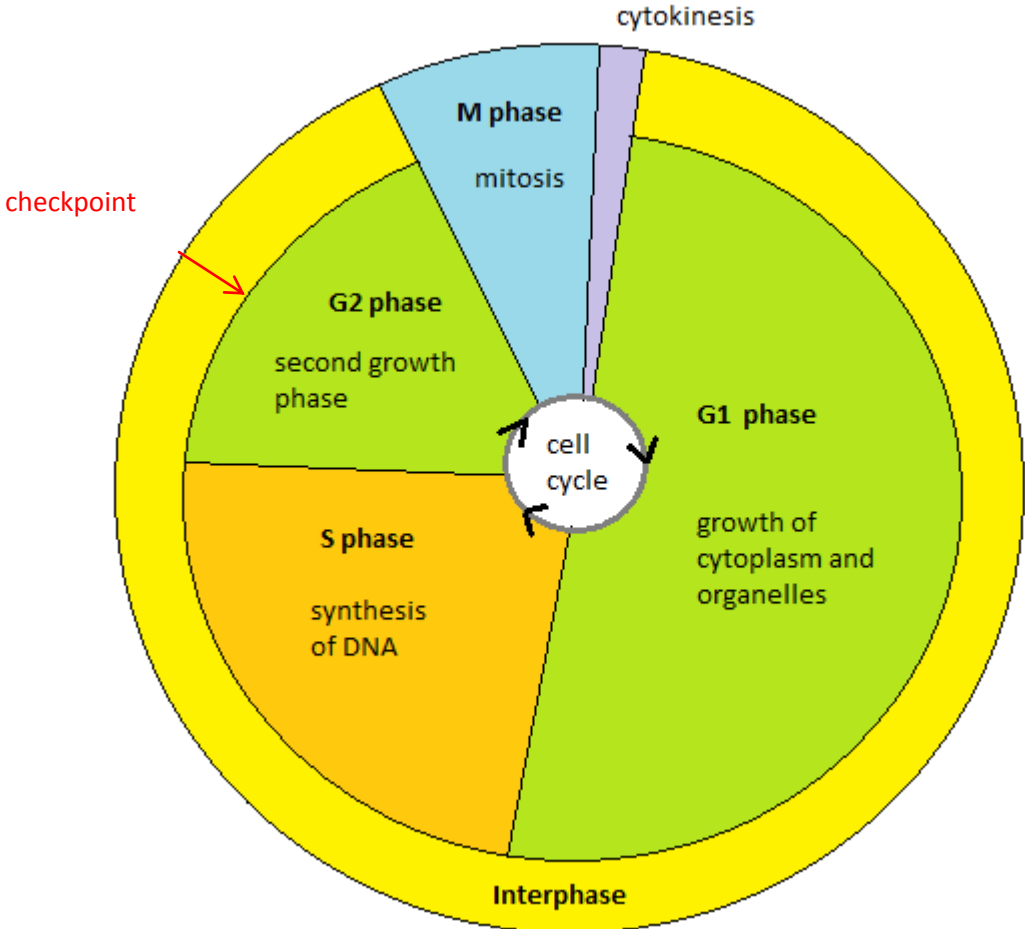


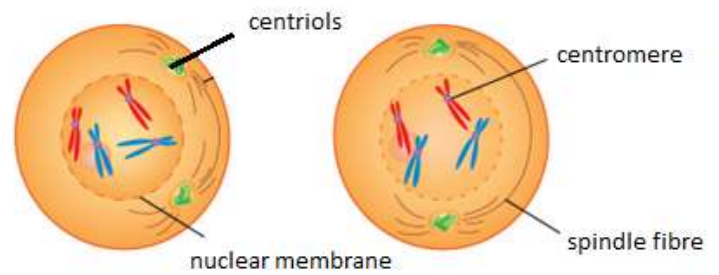
Cell cycle



Mitosis

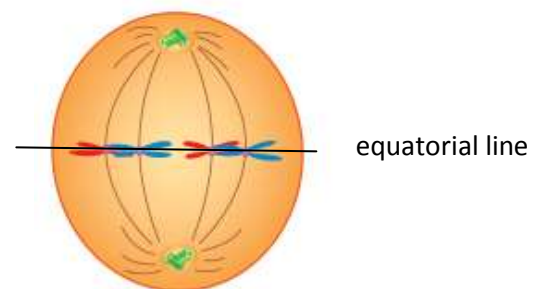
Prophase

- **chromosomes condense** to small compact bundle of DNA → chromosomes become visible
- **mitotic spindle** is formed (formation controlled by organelles called **centrioles**)
- centriols migrate to opposite side of cell
- **spindle fibres** are produced
- nucleoli disappears and nuclear membrane breaks down



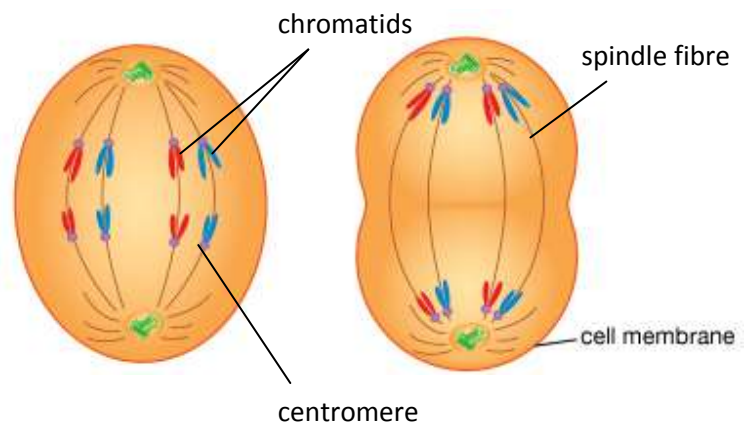
Metaphase

- microtubules of mitotic spindle attach to chromosomes in the **centromere**
- chromosomes arrange into **equatorial line** of cell
- chromosomes split in two separated chromatids



Anaphase

- spindle fibres begin to shorten
- chromatids travel towards opposite poles of cell pulled by spindle fibres

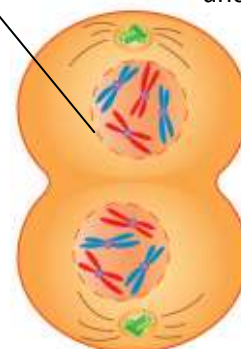


Telophase

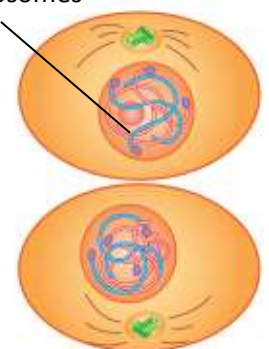
- **karyokinesis** – division of the nucleus
- chromatids uncoil at the opposite poles
- nuclear envelop reforms around chromatids on each side
- mitotic spindle breaks down
- **cytokinesis** – division of the cell

reformation of nuclear envelop

uncoiled chromosomes



karyokinesis



cytokinesis