

Source: [\[KBhBIO101Cells\]](#)

1 | The Cell('s) (Life)Cycle

1.1 | So, why do cell divide

Everyday, 50-70 Billion die (**programmed cell death**, apoptosis), so...

The ability to produce organisms more of their kind is one characteristic that best distinguishes living things from nonliving matter

[\[KBhBIO101Viruses\]](#) and organelles challenge this definition => they are symbiotic and cannot reproduce on their own. But like screw them right?

To compensate for programmed cell death, (cell division) happen.

Before we continue, do yourself a favor and review [\[KBhBIO101DNAstructures\]](#)

1.2 | So, when do cells divide?

The cell follows a lifecycle from new cell to cell-too-bit-aaa-gotta-divide called... you ready for this? "Cell Cycle". At the pointy bit of the cell cycle, the cell reproduces [\[KBhBIO101CellReproduction\]](#). And et viola the cell cycle!

[\[KBhBIO101CellCycle\]](#)

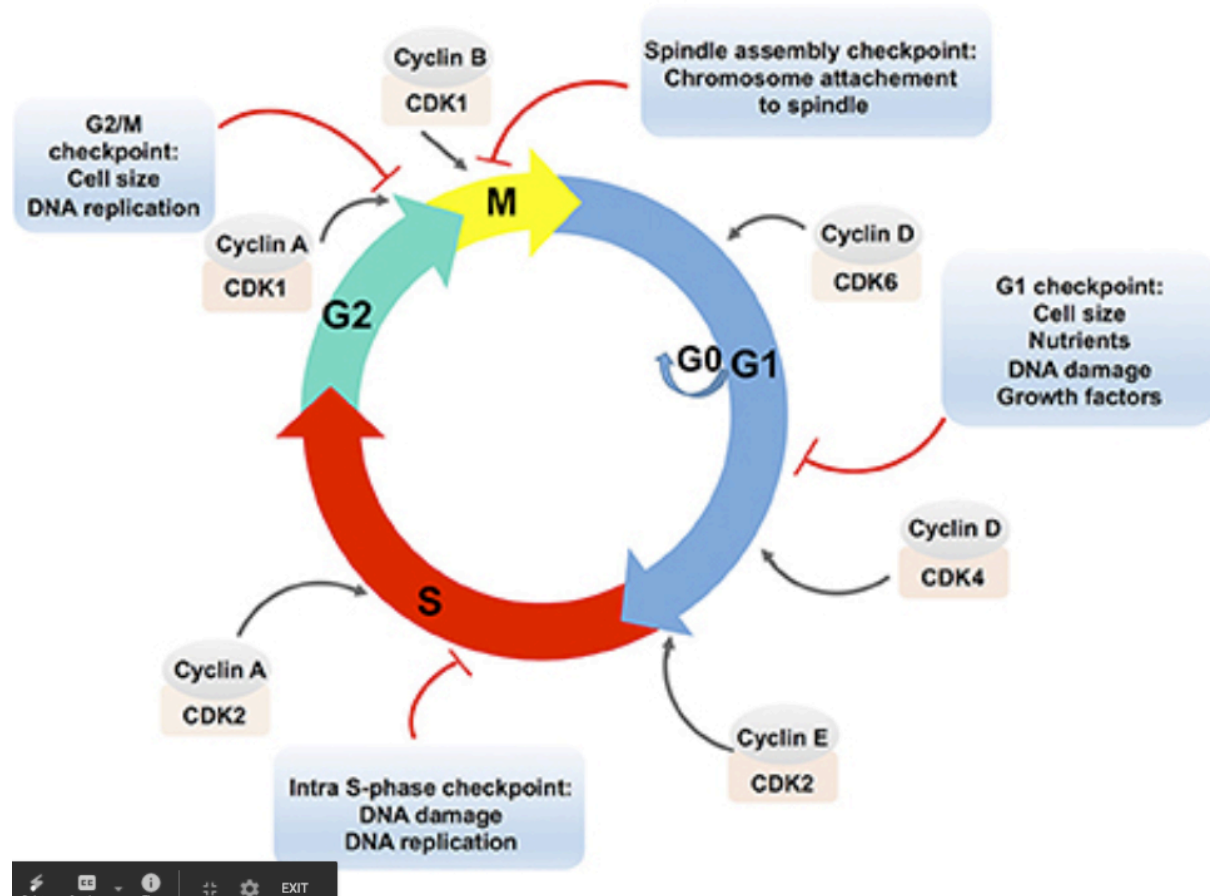


Figure 1: lecellcycle.png

1.3 | So, how do cells divide?

[KBhBIO101CellReproduction]

1.4 | The (actual) Cell Cycle