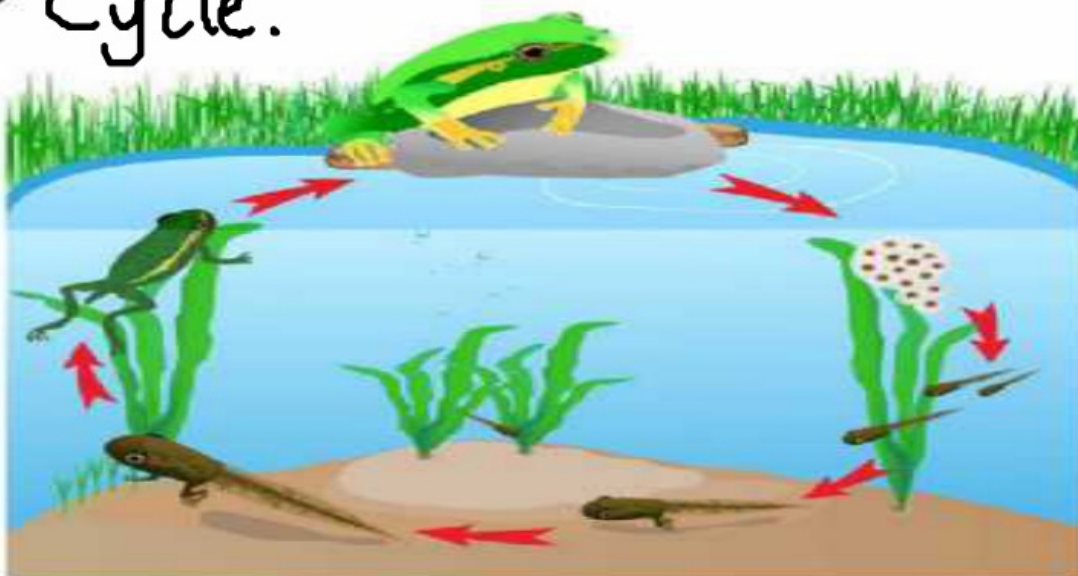


Cell Cycle

Cell Life Cycle

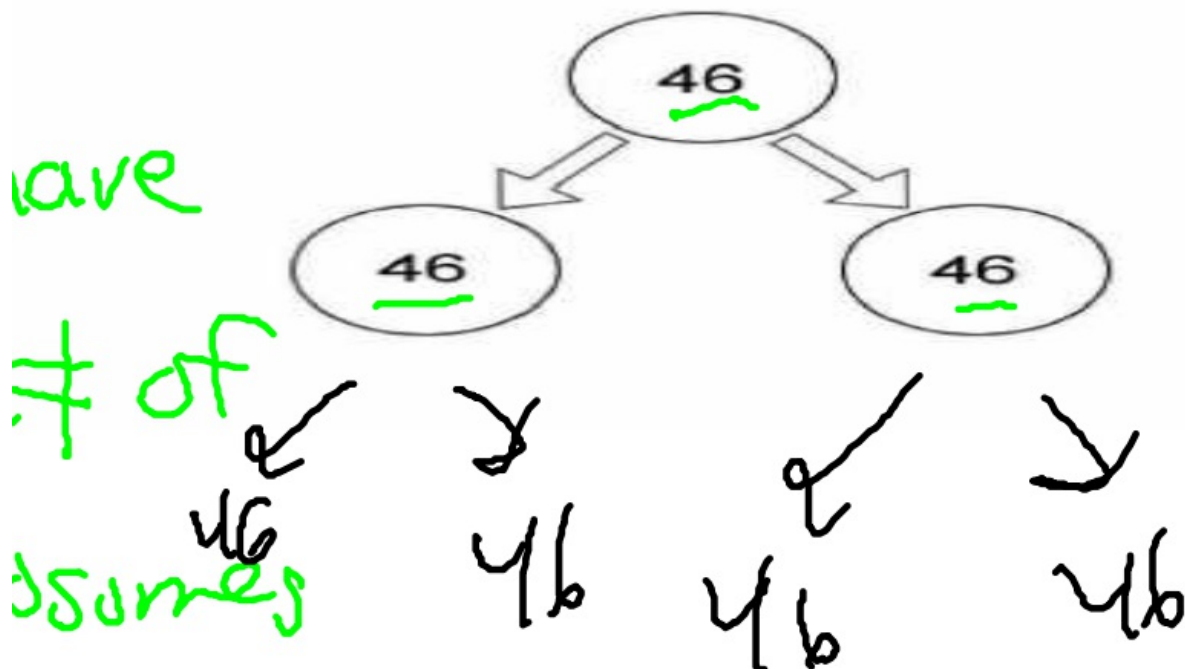
the life cycle of plants and animals, cells
life cycle.



Cell Division

One of the cell life cycle is to create more cells.

For example, a cell with 46 chromosomes will divide into two daughter cells, both with 46 chromosomes.



Phase Life Cycle

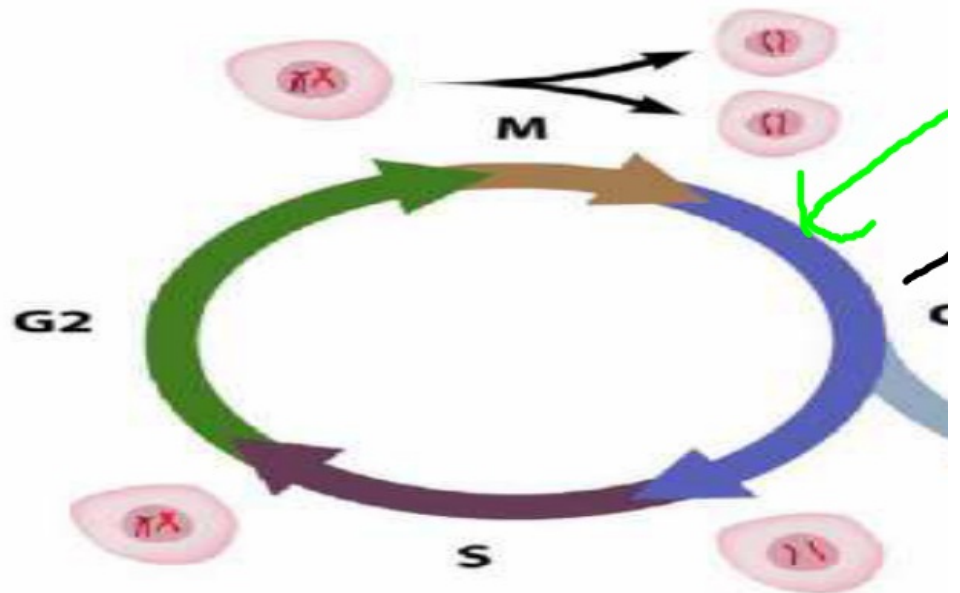
Life

1)

osis)

2)

s)

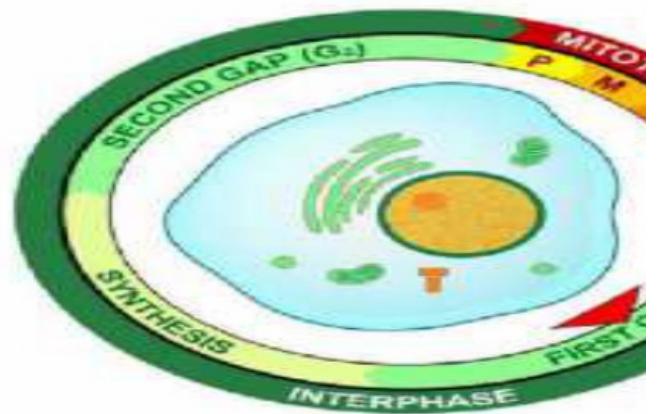




G1 Phase

Cell grows larger in
increases its
surface to volume ratio

This phase is normal
e.



chromosomes are
doubled.

S Phase

ADNA
repliu

synthesized,
DNA is

forms DNA
on.



*Cell dupli
its DNA

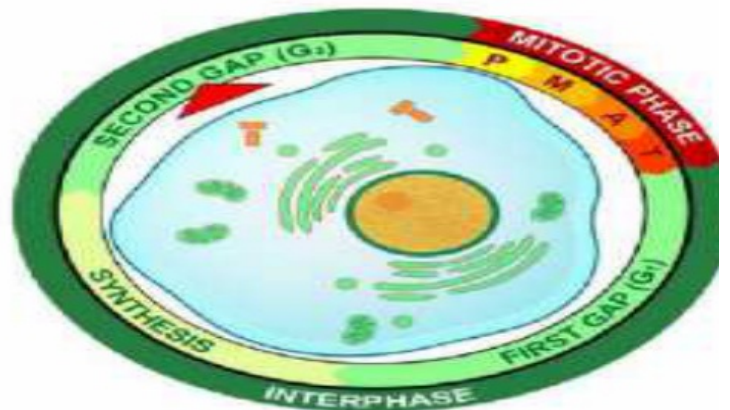
© NGSS Life

2
1.

growth
G2 Phase

prepares to
sis.

duplicates
nelles.



elles

ole (minus nucleus)

Question

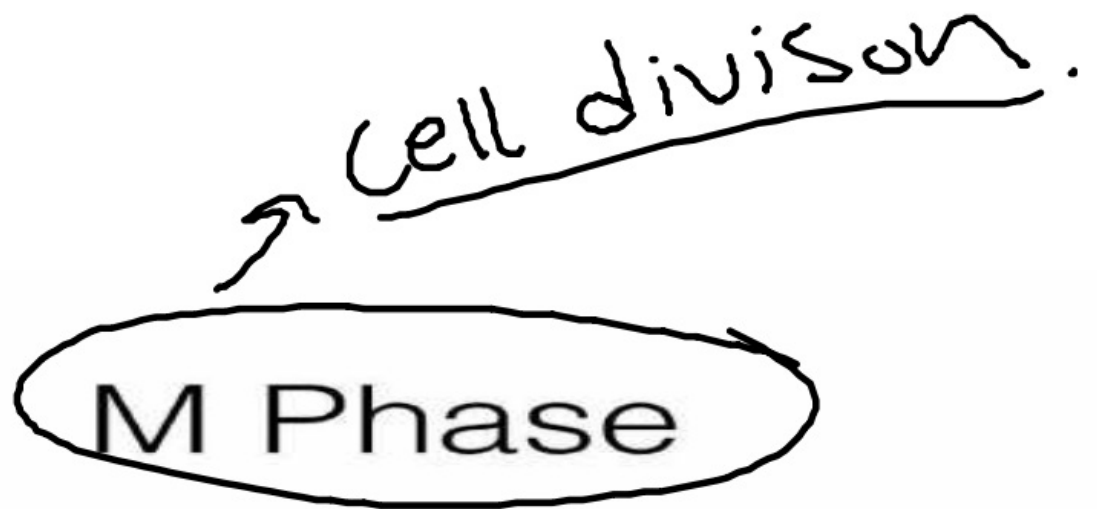
What are the 4 phases of the cell life cycle?

G₁ - Growth

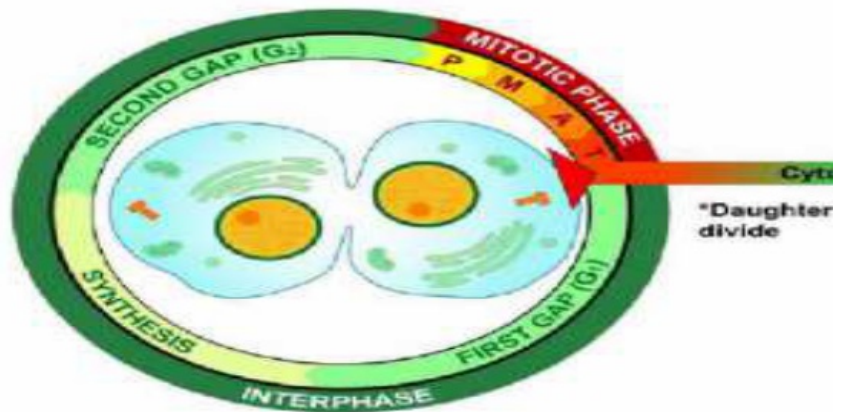
S - Chromosomes Double

G₂ - organelles D., grows

M - Cell Splits



M Phase = Mitosis
This is all about cell
division.



Question

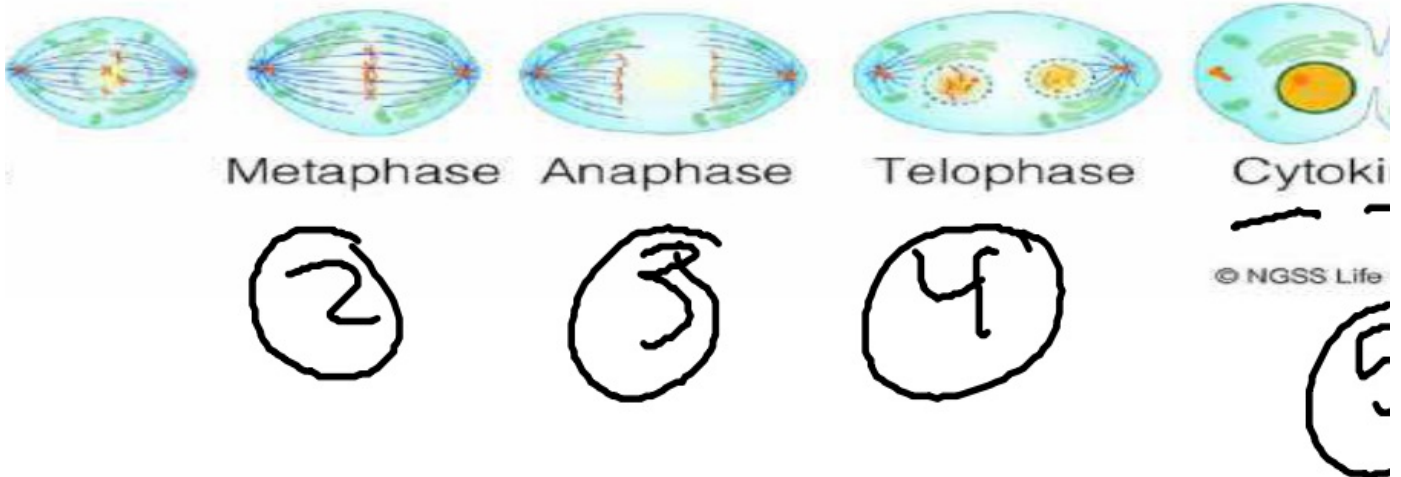
What is the goal of the cell life cycle?

create identical cells.

Mitosis

Mitosis is made up of four stages and then the cell divides.

- Prophase
- Metaphase
- Anaphase
- Telophase
- Cytokinesis = cell divides



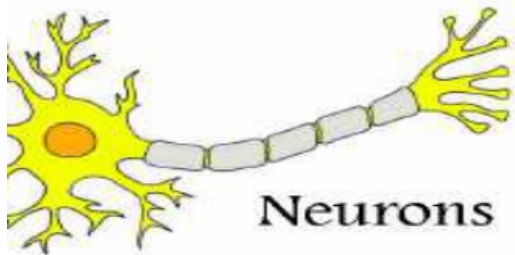
Question

Do all of the cells in your body divide?

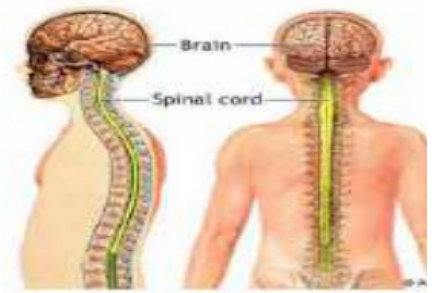
yes, no

Some specialized cells do not divide

Some specialized cells stop dividing after reaching maturity!



Neurons



Central nervous system

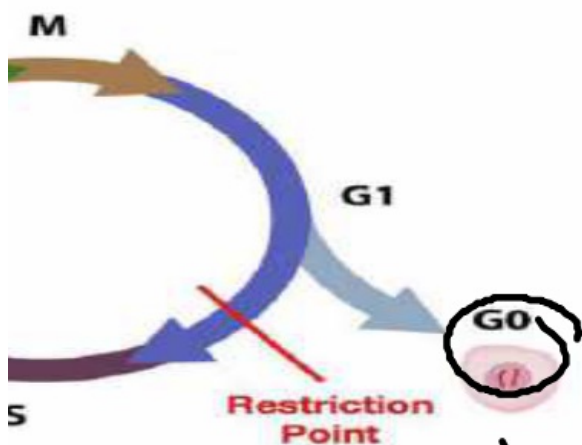


Cardiac muscle



Skeletal muscle

Specialized Cells



- A cell will become specialized during the G1 phase of the life cycle.
- Once a cell has become specialized, it will enter G0 and the specialized cell will NOT divide.

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Specialized
Cells, working

Question

at cells might divide very rapidly in your

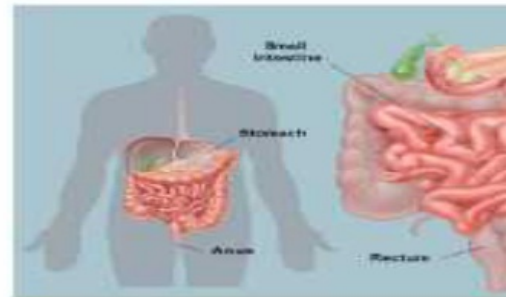
ne cell types are constantly div



Skin cells



Hemocytoblasts



Intestinal c

row

Checkpoint

Draw the cycle circle with the names
of the 5 cell cycle phases
and list which cells divide, and which
cells do not
