

# Objectives:

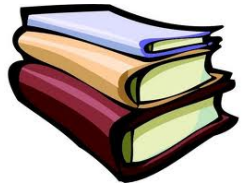
1. Students will review the steps of Replication
2. Students will create an analogy of the cycle they go through in the school day to the cycle that cell goes through

# Agenda:

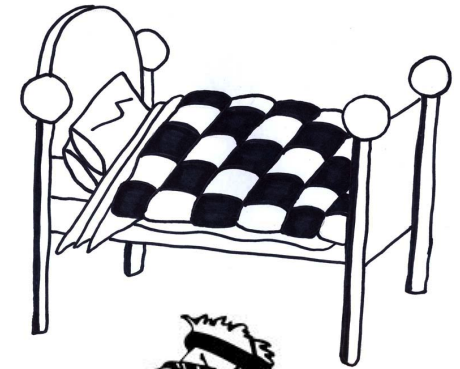
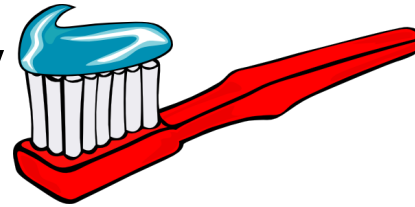
1. Collect Homework
2. Give Back Quiz
3. Review Replication
4. Cell cycle Day activity
5. Notes on the Cell cycle

# Warm Up:

When DNA Polymerase is matching the nucleotides to make the new strand of DNA where are these Nucleotides coming from?

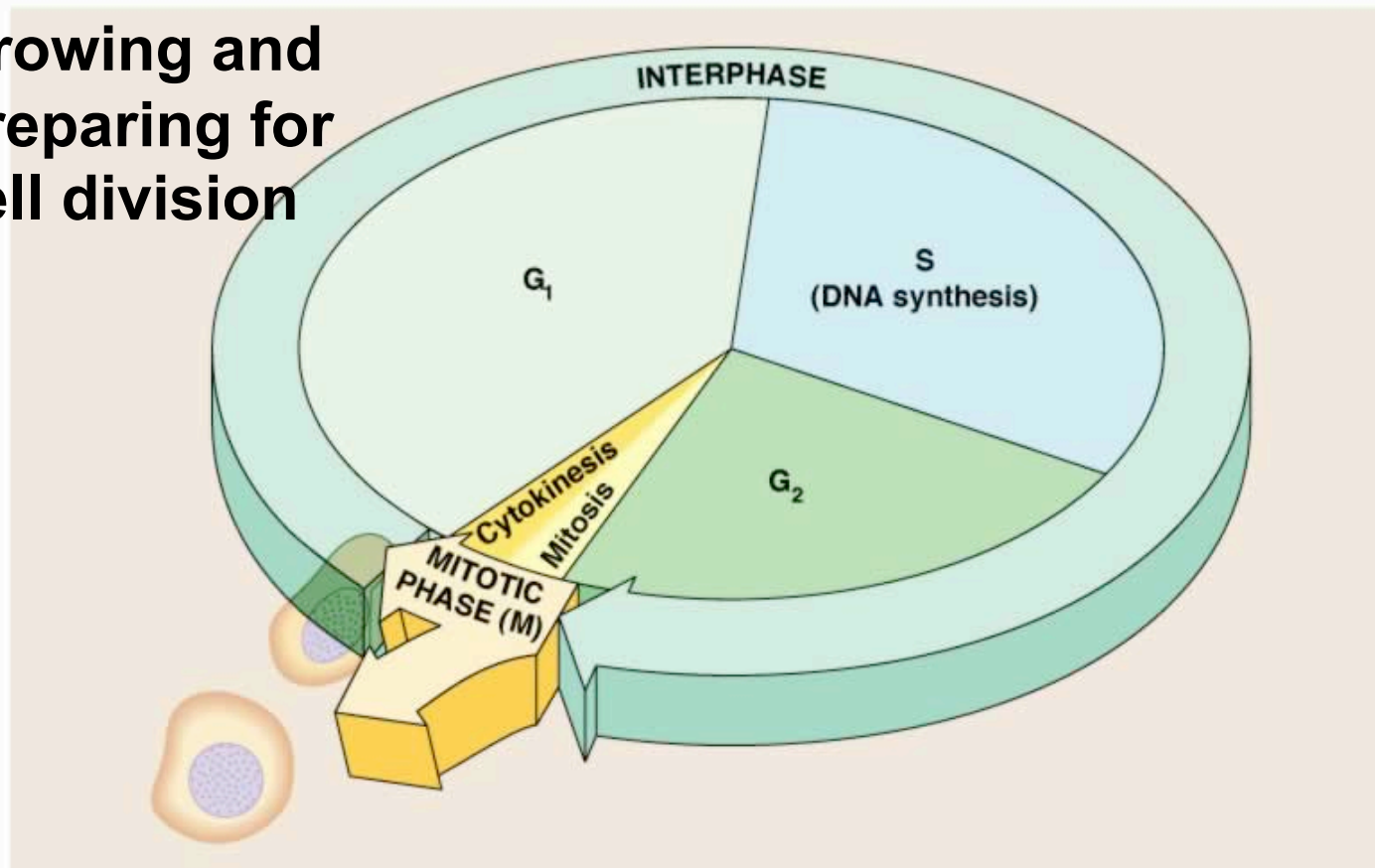


# Cell Cycle Activity



1. Write out the steps you take on a typical school day.
2. Draw these steps out as a cycle.
3. What lets you know when to go from the first part of your day to the second?
4. What would happen if you your feeling sick in the morning?

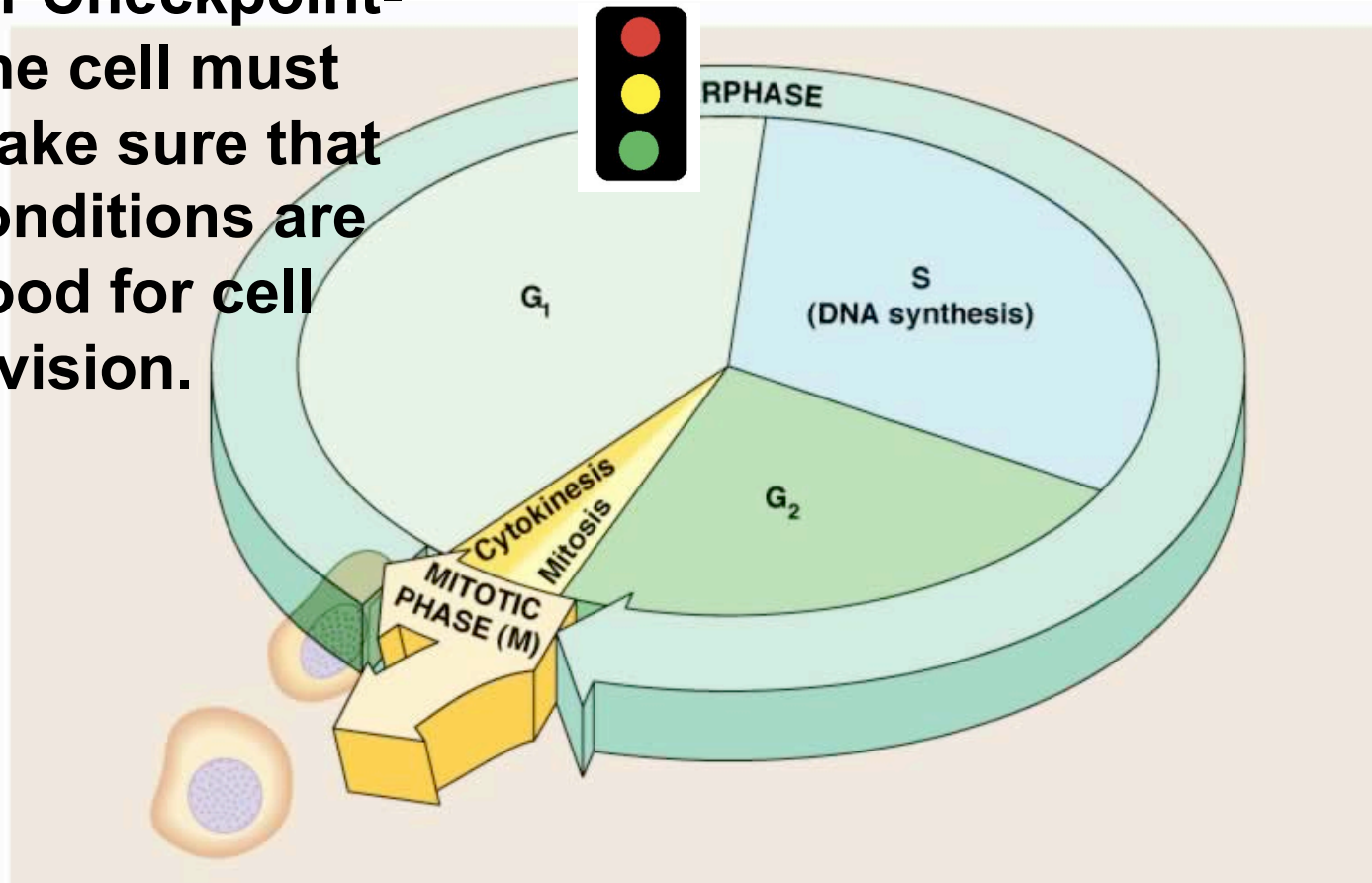
# G1-The cell is Growing and Preparing for cell division



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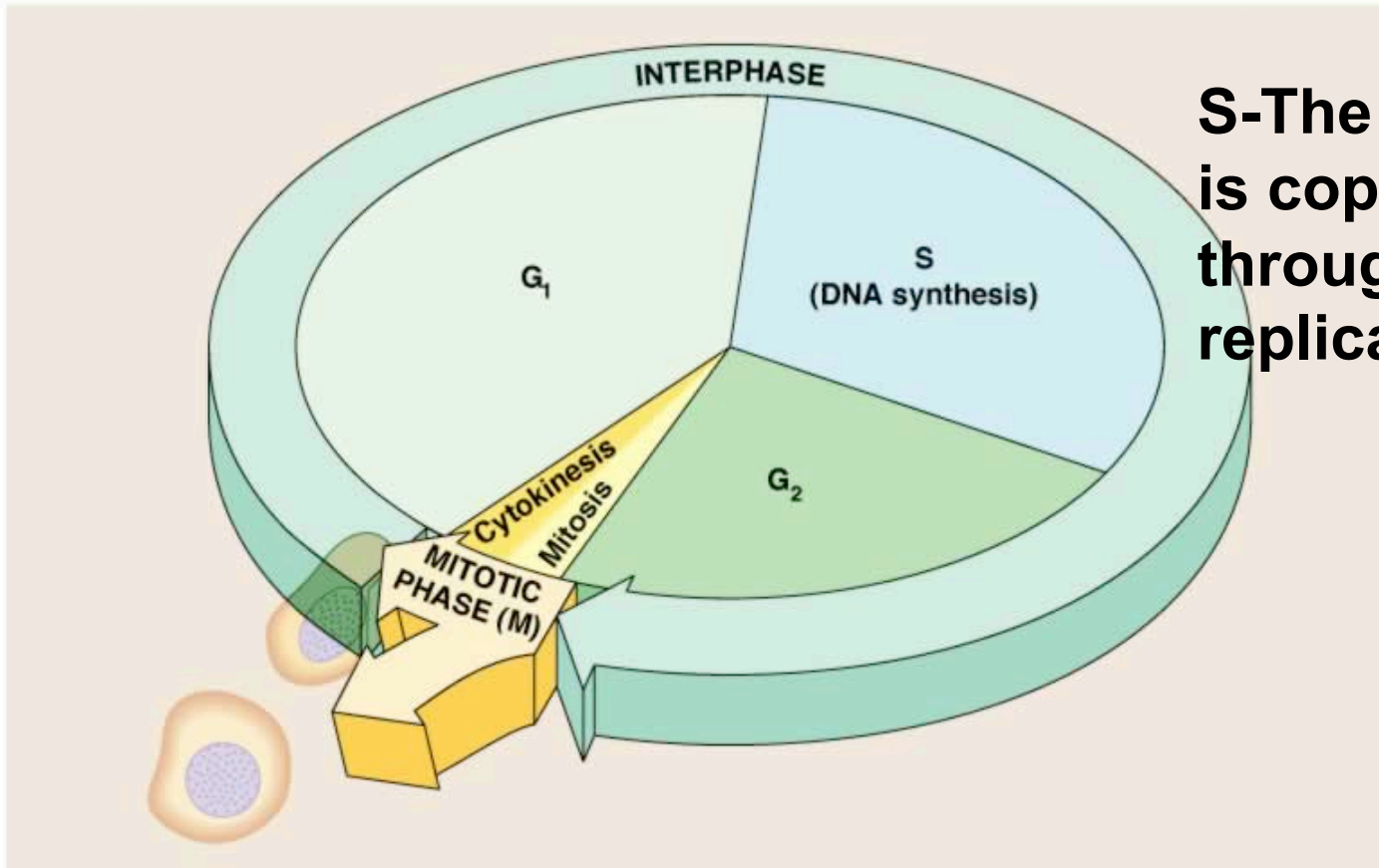
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**G1 Checkpoint-**  
The cell must  
make sure that  
conditions are  
good for cell  
division.



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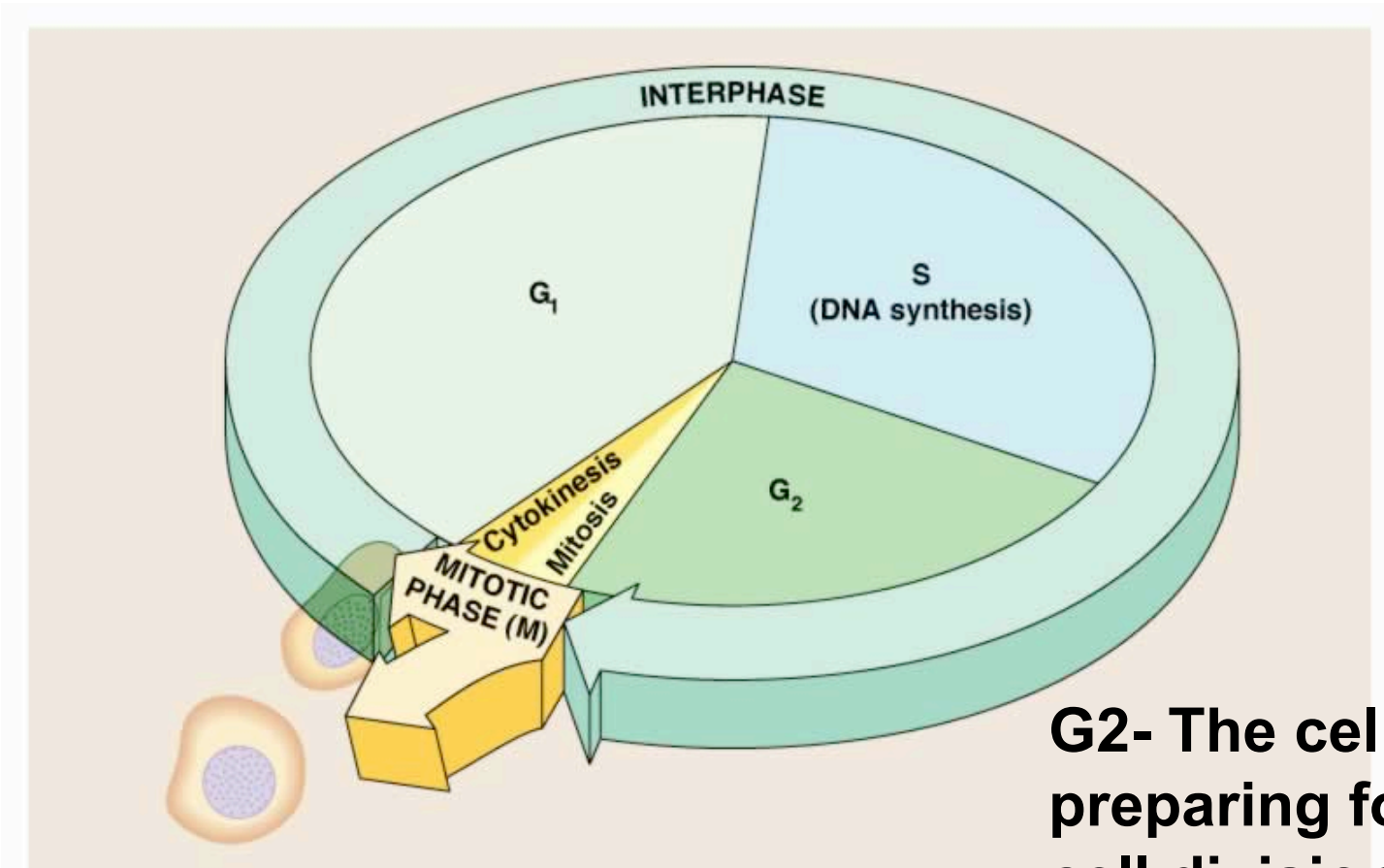
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**S-The cells DNA is copied through DNA replication**

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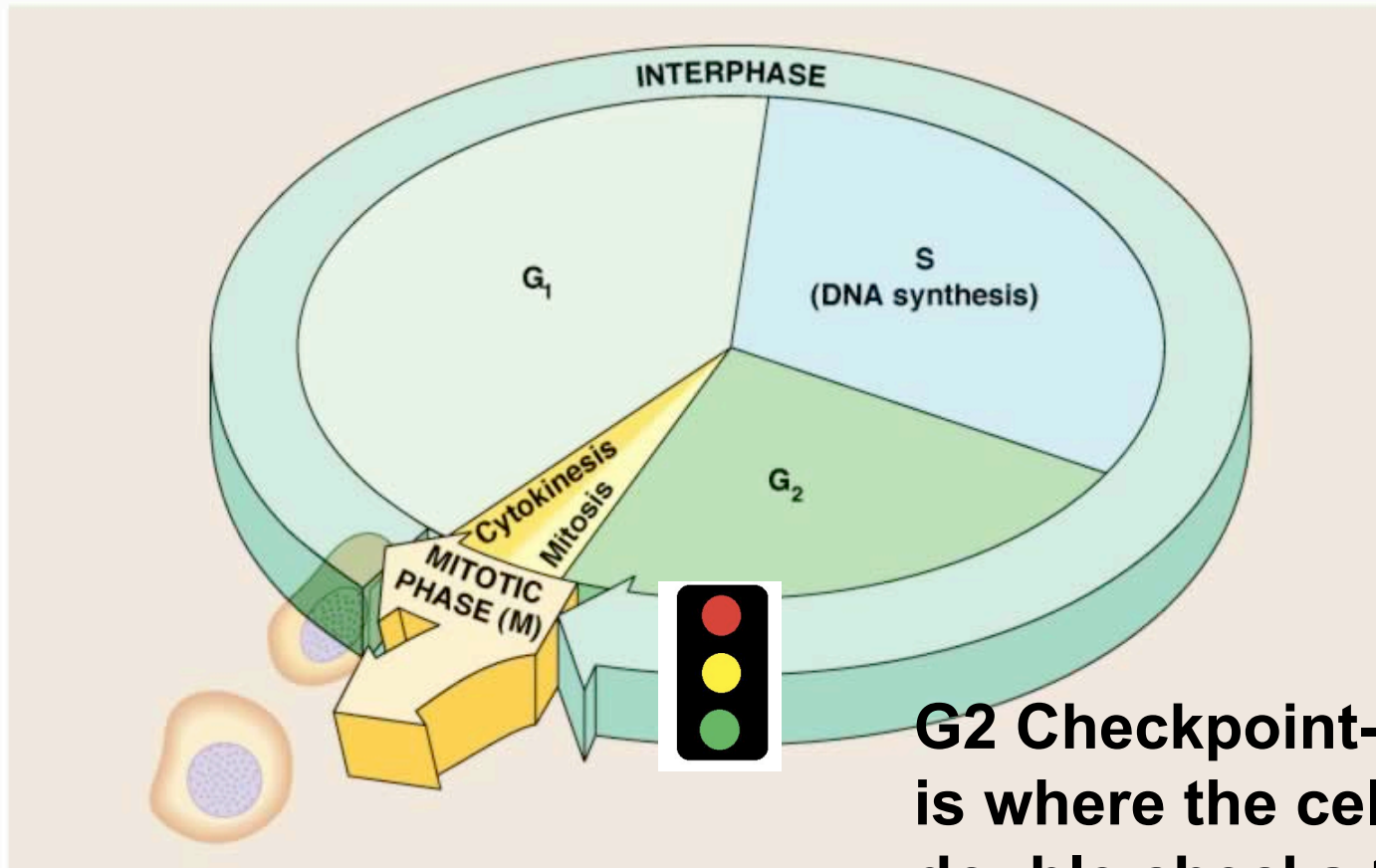
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**G<sub>2</sub>- The cell is preparing for cell division.**

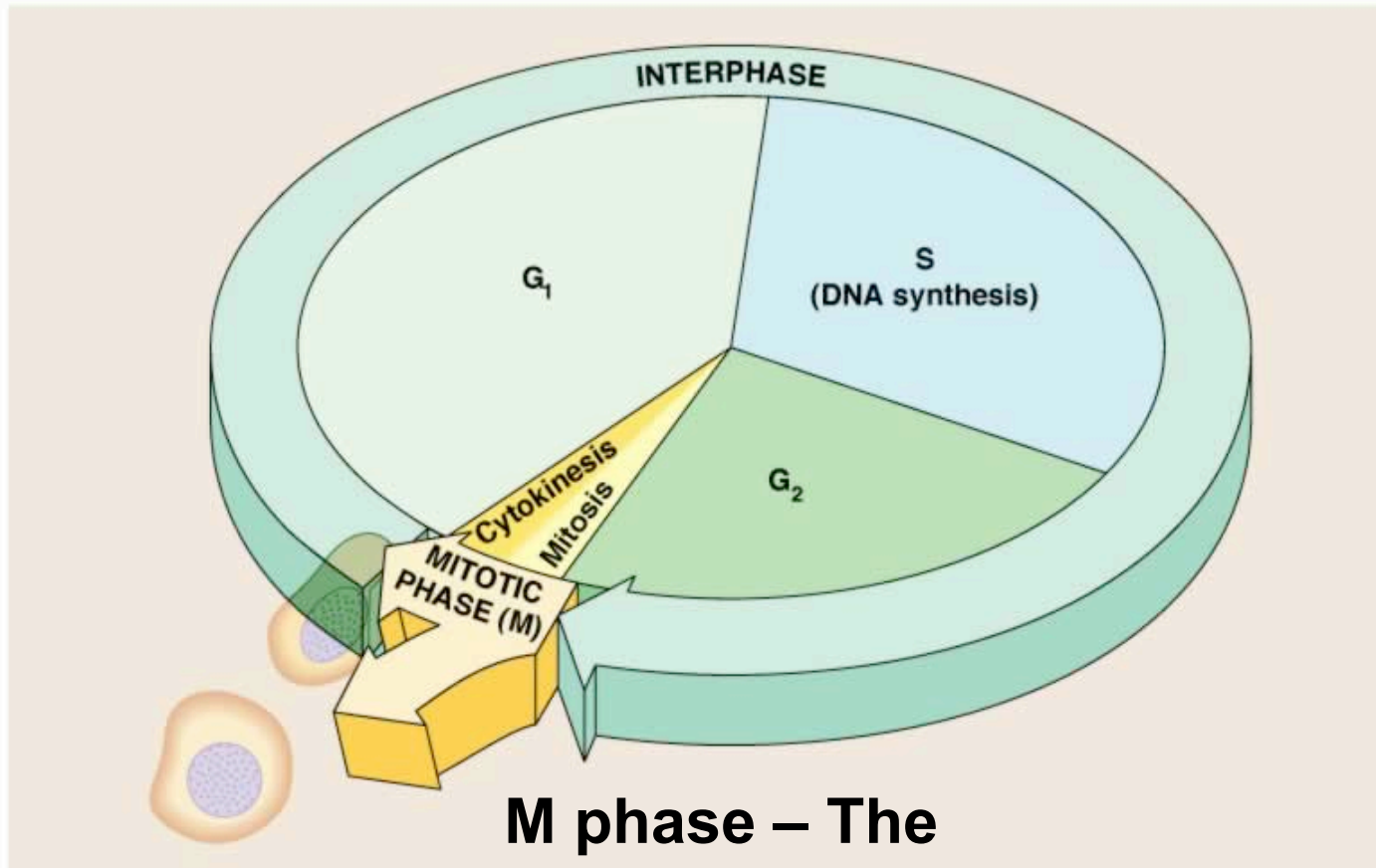
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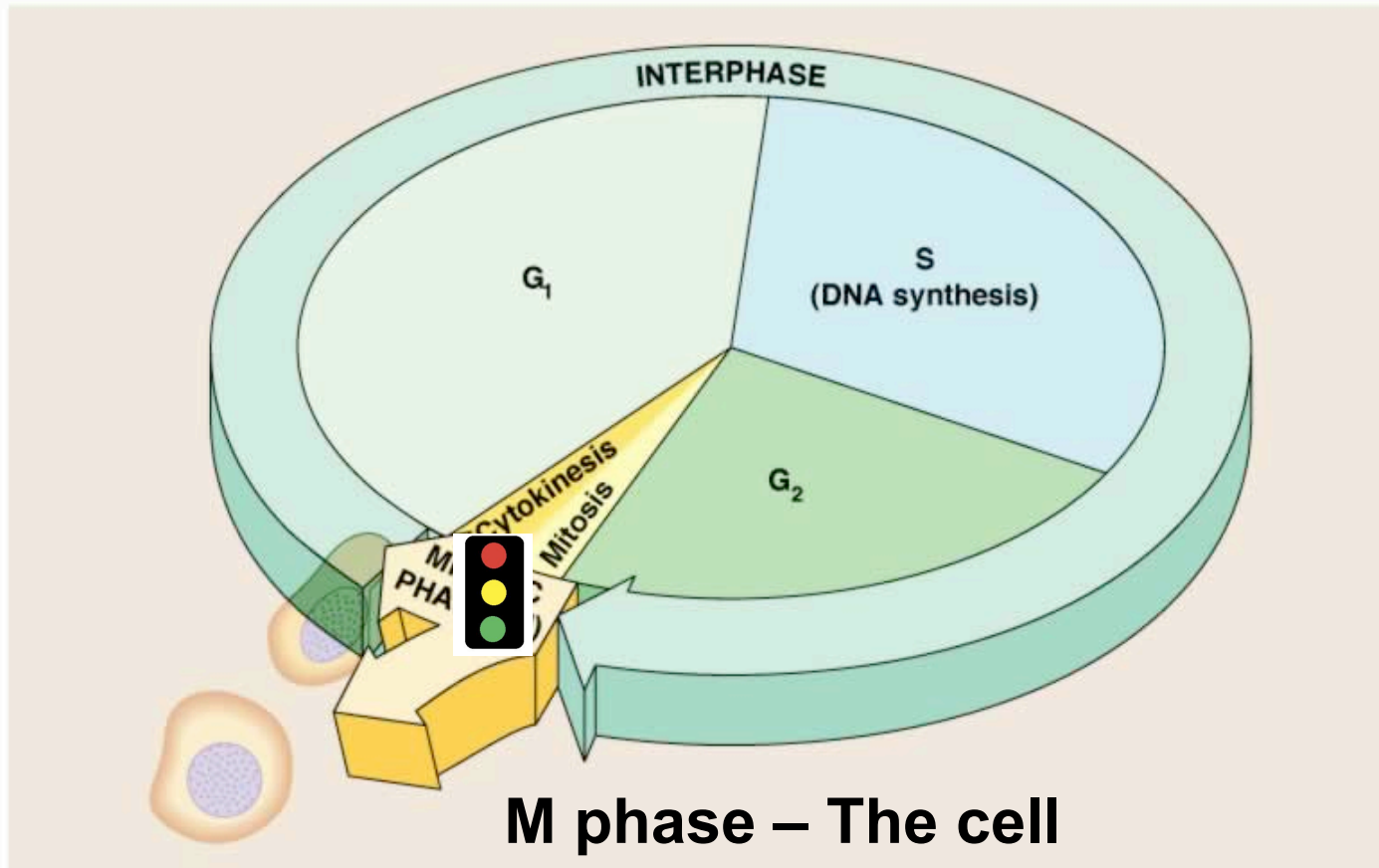
**G2 Checkpoint-** This is where the cell double checks that the DNA has been copied correctly.



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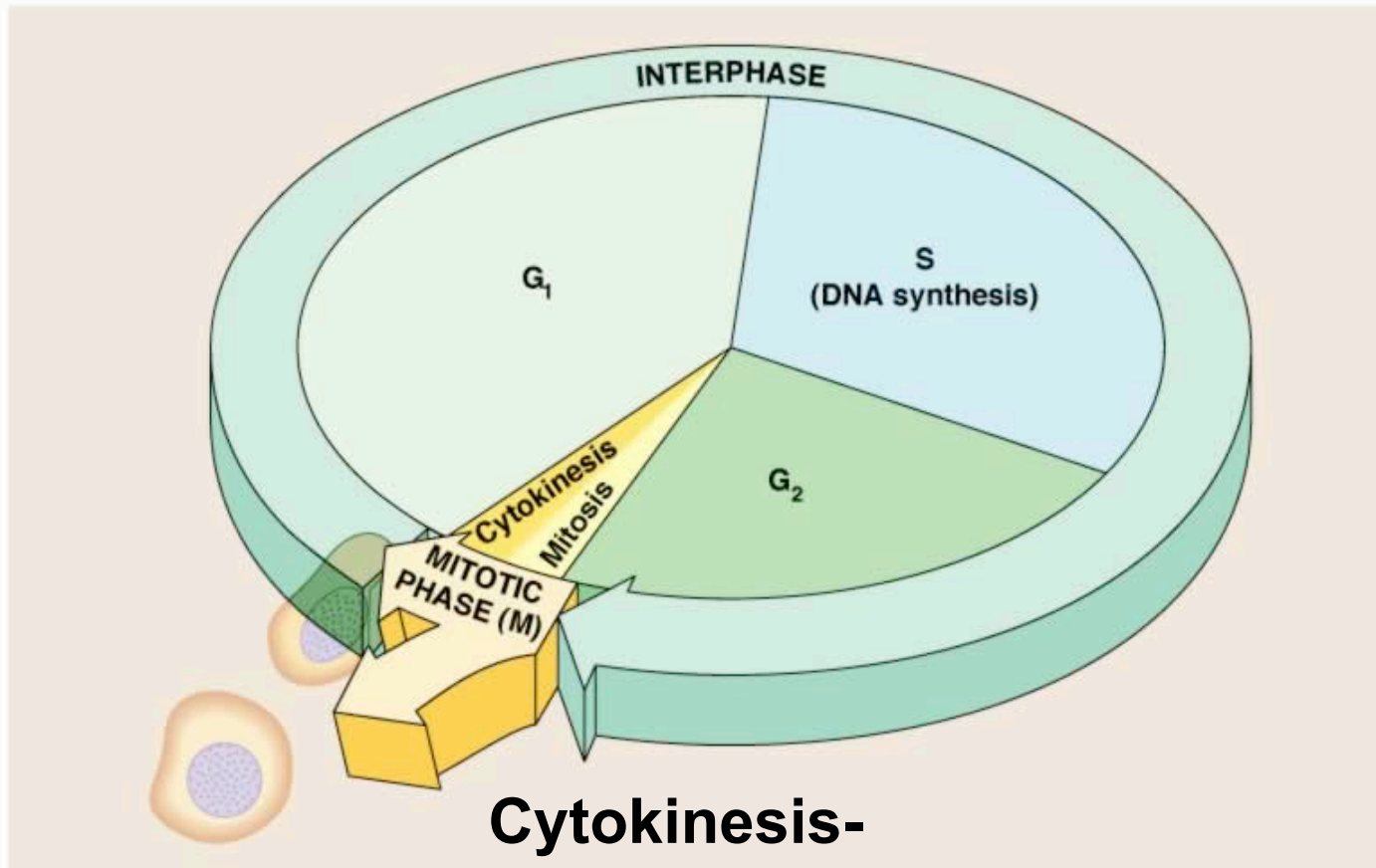
**M phase – The nucleus is dividing during Mitosis.**



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**M phase – The cell checks if the nucleus has been divided correctly.**

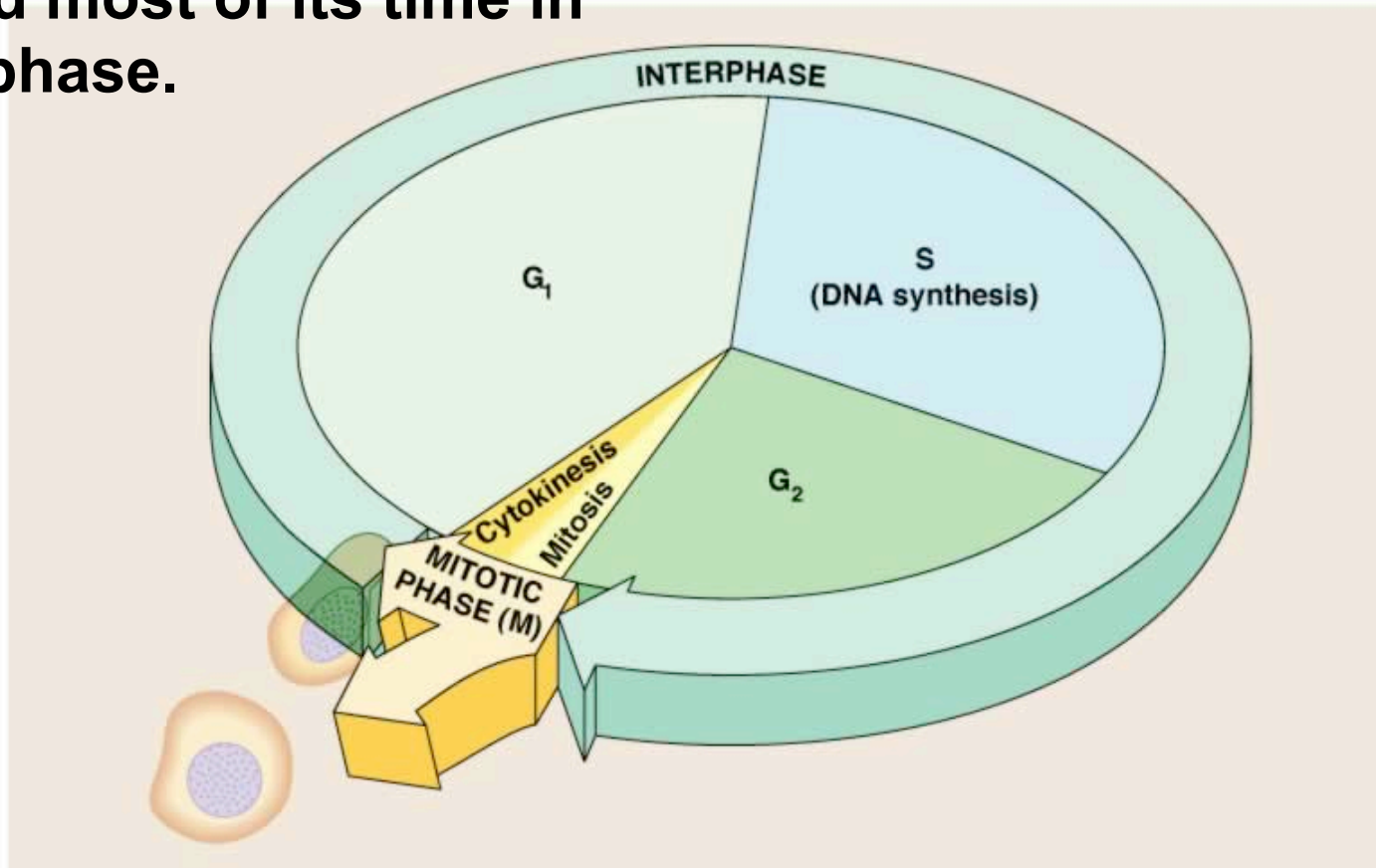


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**Cytokinesis-**  
**The entire cell is**  
**dividing to go**  
**from one cell to**  
**two.**

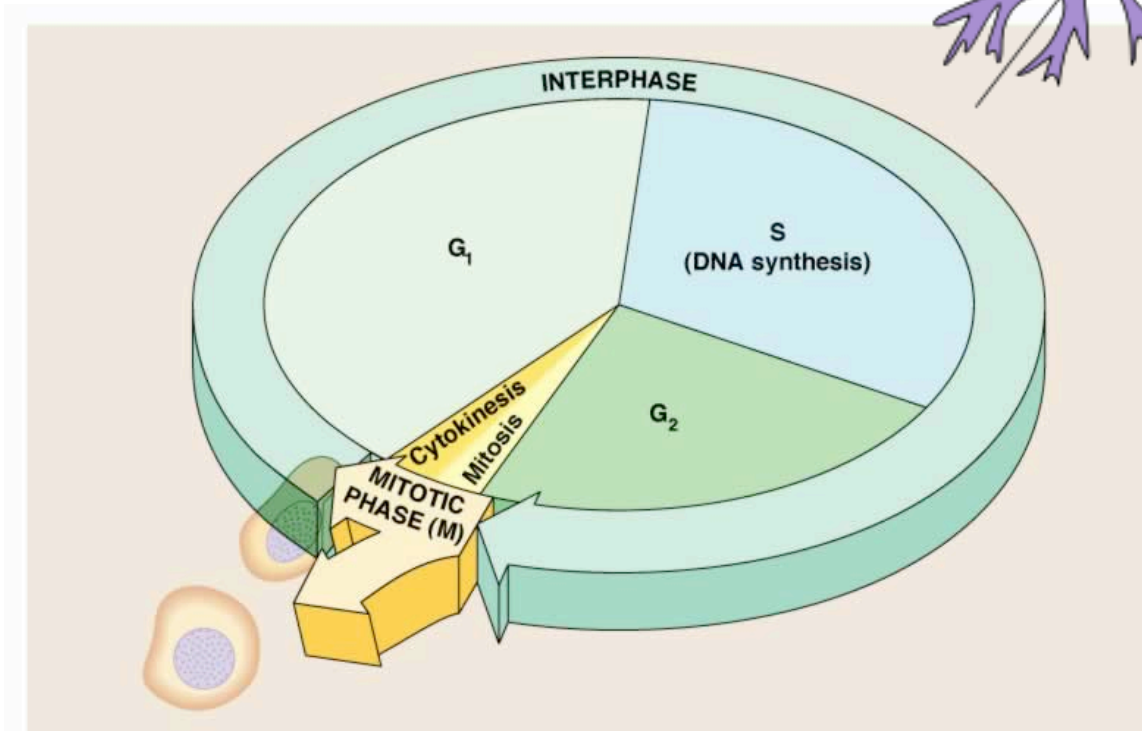
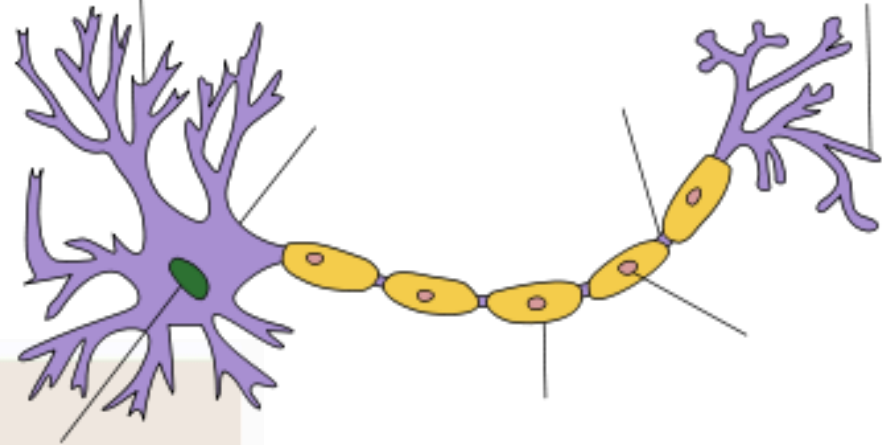
**Interphase- This includes the G<sub>1</sub>, S and G<sub>2</sub> phases. Your cell will spend most of its time in Interphase.**

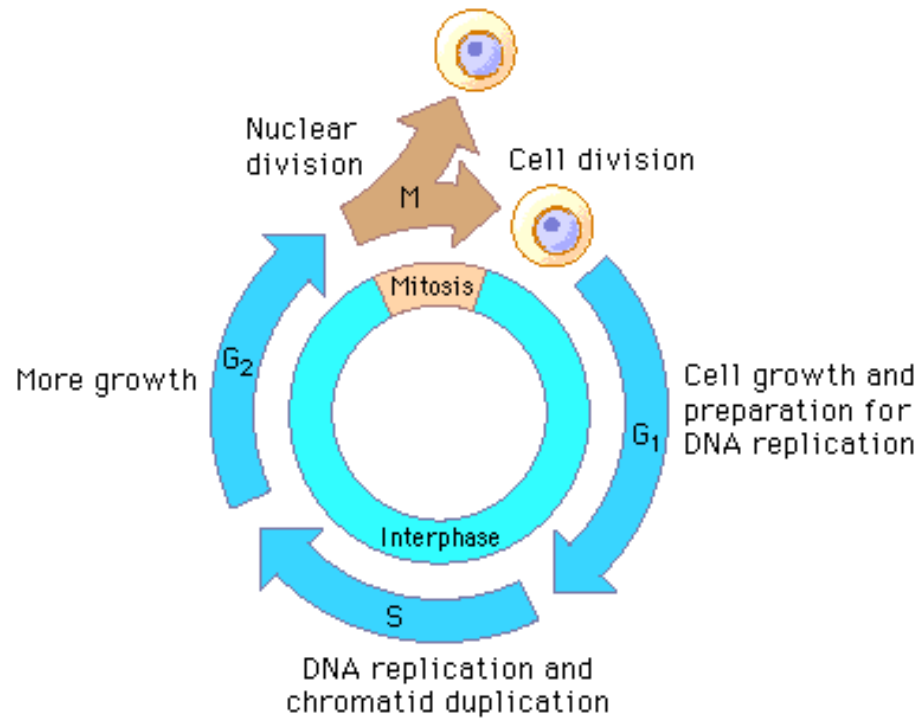


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**G0- Some cells never divide so they go into something called the G0 phase. These tend to be cells that are highly specialized.**





**Cells that are growing and dividing go through a repeating series of events called the cell division cycle (or cell cycle). During the first phase (G<sub>1</sub>), the cell grows and prepares for DNA replication, which occurs in the subsequent S phase. Further growth takes place in the G<sub>2</sub> phase, and finally mitosis occurs in the M phase.**

Mitosis!

Turn over your paper.

You will need colored pencils.

