

Cell Cycle

The cell cycle interest group
featuring Amelia Ireland

Current Arrangement

cytokinesis

cell cycle

Ⓟ M phase

Ⓟ nuclear division

Ⓢ meiosis

Ⓢ mitosis

Ⓢ mitotic cell cycle

Ⓟ phases of the mitotic cell cycle - G1, G2, S

Ⓟ M phase of mitotic cell cycle

Ⓟ cytokinesis after mitosis

Ⓟ mitosis

Ⓟ phases of mitosis: anaphase, metaphase, etc.

Ⓟ events occurring during each phase

Problem

- Based on the *S. cerevisiae* cell cycle model
 - True path problems for any species without paradigmatic mitotic or meiotic cell division
 - No connection between cytokinesis and cell cycle
 - Cell cycle phases represent temporal stages, not processes

Solution

- Split cell cycle in cell cycle phases and cell cycle events

cell cycle

Ⓟ cell cycle events

Ⓢ DNA replication

Ⓢ cytokinesis

Ⓟ cell cycle phase

Ⓢ M phase

Ⓢ S phase

Ⓢ G1 phase

Ⓢ G2 phase