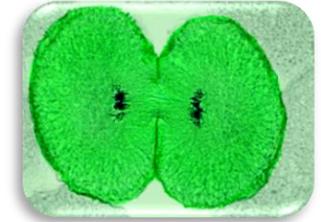


Unit 5: Cell Growth and Development

Chapter 10



Objectives: Cells undergo cell division to produce new cells. In eukaryotic cells, cell division is part of a highly regulated cycle known as the cell cycle. Cancer cells do not respond to the signals that regulate the growth of most cells, therefore they divide uncontrollably.

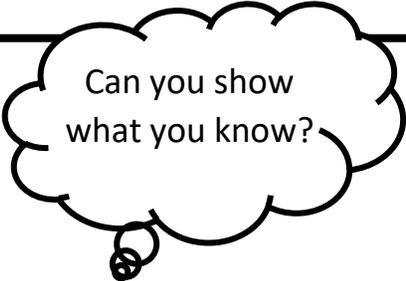
Key concepts:

Surface Area : Volume ratios Chromosomes Cell cycle Mitosis
 Stem Cells Cancer Differentiation

Fold along the line and glue this side down in your Biology Interactive Learning Log (BILL)

Essential Questions:

1. Why do cells divide?
2. How does a cell produce a new cell?
3. What is the role of chromosomes in cell division?
4. What is the role of the cell cycle in organisms?
5. What happens if the cell cycle is not regulated?
6. How do cancer cells differ from other cells?
7. How do cells become specialized for different functions?
8. Why is it possible to clone a whole organism from an undifferentiated cell?
9. Why are stem cells sought by researchers as potential cures to medical problems?



Vocabulary: (+) = Can explain it; (-) = Only heard it; 0 = No idea

Term	Pre	Post	Memory Clue
1. asexual reproduction			
2. binary fission			
3. sexual reproduction			
4. chromosome			
5. chromatin			
6. centromere			
7. sister chromatids			
8. histone			
9. cell cycle			
10. interphase			
11. DNA replication			
12. mitosis			

