

Case study

In groups of two:

- Read pages 144-147
- discuss and answer questions a to q

NOTE:

If a student in your group is not contributing to your discussion they will be removed and asked to work on the case study by themselves.

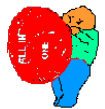
Importance of Cell Division

New cells need to be created to

- Replace old / dead cells
- Repair damaged tissues
- Allow organisms to grow

Why do cells divide instead of increasing in size?

If a cell were to increase in size then the volume of the cell would increase. As you know, a cell is surrounded by a membrane. Think of the cell like a balloon. The more air you put into a balloon the thinner the outer layer becomes. If you continue increasing the size of the balloon eventually the balloon will burst. The same applies to the cell.



Also if a cell increased in size then the distance between the organelles within the cell and the nucleus would increase causing the messages to become delayed.

Cell division allows an organism to grow, while maintaining the cells size that keeps the organism healthy.

Read Page 148 - 149

Page 149
Question 1-3