

**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 Actual Cell Cycle)

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!

For more, see [KBhBIO101CellCycle](#).

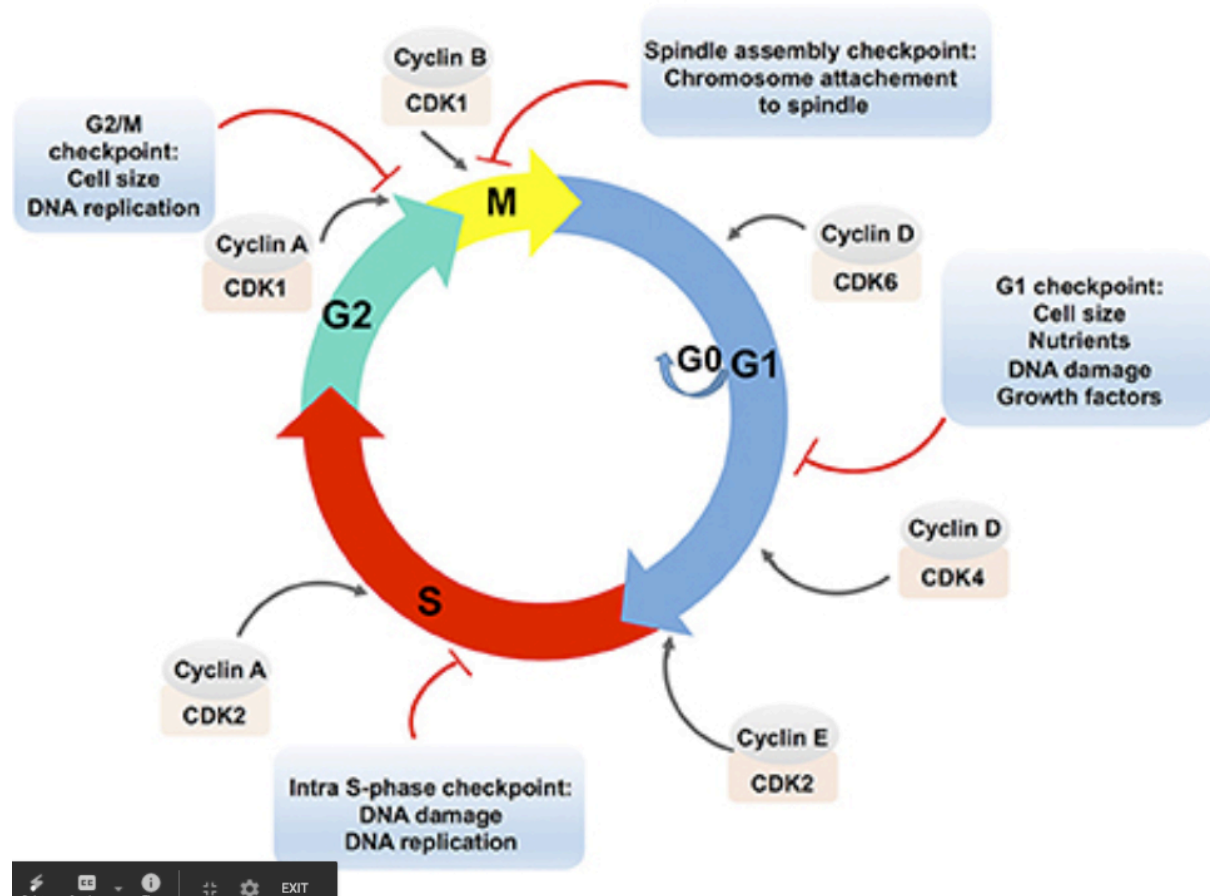


Figure 1: lecellcycle.png

### 1.3 | So, how do cells divide?

[KBhBIO101CellReproduction]