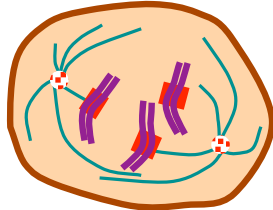
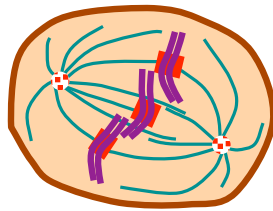


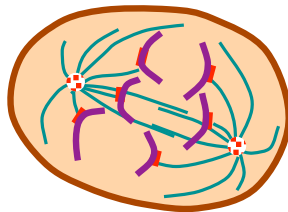
*prophase* chromosomes slowly condense (two sister chromatids each); centrosomes have duplicated and begun to form spindle poles; the nuclear envelope is still intact (kinetochores are depicted in black on the chromosomes)



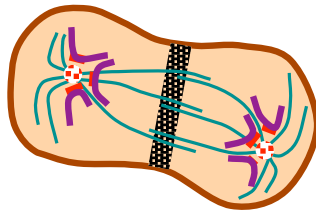
*prometaphase* the nuclear envelope breaks up, allowing microtubules from the separated centrosomes to seek out the kinetochore on each sister chromatid; *polar* microtubules extend towards midplane



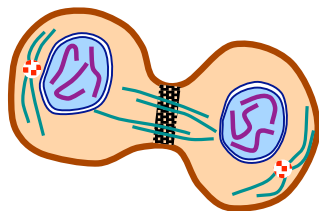
*metaphase* once connected to each other, polar microtubules provide a force opposing that from the kinetochore microtubules; this creates a tension on the chromosomes, pulling them towards the midplane



*anaphase* chromosomes break into pairs of chromatids, which are dragged by shortening kinetochore microtubules to the spindle poles; pressure from polar microtubules begins to push spindle poles apart



*telophase* the kinetochore microtubules disappear; chromatids decondense; a contractile ring begins to constrict around the equator; the nuclear envelope begins to reform as mitosis ends



*cytokinesis* nuclear envelopes complete; contractile ring causes cleavage furrow and leads to cell division