

# BIOLOGY BOOT CAMP 12

## The Cell Cycle

What controls the life and development of a cell?

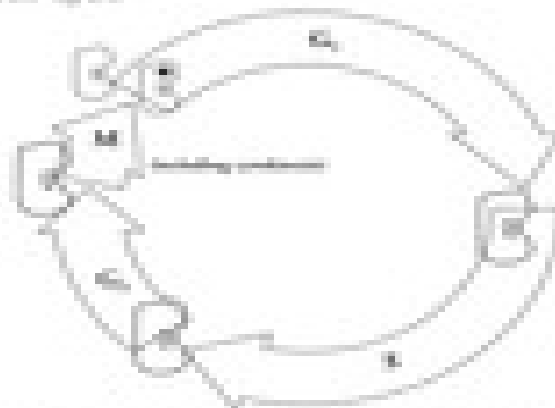
### Why?

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An old piece of jewelry says "to everything there is a season... a time to be born, a time to die." For cells, the line might say "a time to divide and a time to grow." In multicellular organisms, different types of cells have different roles and need to complete specific tasks. For example, a cell that isn't large enough is not useful for creating muscles in the leg. For a cell that is too large will not be useful for transporting through a tiny capillary. In this activity, you will learn about the seasons of a cell's life, and its own built-in molecular time-keeping function.

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### Model 1 – The Cell Cycle



1. How many phases are in the cell cycle as shown in the diagram in Model 1?
2. Starting at the second cell, what is the order of the stages of a cell's life?
3. During which phase does the size of the cell increase?
4. During which phase does the number of cells increase?