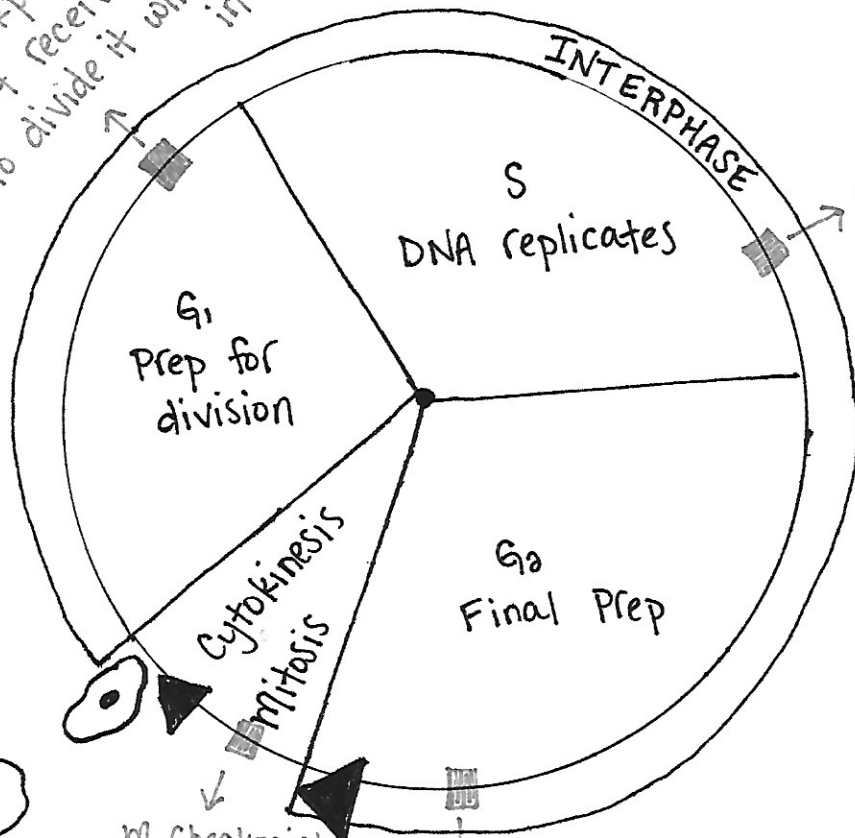


G₁ Checkpoint - if cell isn't receiving signal to divide it will stay in G₀



S Checkpoint - checks to see if DNA is ok
p53 is a protein that will prevent continuation if DNA is damaged

Tumor-Suppressor Genes

- code for proteins that will inhibit mitosis if there is a problem
- if mutated, protein cannot prevent mitosis even if there's a problem

M Checkpoint
Are chromosomes lined up?

G₂ Checkpoint

protein that signals cell to divide

Cell will be in G₀ phase being a cell until it gets signal to divide

Proto-oncogenes - code for proteins that stimulate normal cell growth and division

- If mutated, it becomes oncogene (producing the protein in excess and stimulating more division)