

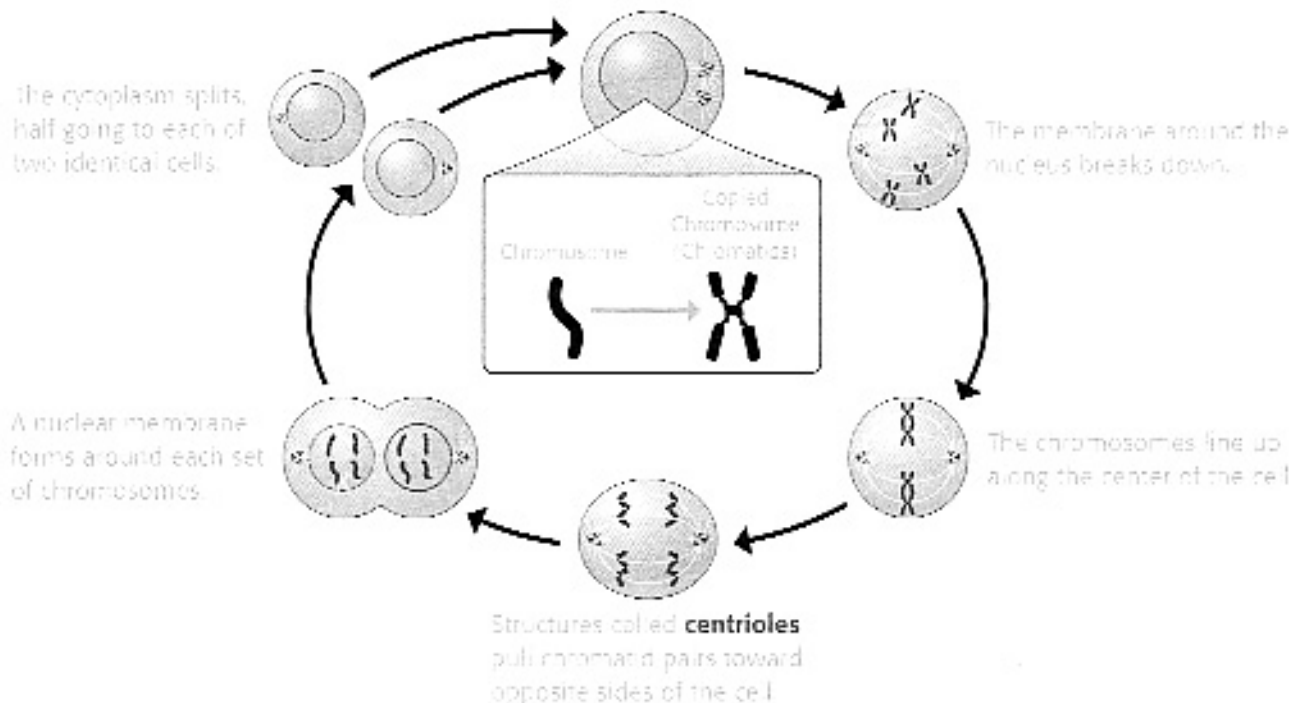
Cell Reproduction

How do cells reproduce?

Cells have a life cycle called the **cell cycle**. During the cell cycle, cells carry out their life activities, like taking in nutrients and making proteins. Cells must also reproduce to make new cells for growth and

repair. When a cell needs to make another cell, the cell's DNA is first copied. Then, the cell splits in half and the DNA is divided equally between the two cells in a process called **mitosis**.

Chromosomes in the nucleus contain the cell's DNA. Before mitosis begins, the chromosomes are copied. The two chromosome copies are called **chromatids**.



Stages of the cell cycle and mitosis

Show What You Know

Each cell needs a complete set of chromosomes in order to be healthy. How does mitosis make sure that each new cell produced has the same set of DNA as the parent cell?
