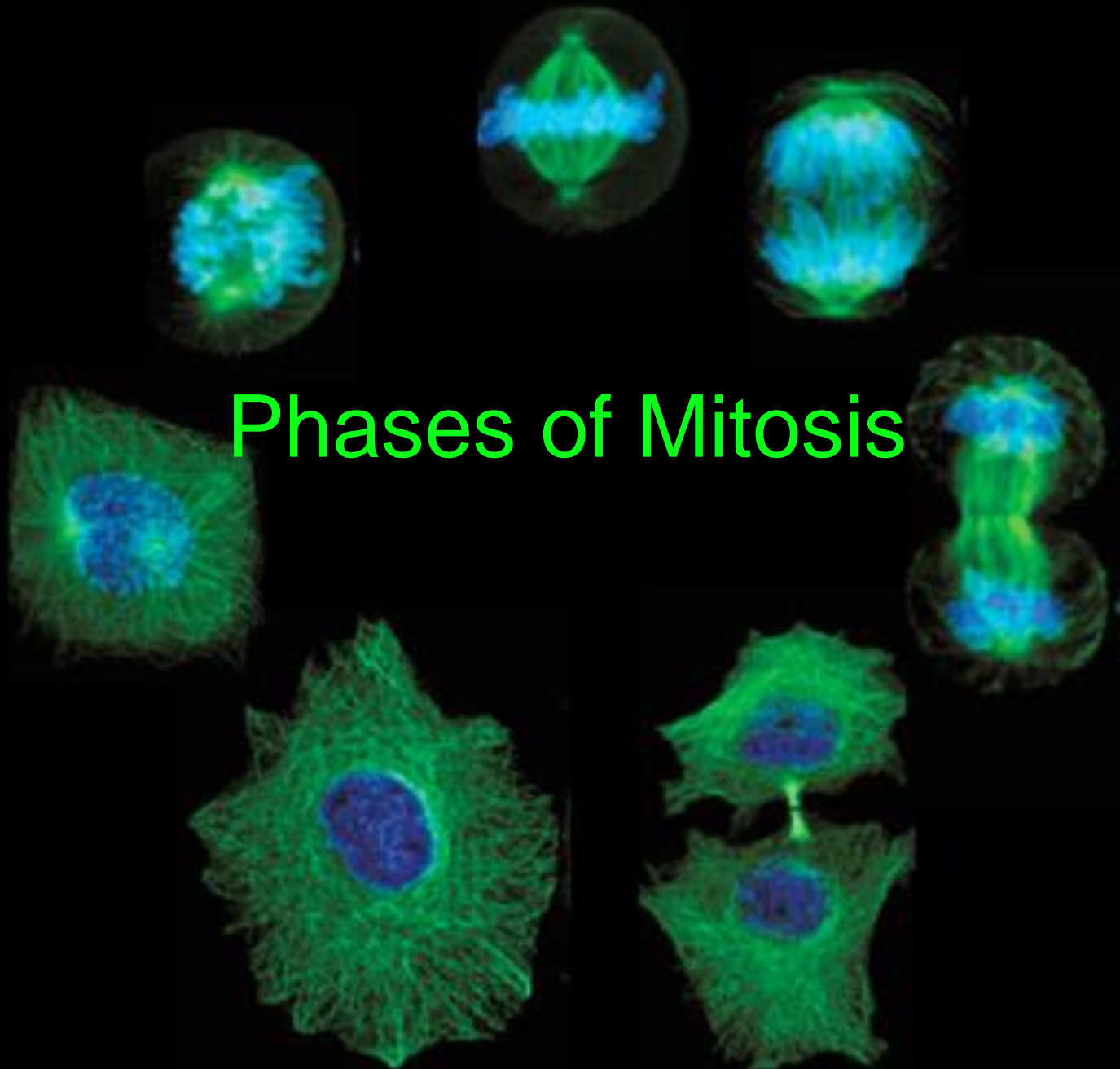


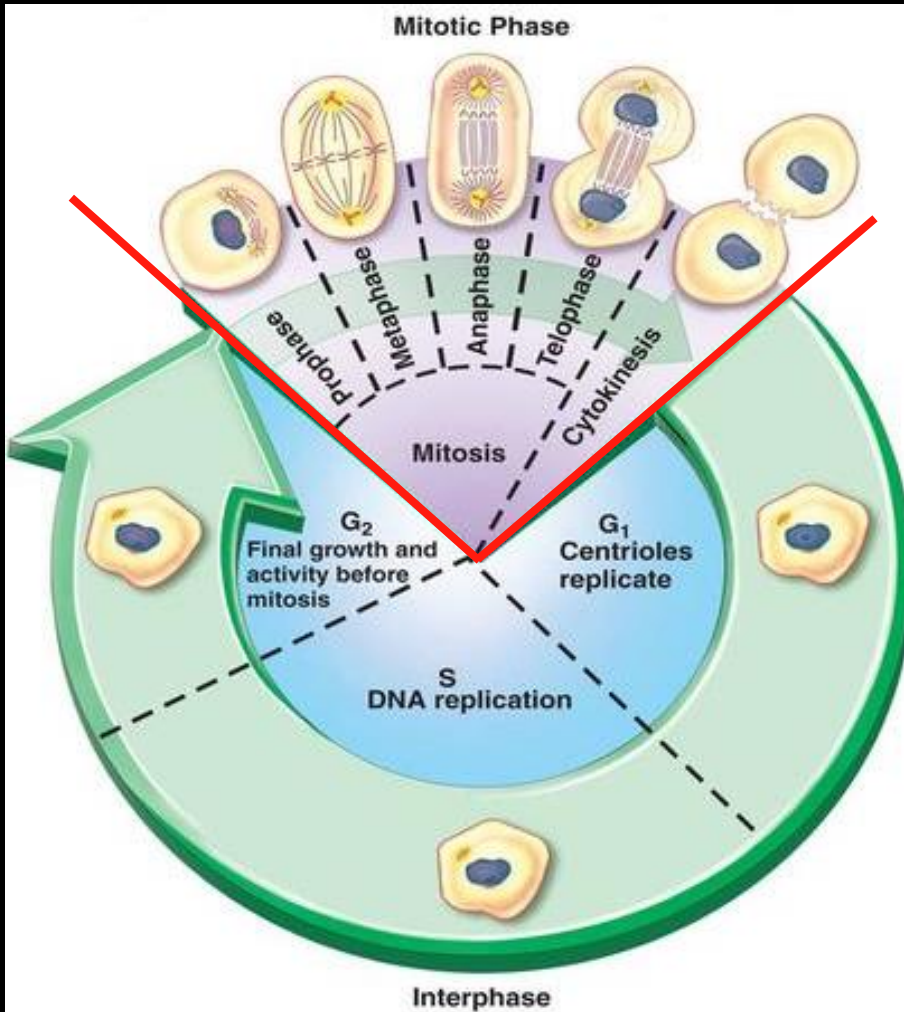
Phases of Mitosis



Learning Objectives

- Describe what happens during the four phases of mitosis

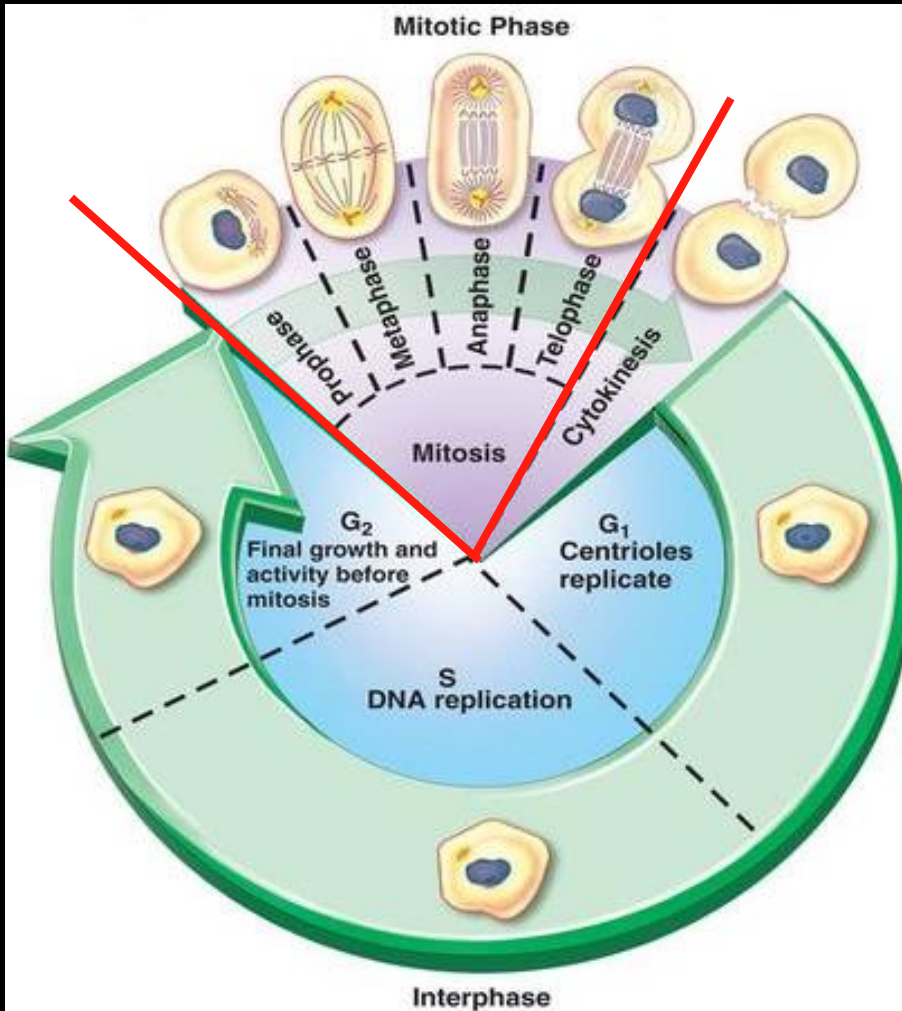
Mitotic phase (M phase)



Mitosis - division of the cell nucleus

Cytokinesis - division of the cytoplasm

Mitosis



Mitosis is divided into four phases:

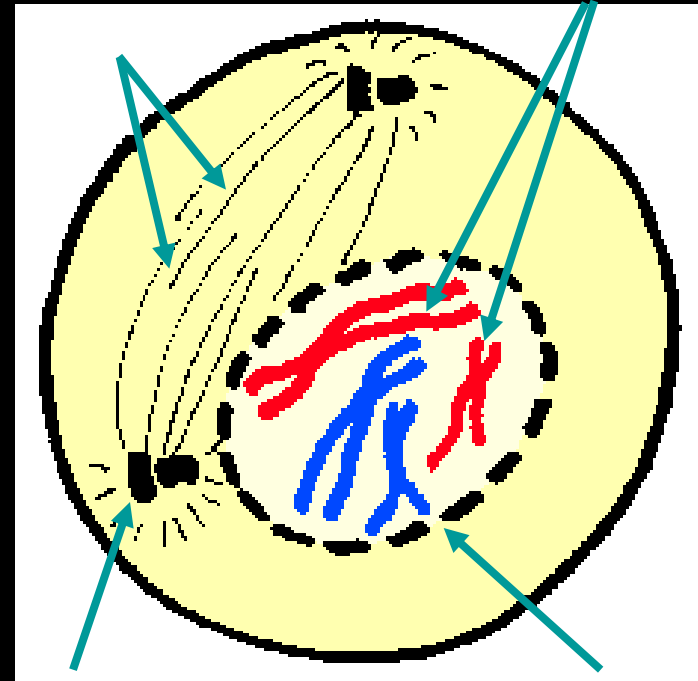
Prophase

Metaphase

Anaphase

Telophase

Prophase



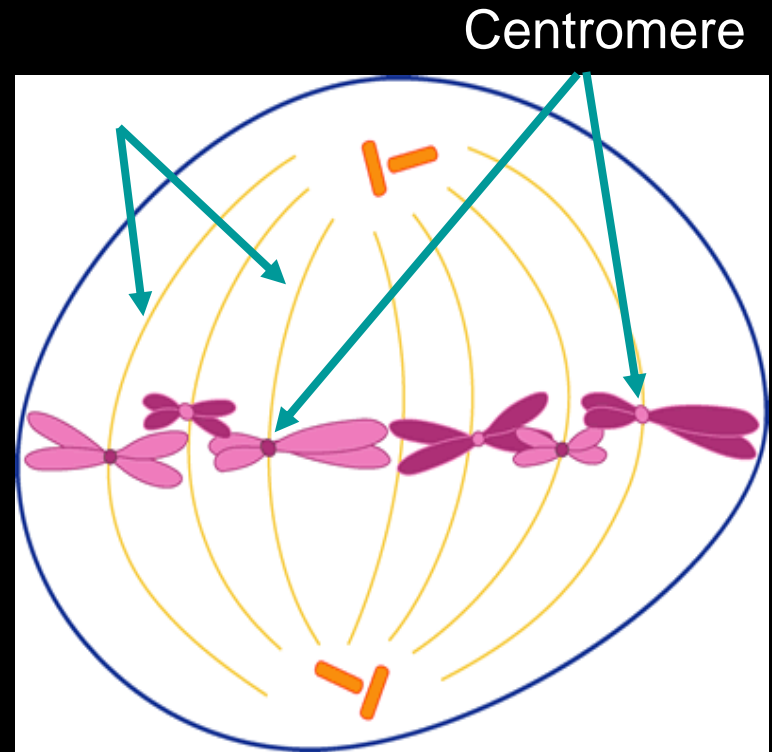
Chromosomes

Centrioles

Nuclear Envelope

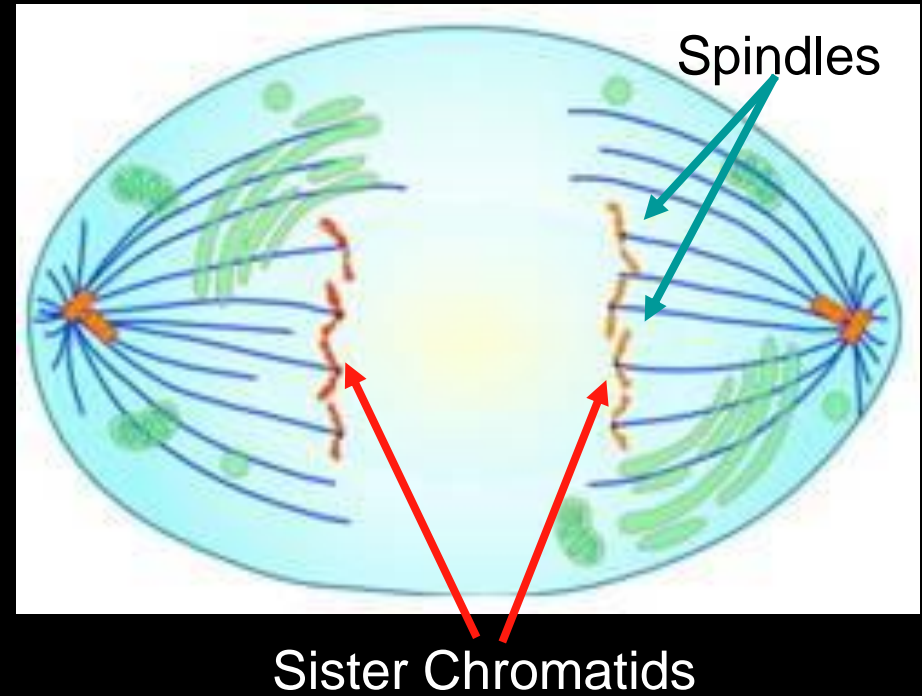
1. Chromatin condenses into chromosomes.
2. Centrioles separate and spindles begin to form.
3. Nuclear envelope breaks down.

Metaphase



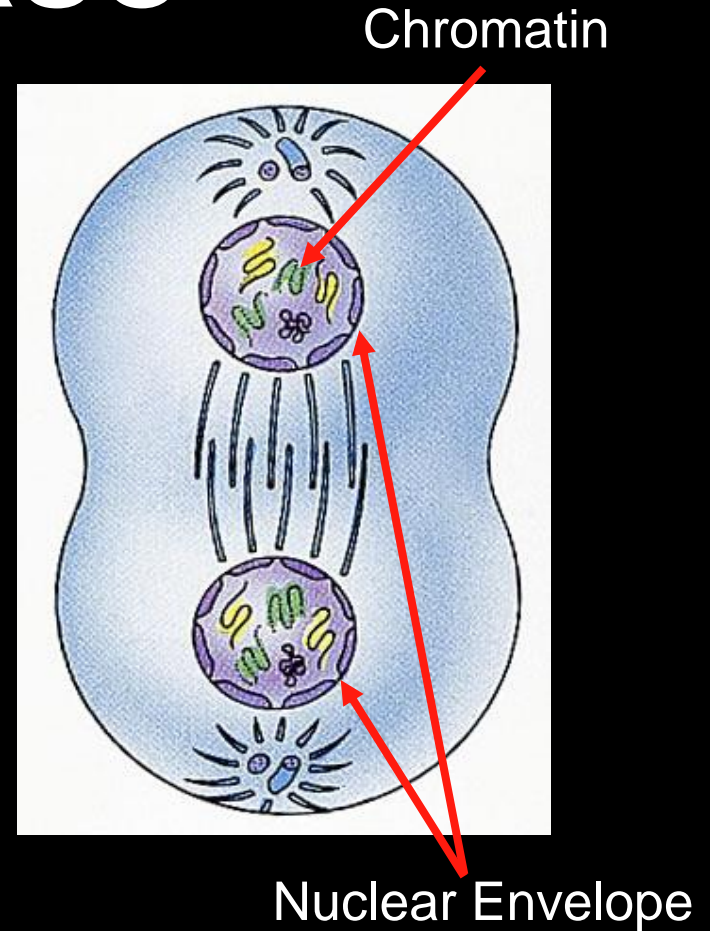
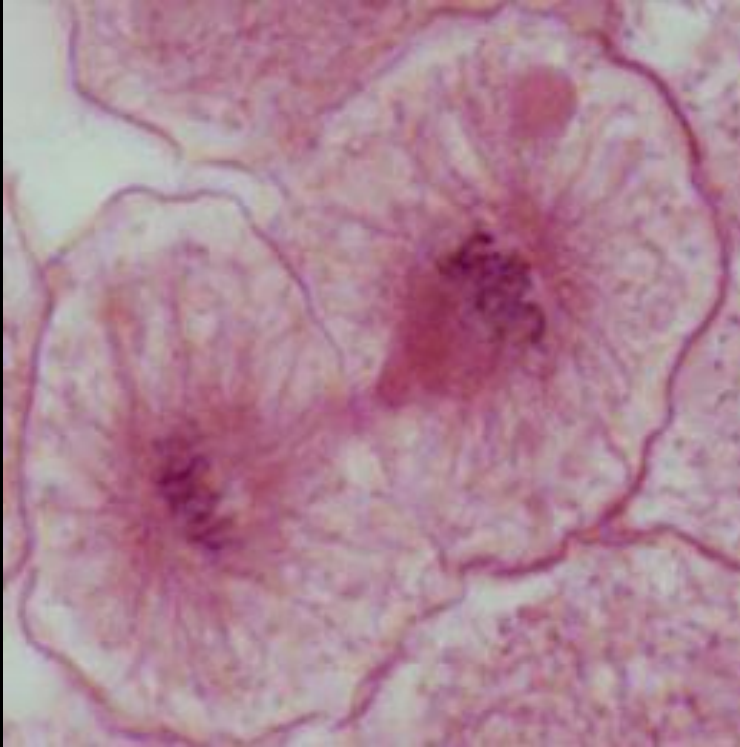
1. Chromosomes line up across the center of the cell.
2. Each chromosome is connected to the spindle fiber at its centromere.

Anaphase



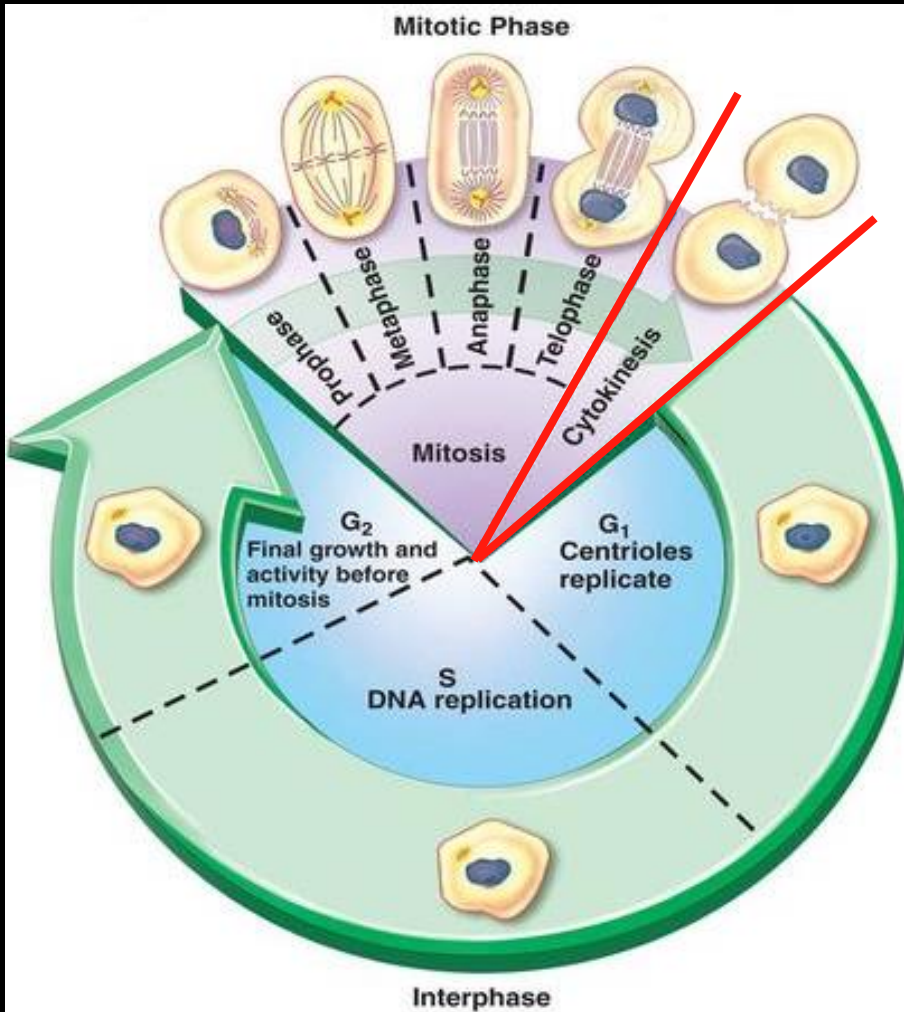
1. Paired chromosomes (sister chromatids) separate into individual chromosomes.
2. Spindle fibers move chromosomes to opposite ends of the cell.

Telophase

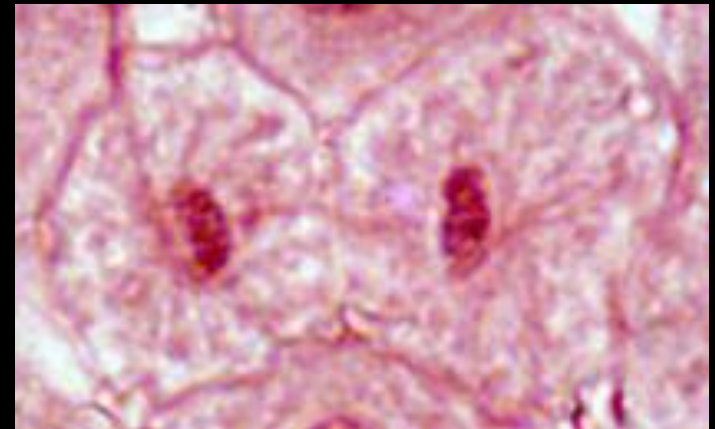


1. Nuclear envelopes form around chromosomes
2. Chromosomes uncoil into chromatin.

Cytokinesis



Cytokinesis - division of the cytoplasm. Two daughter cells with an identical set of chromosomes are formed.



YouTube Video

Mitosis

Amoeba Sisters

YouTube Video

Stages of Mitosis

YouTube Video

Mitosis

Stop Here

