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| Interphase | * Cytoplasm separates and two new cells are formed.
* Different in plants (cell wall forms down the center) and animals (cell membrane pinches in).
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| Prophase | * Chromosome pairs line up at the equator (center of cell).
* Spindle fibers attach to the chromosomes at the centromere.
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| Metaphase | * Mitosis begins during this phase.
* Nucleolus and nuclear membrane disappear.
* Centrioles appear and move to opposite ends of cell.
* Spindle fibers begin to stretch across the cell.
* Chromosome pairs or sister chromatids become visible (attached to one another by a centromere).
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| Anaphase | * Two new nuclei form.
* Chromosomes change to chromatin (threads rather than rods).
* Mitosis ends.
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| Telophase | * Chromosome pairs (sister chromatids) separate and move to opposite ends of the cell.
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| Cytokinesis | * Cell’s resting phase. Cell grows to mature size.
* Cell spends 90% of its time in this phase.
* Cell copies/doubles its chromosomes and prepares for cell division (mitosis).
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