

## Chapter 18: The Cell Cycle

### Section 18.1: Overview of the Cell Cycle

The cell cycle is the process by which a cell grows and divides to produce two daughter cells. It is a highly regulated process that ensures the proper distribution of genetic material and the maintenance of the cell's internal environment. The cell cycle is divided into two main phases: interphase and mitosis. Interphase is the period of cell growth and DNA replication, while mitosis is the process of cell division. The cell cycle is a continuous process that repeats itself throughout the life of the cell.

1. What is the main purpose of the cell cycle?
2. What are the two main phases of the cell cycle?
3. What is the main purpose of interphase?
4. What is the main purpose of mitosis?
5. What is the main purpose of cytokinesis?
6. What are the main stages of mitosis?
7. What is the main purpose of the spindle apparatus?
8. What is the main purpose of the cell plate?
9. What is the main purpose of the cell wall?
10. What is the main purpose of the cell membrane?
11. What is the main purpose of the nucleus?
12. What is the main purpose of the nucleolus?
13. What is the main purpose of the ribosomes?
14. What is the main purpose of the endoplasmic reticulum?
15. What is the main purpose of the Golgi apparatus?
16. What is the main purpose of the lysosomes?
17. What is the main purpose of the peroxisomes?
18. What is the main purpose of the vacuoles?
19. What is the main purpose of the chloroplasts?
20. What is the main purpose of the mitochondria?