

The Cell Cycle Coloring

Label the diagram below with the following labels:

✓

10/10

Interphase

Mitosis

Anaphase

Interphase

G1 - cell grows

Prophase

Telophase

Cytokinesis

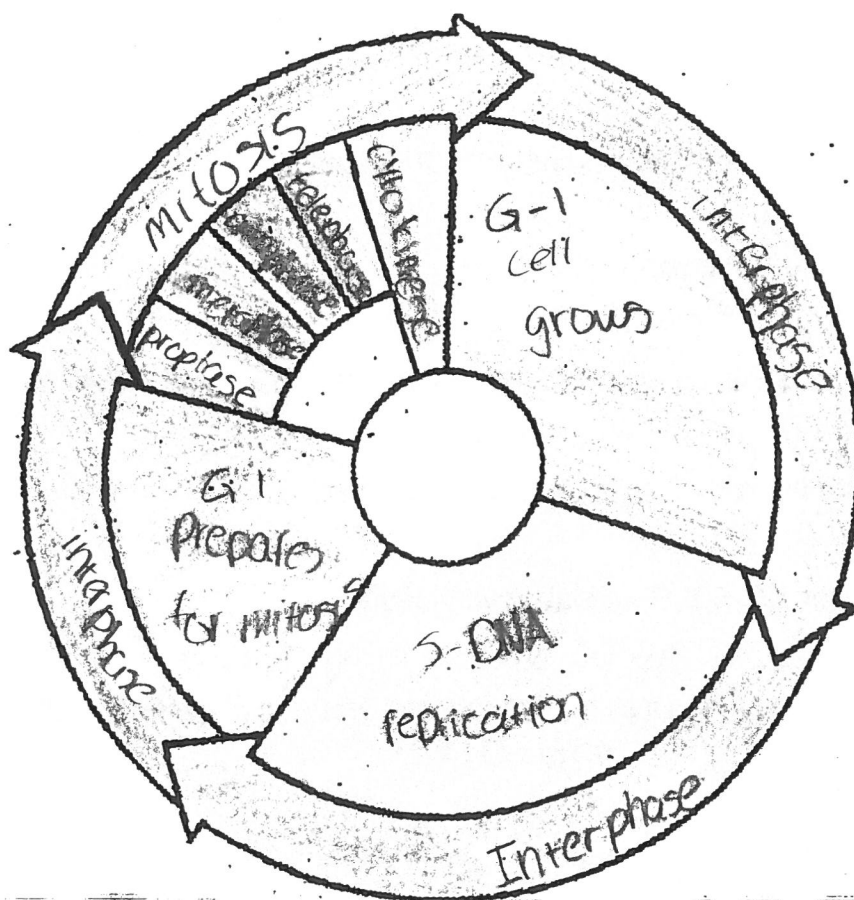
G2 - prepares for mitosis

Metaphase

Cell division (M Phase)

Interphase S-DNA replication

Then on the diagram, lightly color the G1 phase **BLUE**, the S phase **YELLOW**, the G2 phase **RED**, and the stages of mitosis **ORANGE**. Color the arrows indicating all of the interphases in **GREEN**. Color the part of the arrow indicating mitosis **PURPLE** and the part of the arrow indicating cytokinesis **YELLOW**.



Use the diagram and your notes to answer the following questions.

1. What is a series of events that cells go through as they grow and divide?

2. What is the longest stage of the cell cycle called?

the cell cycle

3. During what stage does the G1, S, and G2 phases happen?

interphase

4. During what phase of the cell cycle does mitosis and cytokinesis occur?

cell division

5. During what phase of the cell cycle does cell division occur?

mitosis

6. During what phase of the cell cycle is DNA replicated?

S-phase

7. During what phase of the cell cycle does the cell grow?

G1 phase

8. During what phase of the cell cycle does the cell prepare for mitosis?

G-2 phase

9. How many stages are there in mitosis?

5 stages

10. Put the following stages of mitosis in order: anaphase, prophase, metaphase, and telophase.

prophase, metaphase, anaphase, telophase

11. Put the following stages of the cell cycle in order: G2, S, G1, M.

G1, S, G2, M

12. Put the following in order: G2, G1, S, mitosis, cytokinesis.

G1, S, G2, mitosis, cytokinesis

13. Put the following actions in order: DNA replication, cell grows, cell division, cell prepares for mitosis.

cell grows, DNA replication, cell prepares for mitosis, cell division

14. Explain why cells don't just continue to grow larger as organisms grow larger. Why do cells divide? (Write in complete sentences)

cell divide because cells are diverse