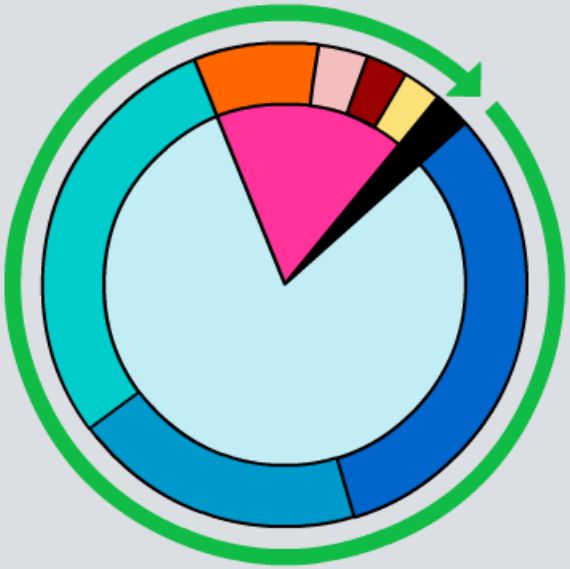
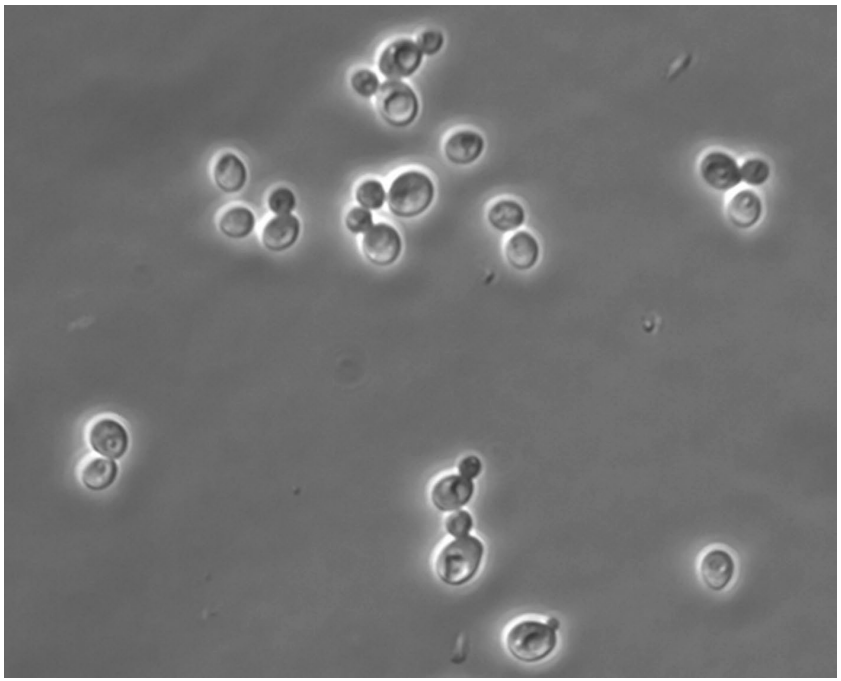
The Stages of Mitosis



What is mitosis?

Mitosis specifically refers to the process of nuclear division that occurs before a cell physically divides in two.

During mitosis, the cell's DNA is copied into each of the two daughter cells. In multicellular organisms, mitosis provides new cells for growth and tissue repair.

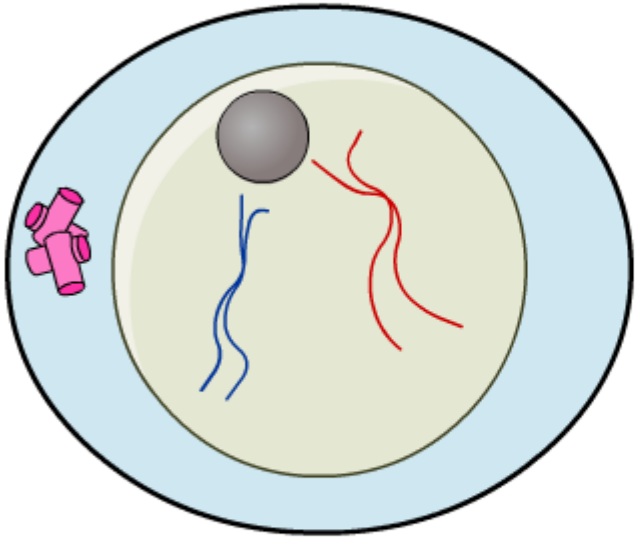


In eukaryotes, it can also be a form of asexual reproduction. This most commonly occurs in single-celled organisms, such as yeast.

What happens during mitosis?

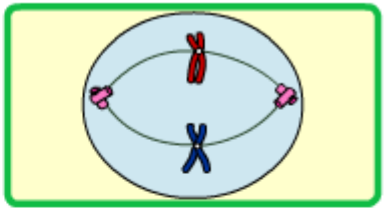
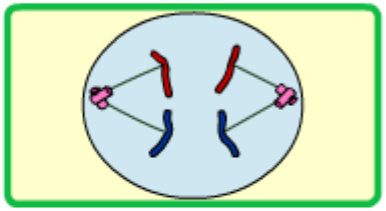
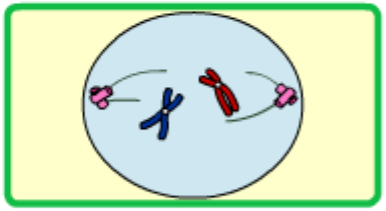
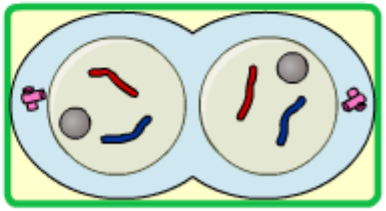
Mitosis (nuclear division) makes up 5-10% of the cell cycle and is considered a separate process to **cytokinesis** (cytoplasmic division).

Click "**play**" or the cell to find out more.



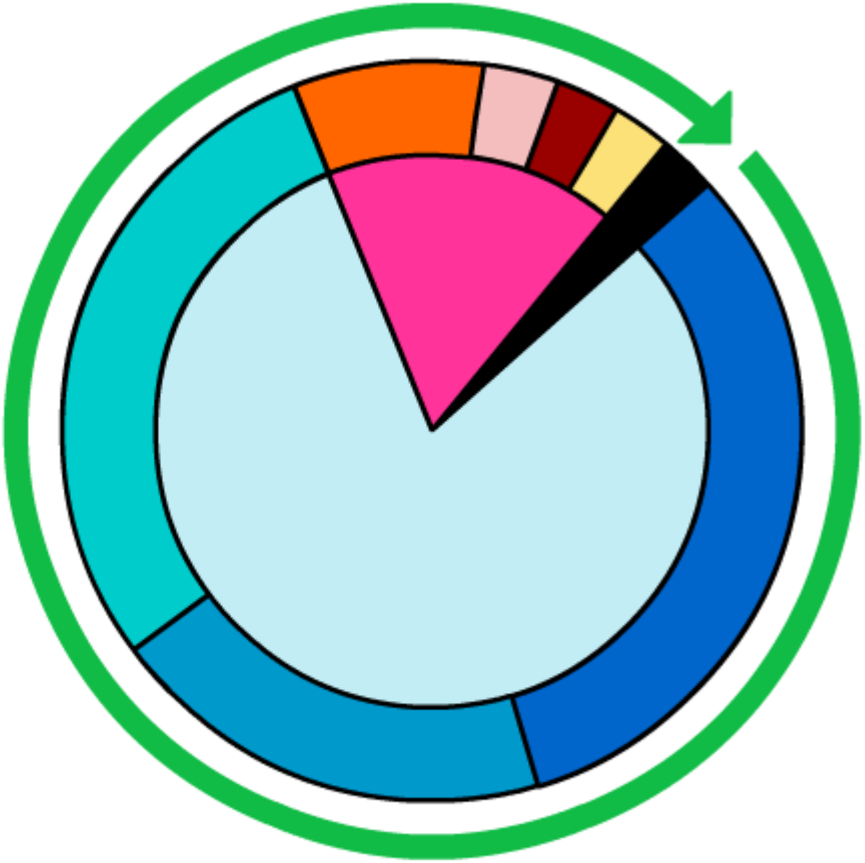
Phases of mitosis

Match each term to its picture and description

prophase		spindle fibres attach and chromosomes align
metaphase		new nuclear envelope forms and chromosomes unfold
anaphase		centromeres cleave and chromatids separate
telophase		chromatin condenses and spindle fibres form

Cell cycle summary

How do the stages of the cell cycle fit together?



The cell cycle consists of a long period of **interphase**, followed by **mitosis**. Each of these can be broken into several smaller phases.

Click on the features of this diagram to find out more.

Stages of the cell cycle

Identifying the stages of the cell cycle