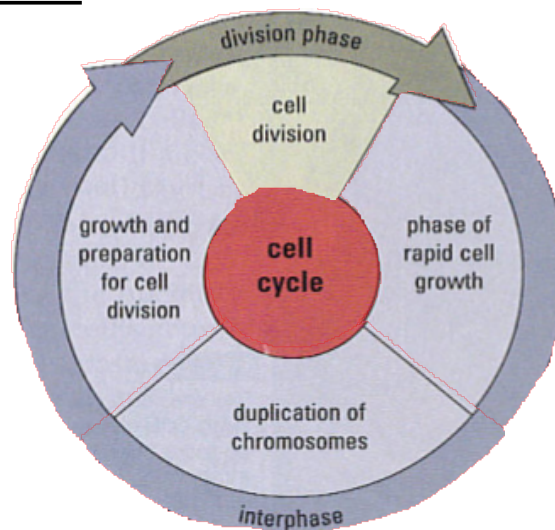


The Cell Cycle

Cells divide and rest. The sequence of event from one division to the next is called the **cell cycle**. For most cells, cell division is a small part of the cells life. The stage between cell division is called **interphase**.



Feb 20, 2019

Continue with Cellular Division

Warm-up:

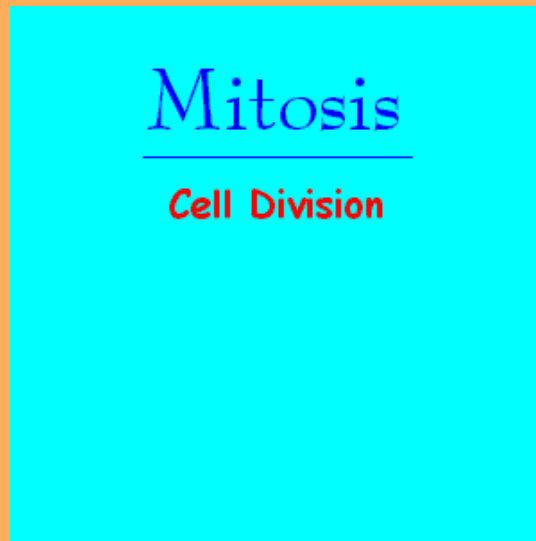
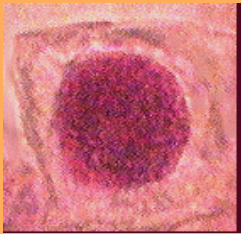
How many chromosomes does a goldfish have?



94

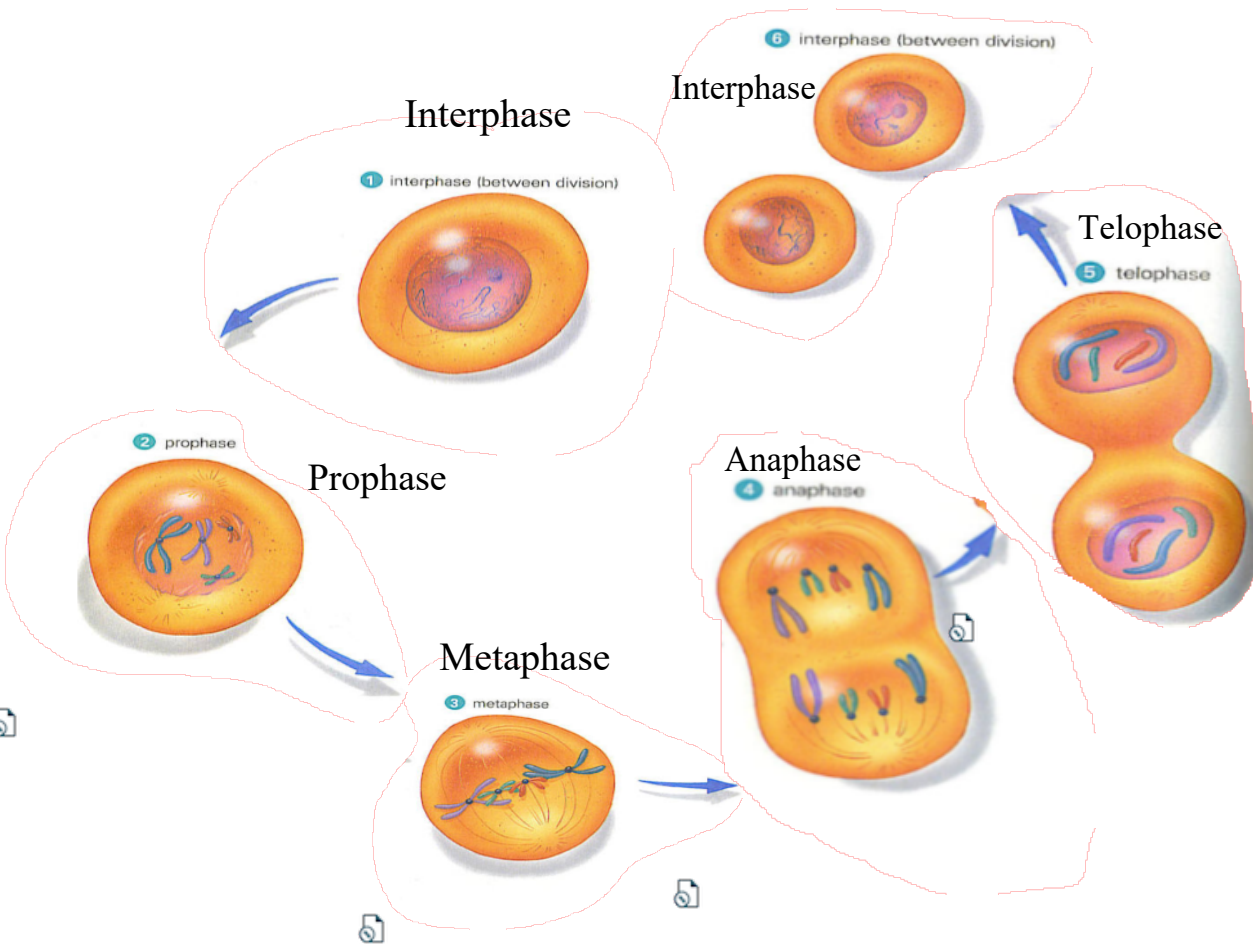
Mitosis

Before we investigate all the details, let's look at what it all looks like first.



Now that we have a sense of what is involved in mitosis, let's look at it in more detail.

Steps of Mitosis (PMAT) pg 152



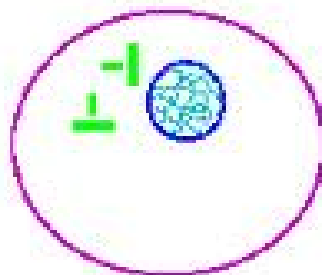
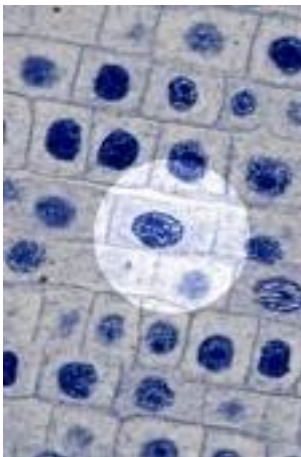
IPMATI

Interphase occurs between the stages of cell division

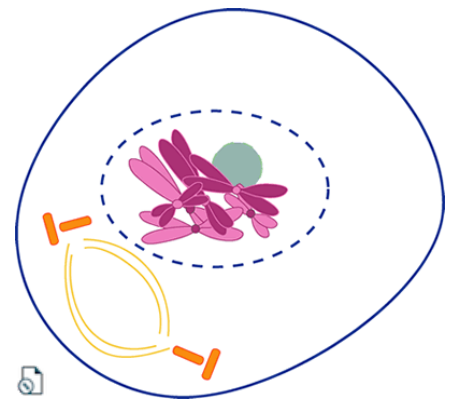
- the cell grows
- duplicates its chromosomes
- prepares to divide

Stage 1: IPMATI

Prophase- chromosomes shorten and thicken, nuclear membrane dissolves



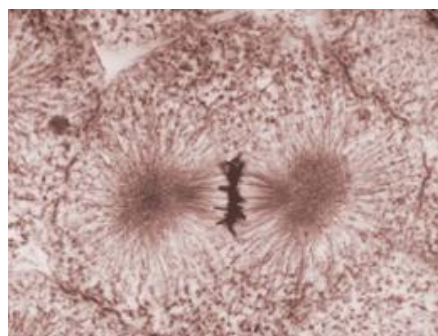
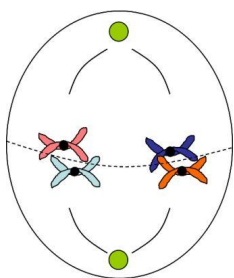
Early Prophase
Chromosomes become visible.



Stage 2: IP MATI

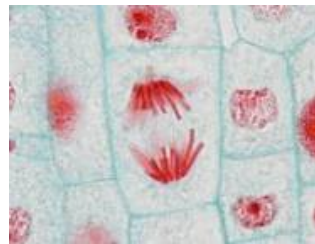
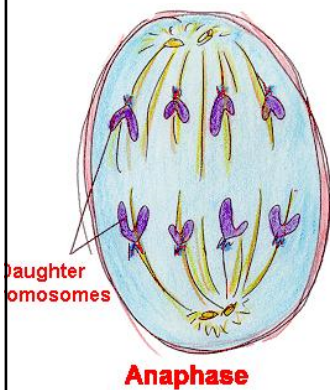


Metaphase- chromosomes line up in the middle of the cell



Stage 3: IPMATI

Anaphase - Chromosomes split apart and move to the poles, daughter cells have complete set of genetic information. The Centrioles help to split the chromosomes.

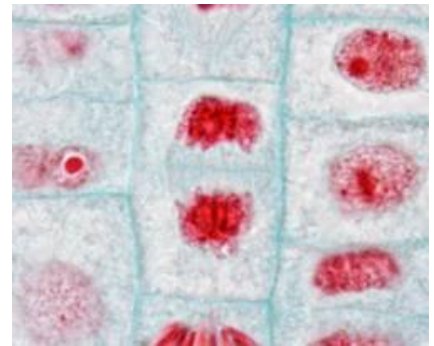
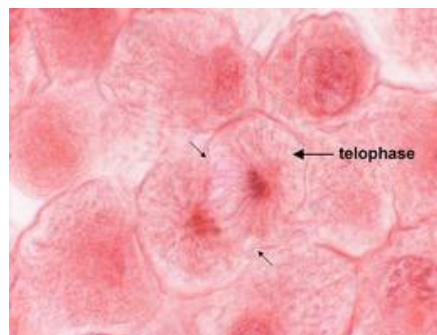
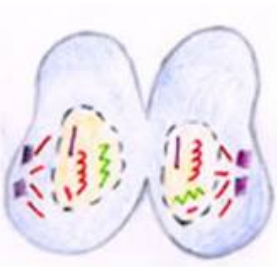


Stage 4: IPMAT

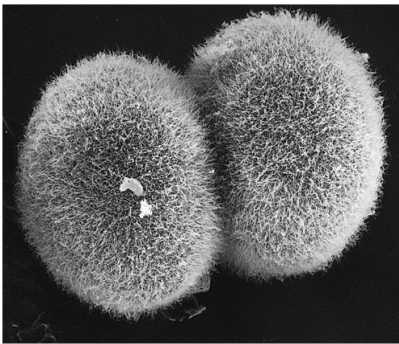


Telophase- chromosomes reach opposite poles, nuclear membrane reforms, cytokinesis begins,

cytoplasm/organelles split into equal parts.

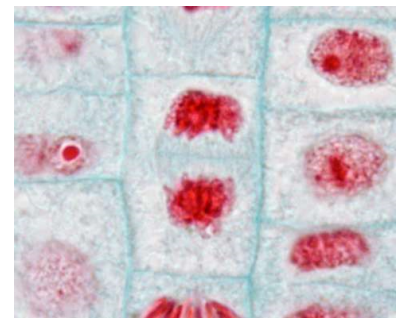


Cell division continues with the separation of the cytoplasm into two equal parts. This is called **cytokinesis**.



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animals the cell membrane pinches in until the cell splits in two

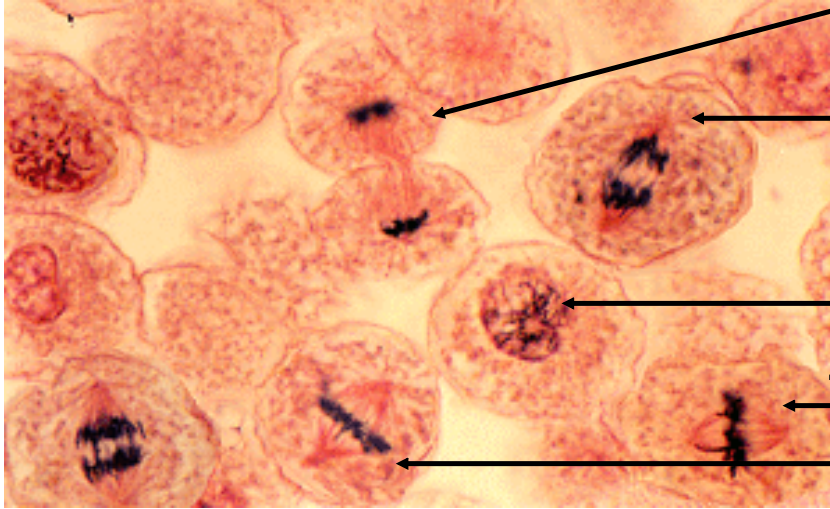


plants a new cell wall forms

Put the phases
in the right
order

Interphase
Prophase
Metaphase
Anaphase
Telophase
Interphase

Name that Stage



1. Telophase

2. Anaphase

3. Prophase

4. Metaphase

5. Metaphase

Five light blue horizontal bars for labeling, each with a red circular icon containing a white stylized 'f' and a small square icon in the top right corner.