

'Through the Lens' Discovery Movie Notes

1. Every few hours cells divide.
2. Before the invention of the microscope, 300 years ago, no one knew cells existed.
3. In 1665, Robert Hooke coined the term 'cell' when he examined a piece of cork under a microscope.
4. In 1833 one of the leading botanists, Robert Brown, discovered every cell contained a dense blob called a nucleus.
5. When scientists observed material moving inside cells, it led them to the conclusion that cells are alive.
6. Cells are the building blocks of LIFE.
7. An amoeba is one of the simplest living creatures. The single cell is able to make its own food, to grow, and to reproduce all on its own.
8. The cell membrane acts like a barrier, allowing material to enter and exit the cell.
9. The nucleus is the control center of the cell.
10. Cytoplasm is the jelly-like substance inside the cell membrane. It is here that all the chemical reactions, which keeps the cell alive, take place.
11. Human cells come in all shapes and sizes.
12. Plant cells have a box- like shape.
13. Like animal cells, plant cells have a nucleus and cell membrane.
14. Unlike animal cells, plant cells have a cell wall, made of cellulose, and chloroplasts.
15. Plants are able to capture the sun's energy and convert it into food.
16. A chemical reaction with sunlight converts water and carbon dioxide into sugars.
17. Green blobs called chloroplasts act a bit like solar panels, harnessing the sun's energy to make a reaction possible.
18. Roots normally grow deep underground.
19. Root cells DON'T contain green chloroplasts because they don't normally see the light of day.