

# MCPS Calls This a "Game", They're Wrong: Cell Cycle Simulation

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Pd. \_\_\_\_\_

Cells in your body are constantly going through the **cell cycle**, a series of changes a cell undergoes from the time it forms until the time it divides. Usually your body contains, regulates, and controls how your cells go through the cycle. In this simulation, you will be in control of the cell cycle without any instructions. I hope you know the steps involved in the cell cycle!! Don't mess this up or cancer will take over the body...no pressure.

## DIRECTIONS

1. Go to the following website: [http://nobelprize.org/educational\\_games/medicine/2001/](http://nobelprize.org/educational_games/medicine/2001/)



What happens in the following stages:

G1: \_\_\_\_\_

S: \_\_\_\_\_

G2: \_\_\_\_\_

M: \_\_\_\_\_

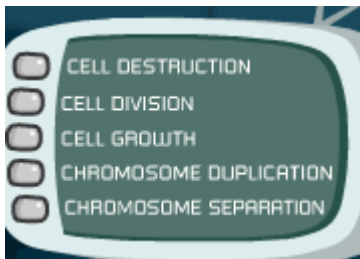


What is the role of CDK and Cyclin?

\_\_\_\_\_  
\_\_\_\_\_

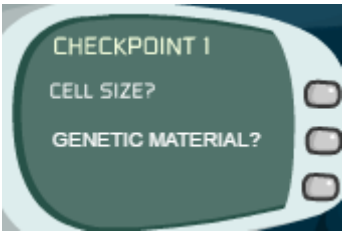
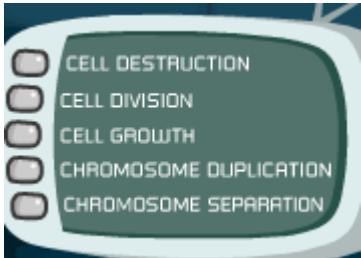
What order do you expect these stages to go in?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



List EACH CORRECT choice you selected as the supervisor of cell cycle and explain the result of each choice. Explain how each step is important to the cell cycle

CHOICE	RESULT
1.	
2.	
3.	
4.	
5.	



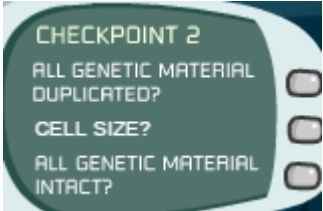
When did the first check point take place?

\_\_\_\_\_

What is the purpose of this check point?

\_\_\_\_\_

\_\_\_\_\_



When did the second check point take place?

\_\_\_\_\_

What is the purpose of this check point?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_