

Your life began as a single cell, the fertilized egg (zygote). Nine months later, when you were born, approximately 100 trillion made your body



Todays Investigation

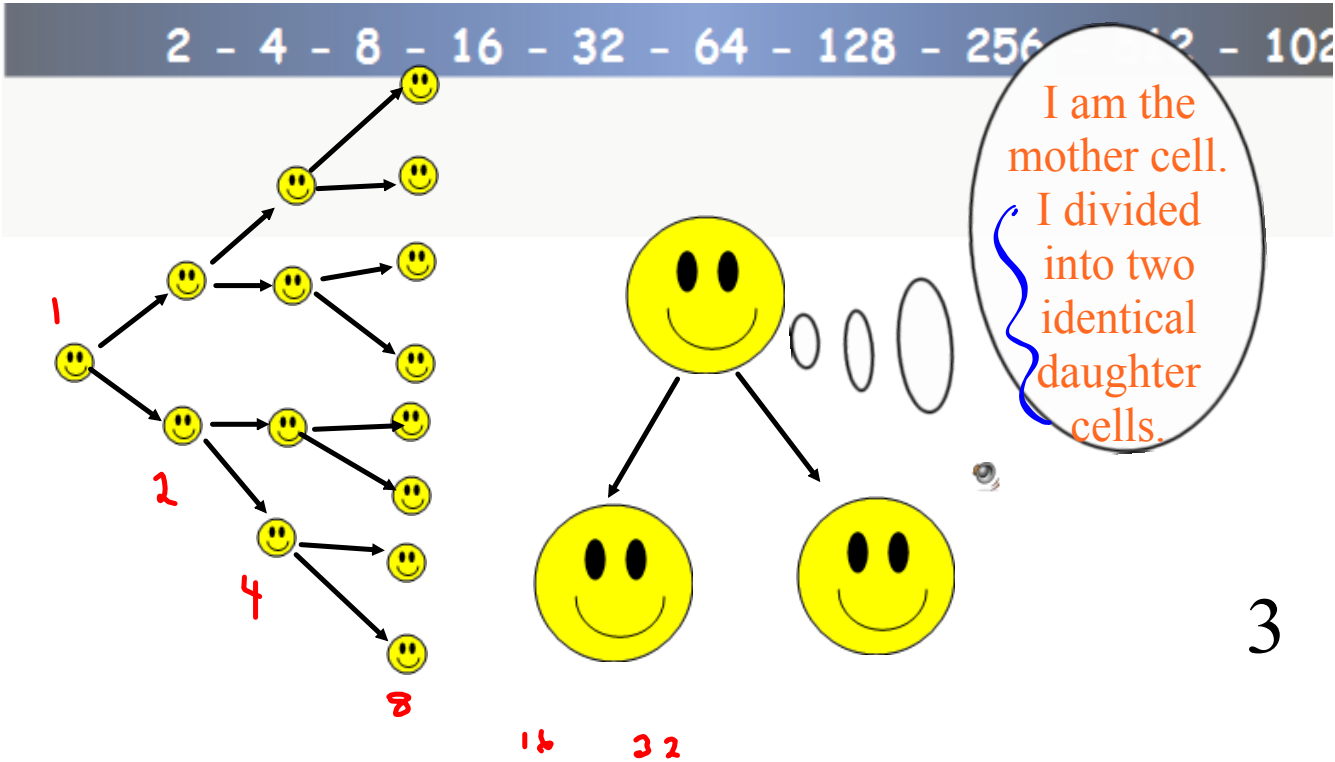
How did one cell become 100 trillion cells?



Cell Division

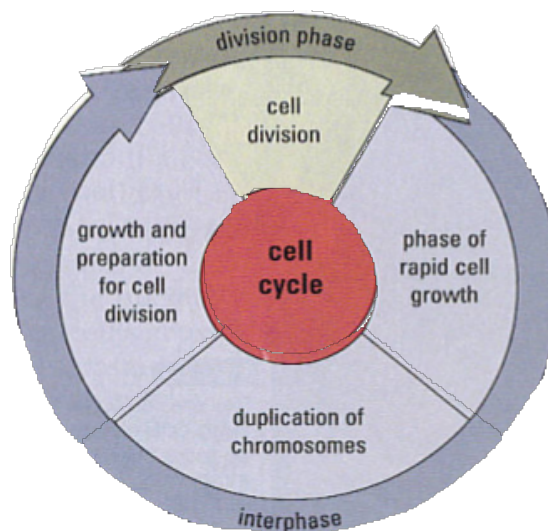
All cells come from preexisting cells through cell division.

Cells divide into two, then each into another two cells.

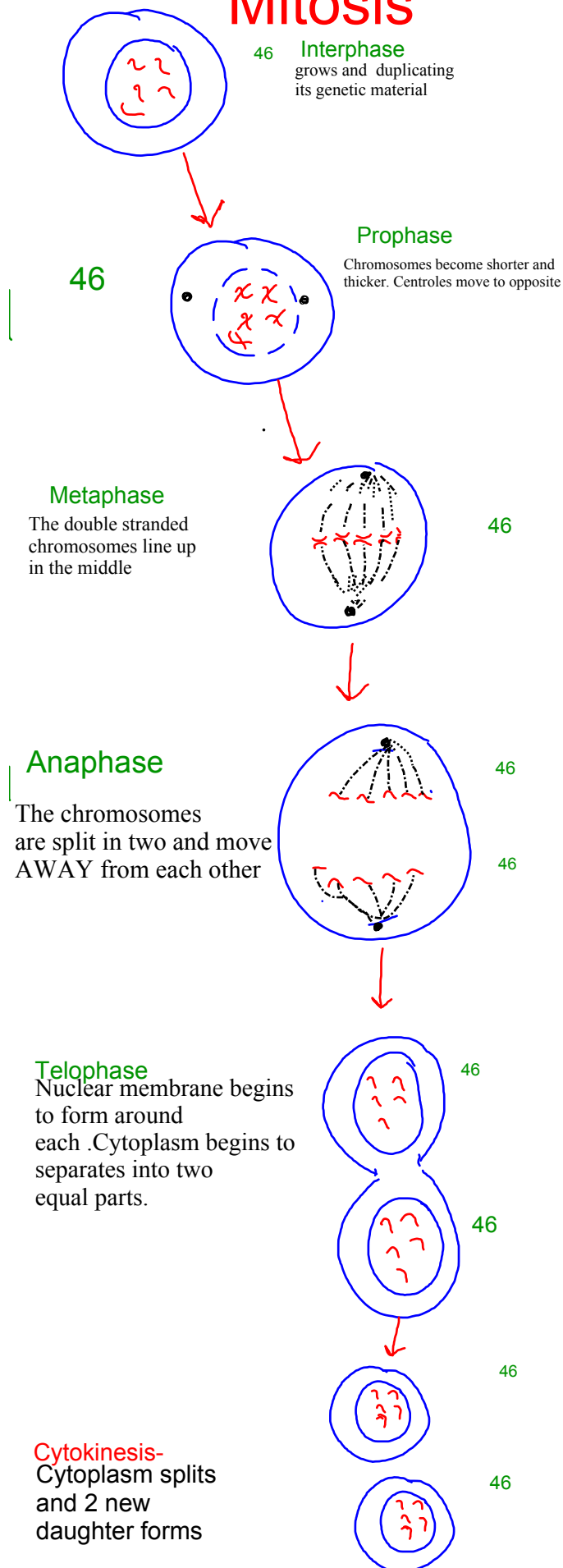


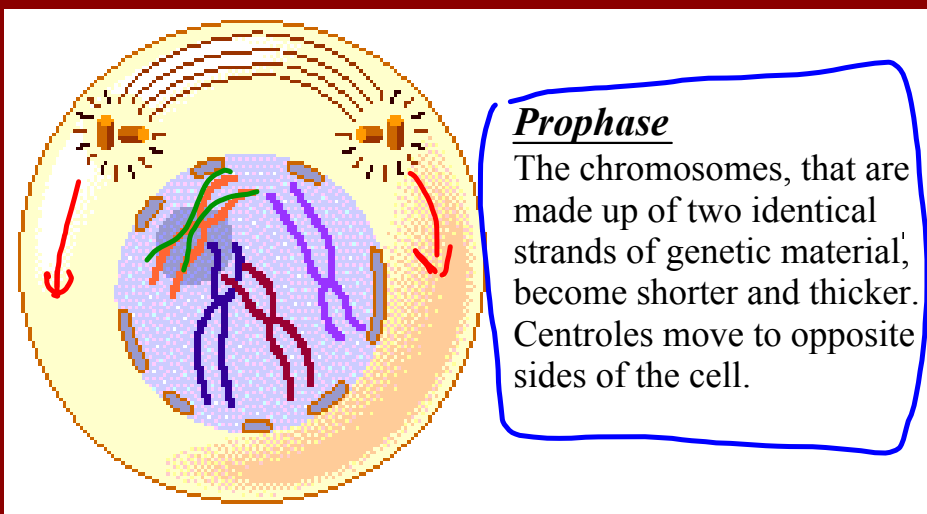
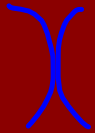
The Cell Cycle → PMAT

Cells divide and rest. The sequence of event from one division to the next is called the cell cycle. For most cells, cell division is a small part of the cells life. The stage between cell division is called interphase.

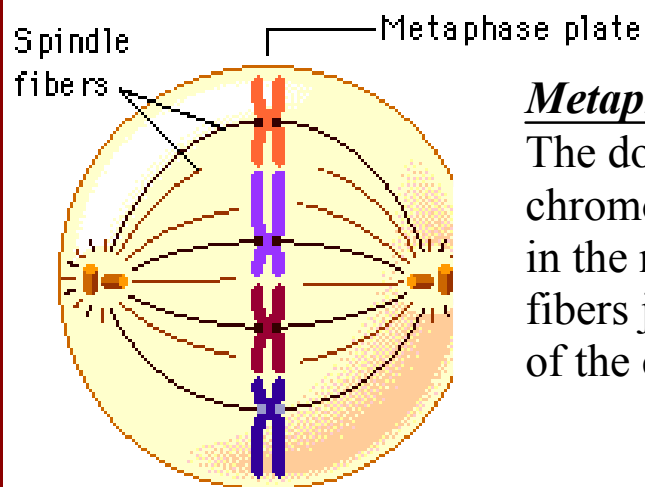
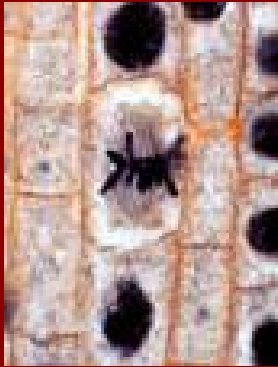


Mitosis





Return



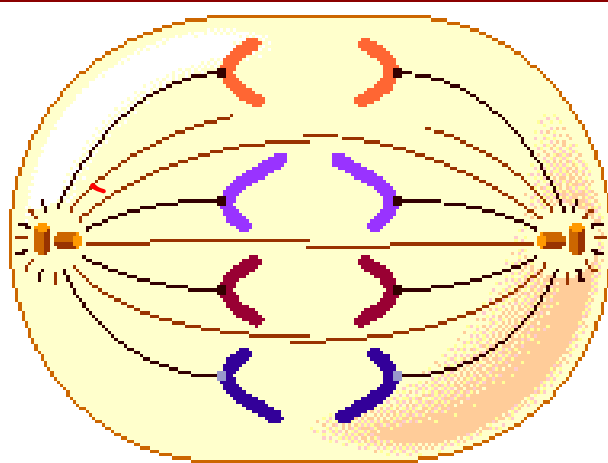
Metaphase

The double stranded chromosomes line up in the middle. Spindle fibers join to each side of the chromosome.

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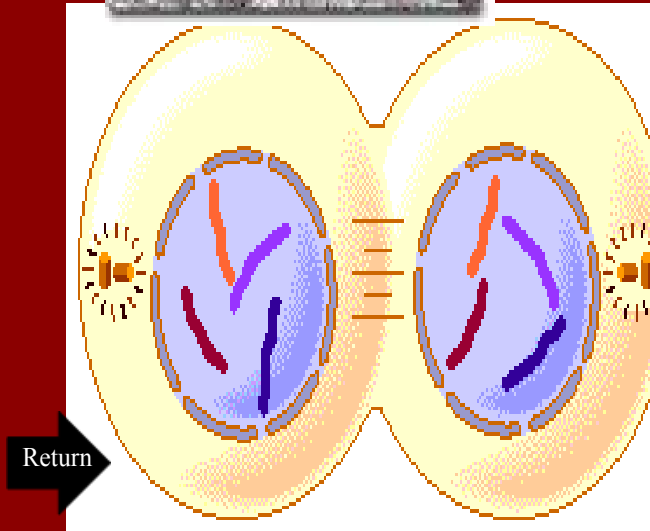
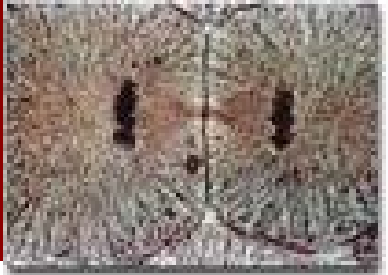


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Anaphase

The chromosomes are separated and move toward the opposite poles.



Telophase

The chromosomes reach opposite poles of the cell, and a nuclear membrane begins to form around each. Cytoplasm separates into two equal parts.

Cytokinesis is when it actually pinches off

