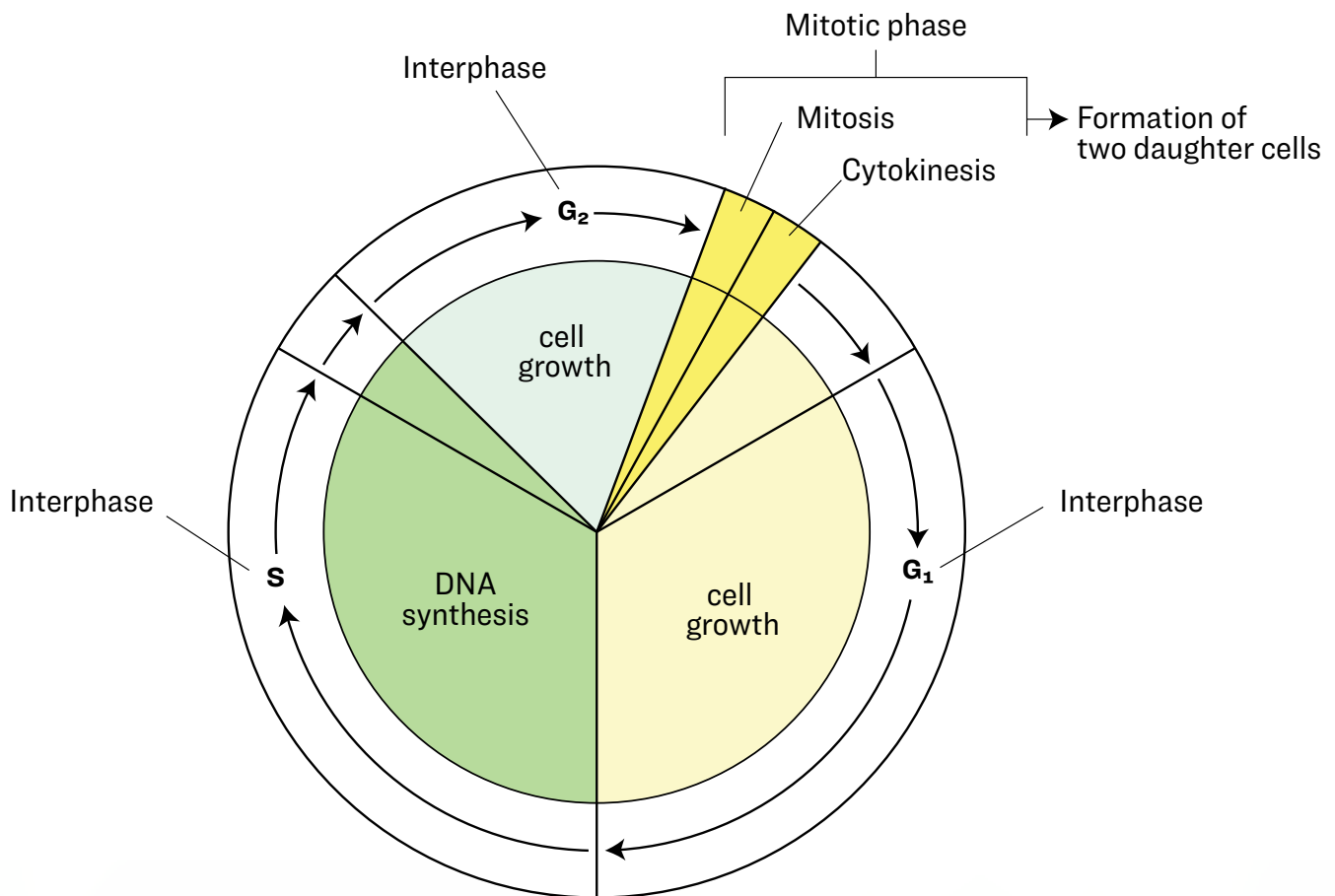


# Cell cycle inventory

All multicellular organisms undergo mitosis in order to grow and repair themselves. Using your microscope, examine the slide containing onion root cells. Identify any onion root cells that you see in these stages: interphase, mitosis, cytokinesis.

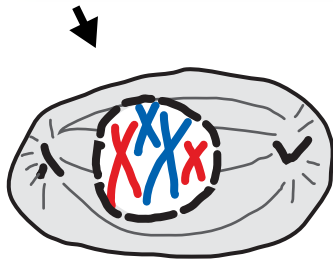
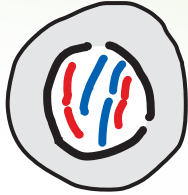
1. Draw an image of a cell you see in each phase under “image of cell in this phase”.
2. Write what you see occurring in each image you draw under “description of cells in this phase”.
3. Record the number of cells you see in each phase on your cell cycle inventory sheet. Then answer the laboratory question in the space provided below.



|                                     | Interphase | Mitosis | Cytokinesis |
|-------------------------------------|------------|---------|-------------|
| Image of cell in this phase         |            |         |             |
| Description of cell in this phase   |            |         |             |
| Number of onion cells in this phase |            |         |             |

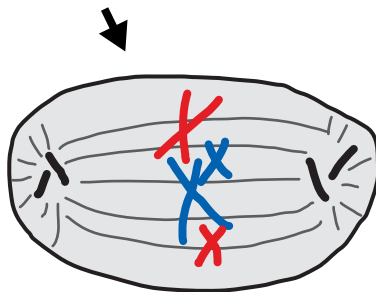
# Mitosis

PARENT CELL



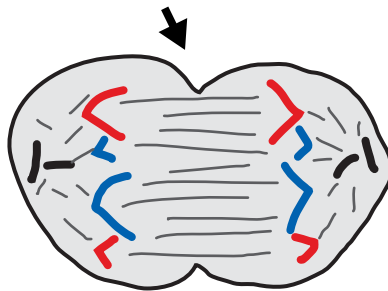
## Prophase

Chromatin condenses into chromosomes.  
Nuclear envelope disappears.



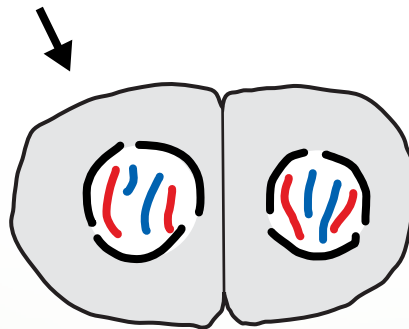
## Metaphase

Chromosomes align at  
the equatorial plate.



## Anaphase

Sister chromatids separate.  
Centromeres divide.



## Telophase

Chromatin expands.  
Cytoplasm divides.

TWO DAUGHTER CELLS