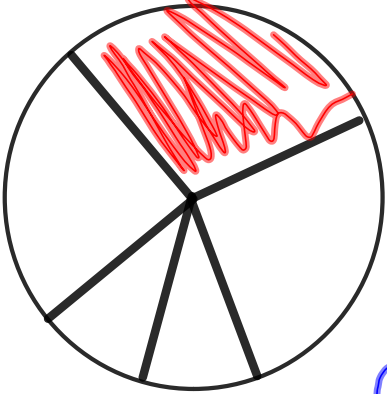


$G_1$  The first growth phase. A cell carries out its functions and grows. Cells that are not dividing stay in  $G_1$


Nov 10 - 2:39 PM



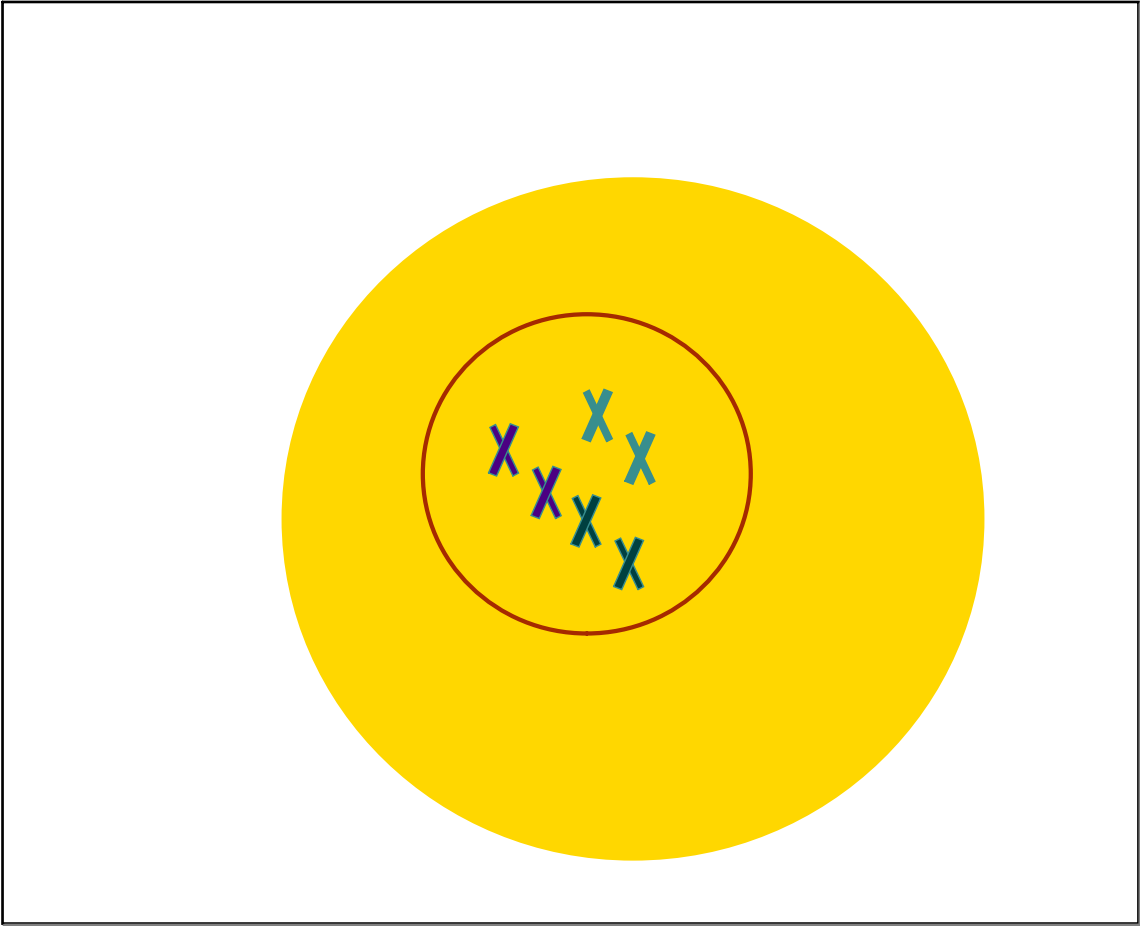
Nov 10 - 2:47 PM



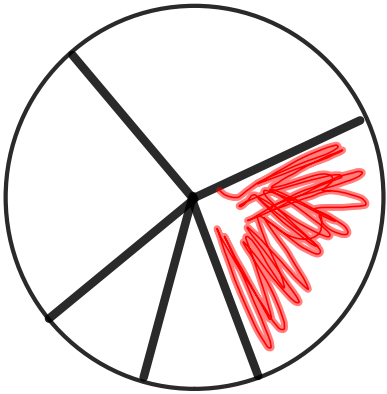
S phase- Synthesis- a cell's DNA is copied. At the end of this phase each chromosome consists of two chromatids attached at the Centromere



Nov 10 - 2:42 PM

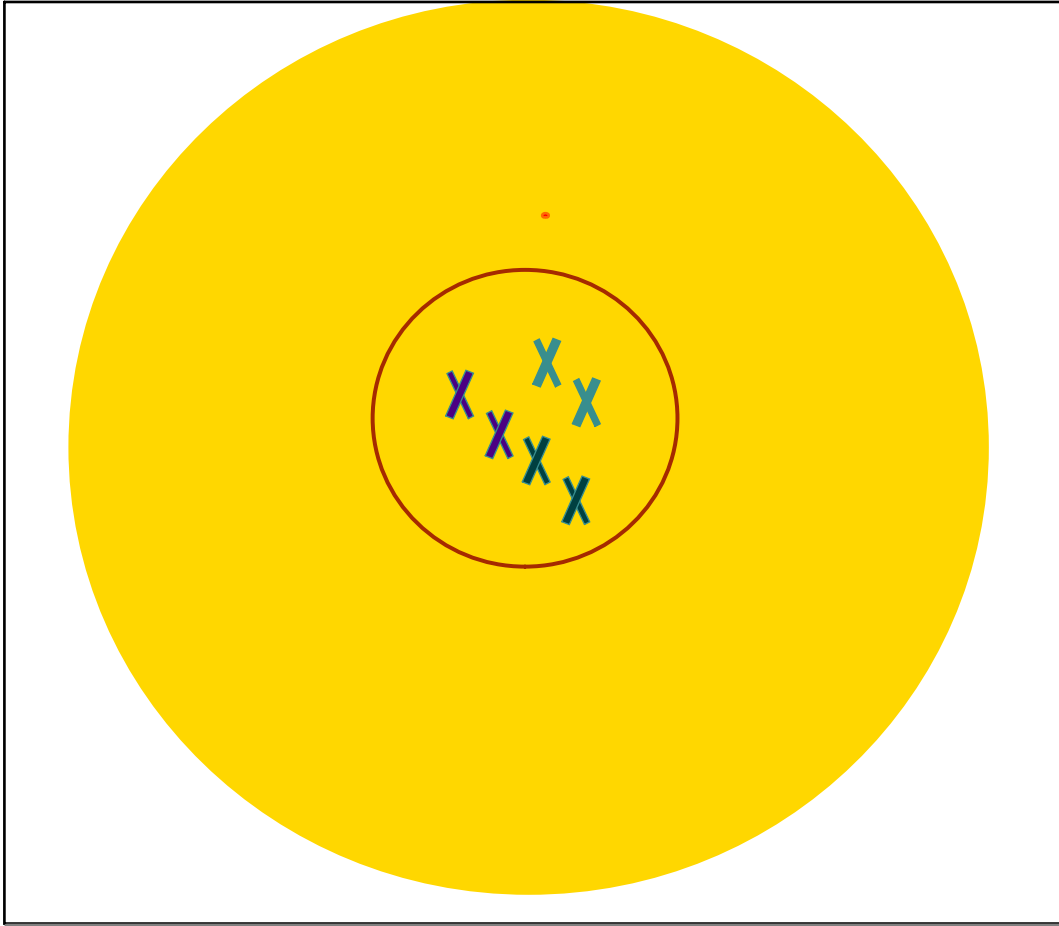


Nov 10 - 2:45 PM

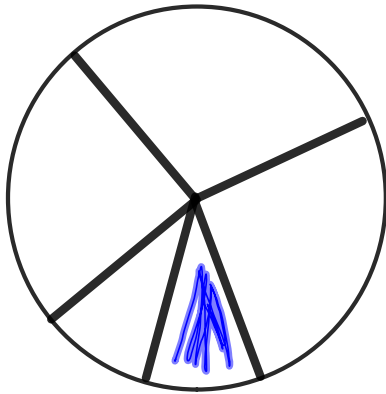


$G_2$  phase. The 2<sup>nd</sup> growth phase. The cell prepares to divide.  
Microtubules are assembled.

Nov 10 - 2:44 PM

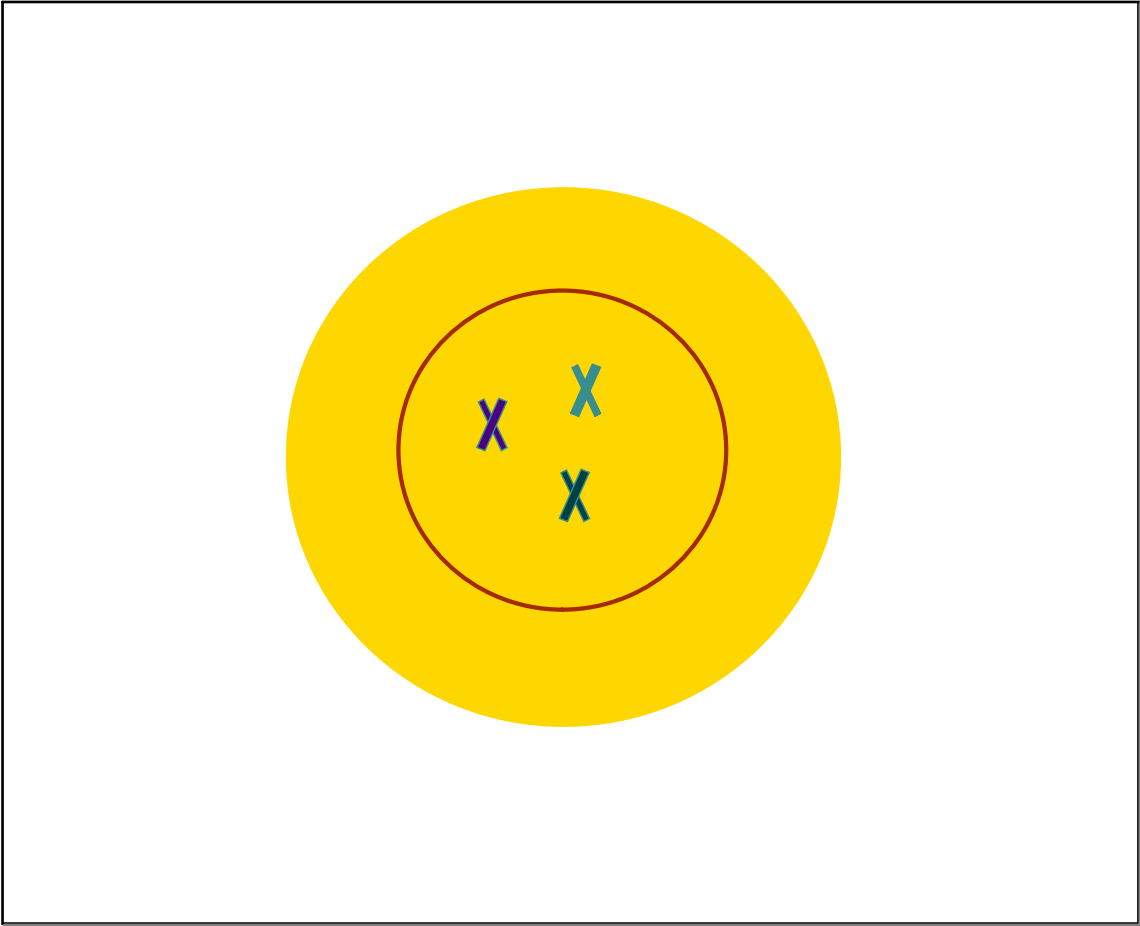


Nov 10 - 2:45 PM

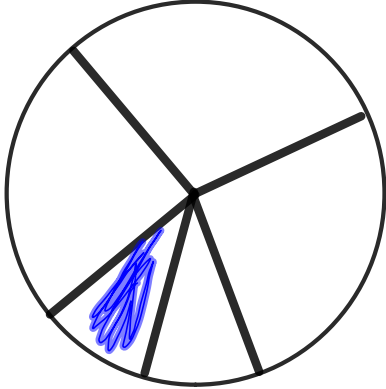


Mitosis- The process of cell division. The cell divides into two nuclei.

Nov 10 - 2:48 PM



Nov 10 - 2:45 PM

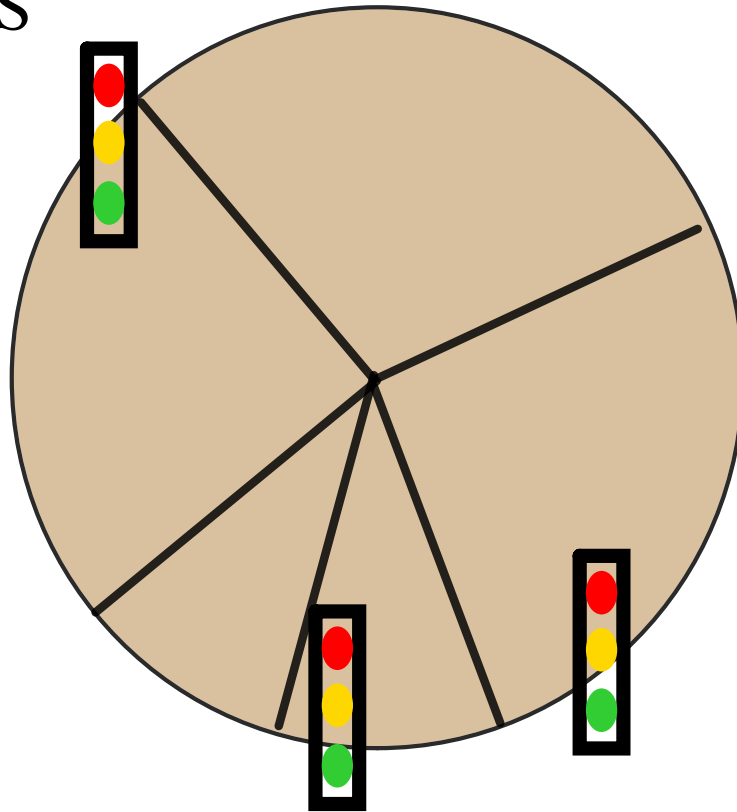


Cytokinesis- the process by which the cytoplasm divides.

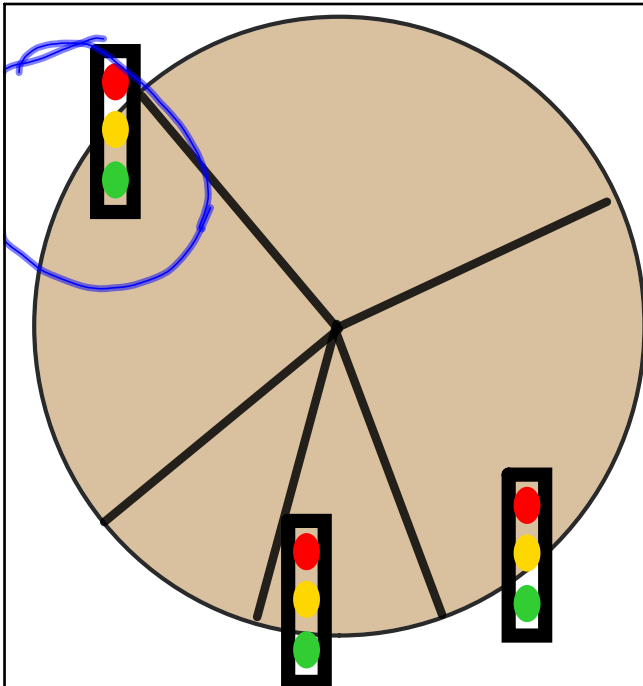
The diagram on the left shows a circle representing a cell. Inside, several lines radiate from a central point to the edge, representing spindle fibers. A blue, brush-like structure is drawn in the lower-left quadrant, representing the cytoplasm being pulled apart during cytokinesis.

Nov 10 - 2:51 PM

# STOPS

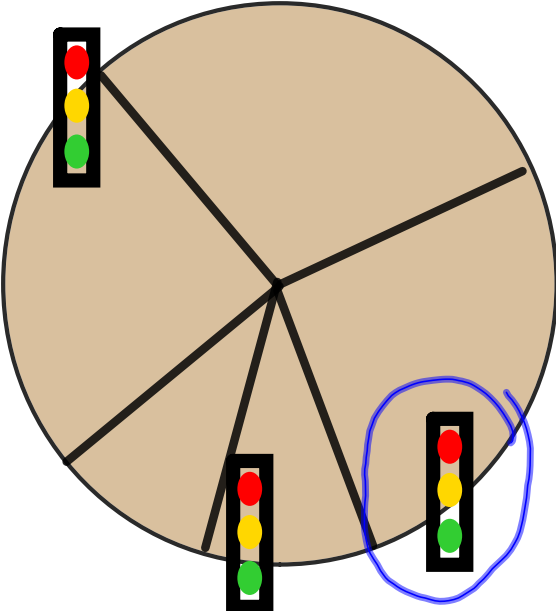


Nov 10 - 2:39 PM



G<sub>1</sub> checkpoint-checks if the cell will divide

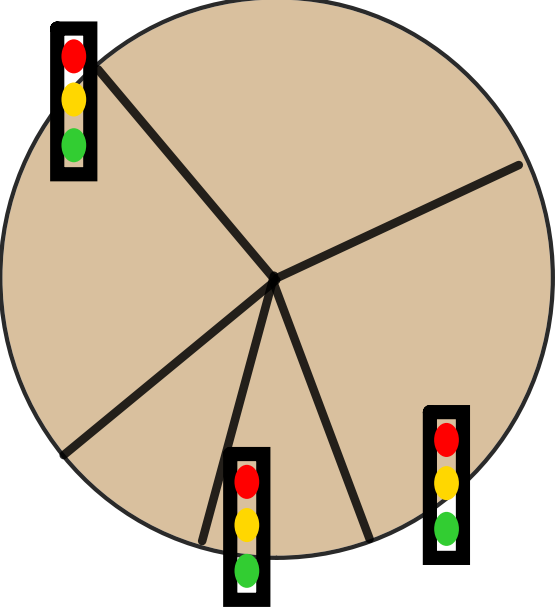
Nov 10 - 3:12 PM



A diagram of a cell cycle checkpoint in the G<sub>2</sub> phase. It shows a large brown circle representing the cell, divided into four quadrants by black lines. Three traffic light icons are positioned around the circle. The top-left traffic light has its red light lit. The bottom traffic light has its red, yellow, and green lights lit. The right traffic light has its red, yellow, and green lights lit and is circled in blue. To the right of the diagram, text explains that DNA replication is checked at this point by DNA repair enzymes, and if the checkpoint is passed, the cell enters mitosis.

G<sub>2</sub> checkpoint-  
DNA replication  
is checked at this  
point by DNA  
repair enzymes.  
If this check  
point is passed  
the cell enters  
mitosis.

Nov 10 - 3:13 PM

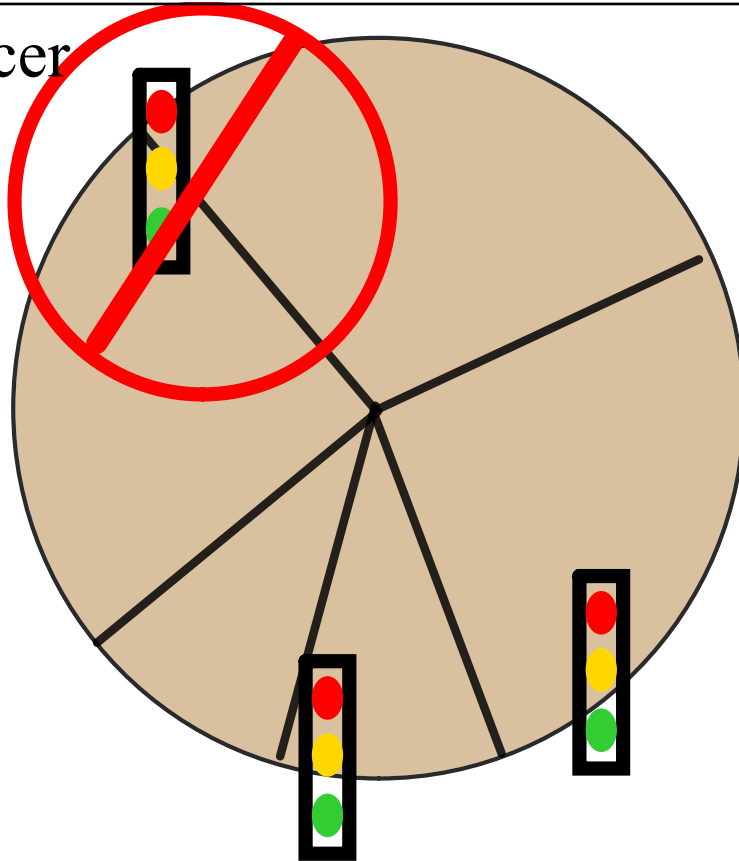


A diagram of a cell cycle checkpoint in mitosis. It shows a large brown circle representing the cell, divided into four quadrants by black lines. Three traffic light icons are positioned around the circle. The top-left traffic light has its red, yellow, and green lights lit. The bottom traffic light has its red, yellow, and green lights lit. The right traffic light has its red, yellow, and green lights lit. To the right of the diagram, text explains that the mitosis checkpoint triggers the exit from mitosis.

Mitosis  
checkpoint-  
triggers the  
exit from  
mitosis.

Nov 10 - 3:14 PM

Cancer



Nov 10 - 3:15 PM