

Cell
Reproduction
Review
Chapter 5
Chapter 6.1 and 6.2

Question

- It is important for the surface area of the cell to be much larger than its _____.

Answer

- Volume

Question

- Name two parts that make up the image below



Answer

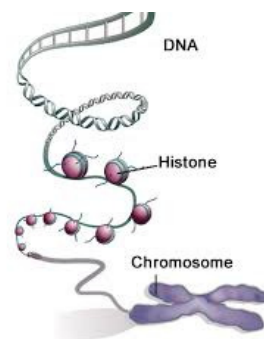
- Chromatid
- Centromere
- Telomeres

Question

- What kind of proteins are involved when chromatin condenses to form chromosomes?

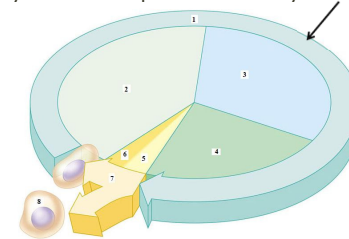
Answer

- Histones



Question

- The cell grows in size & it's the busiest part of the cell cycle. Name that stage of the cell cycle. It is represented by # 1

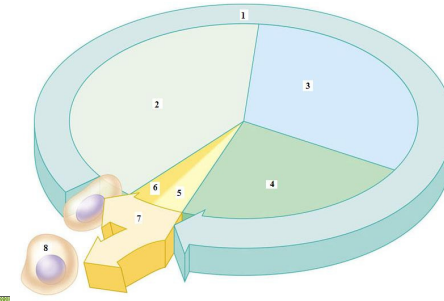


Answer

- Interphase

Question

- Name the three parts of Interphase.



Answer

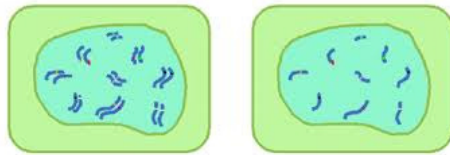
- Gap 1 or G1
- Synthesis or S phase
- Gap 2 or G2

Question

- How many chromosomes do human somatic cells have?
- How many does a human gamete have?

Answer

- 46 Chromosome or 23 pairs
- 23 Chromosome



Somatic Cell

Gamete Cell

Question

- Mitosis divides the cells _____ while cytokinesis divides the cells _____.

Answer

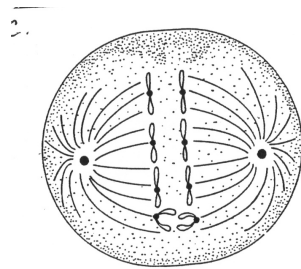
- Nucleus
- Cytoplasm

Question

- During which phase of mitosis do the centromeres split?

Answer

- Anaphase

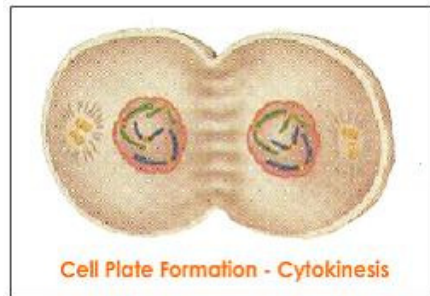


Question

- During which stage of mitosis does cytokinesis usually start in animals?

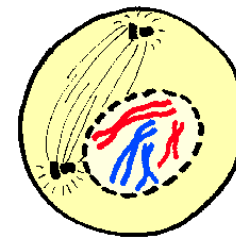
Answer

- Telophase



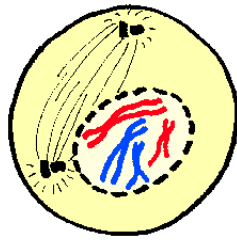
Question

- Name the phase of mitosis.



Answer

Prophase

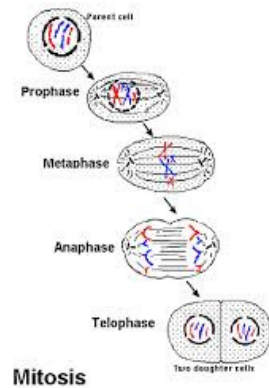


Question

Name the phases of mitosis in order:

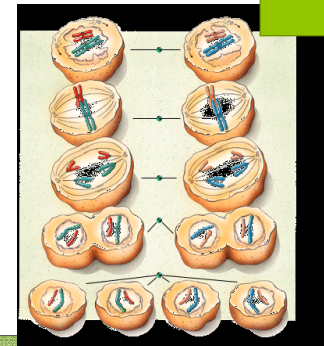
Answer

- PMAT



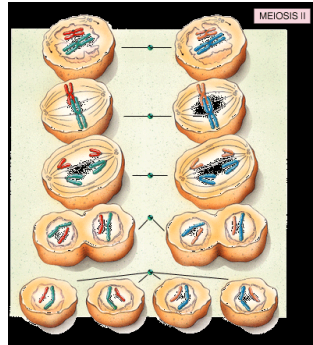
Question

- What process is occurring in the diagram?
Be specific!



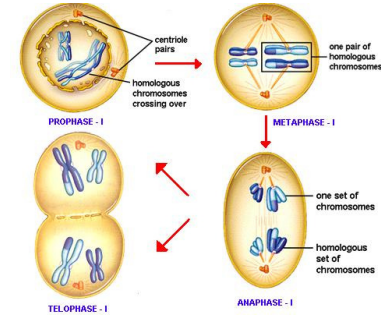
Answer

- Meiosis 2



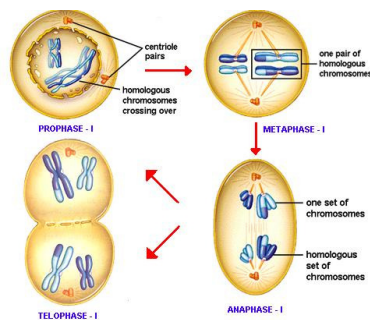
Question

- What division of meiosis is occurring below?



Answer

- Meiosis I

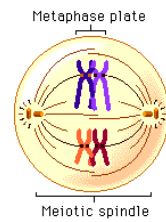


Question

- During which phase of meiosis do tetrads line up at the equator?

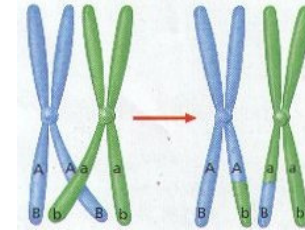
Answer

- Metaphase I



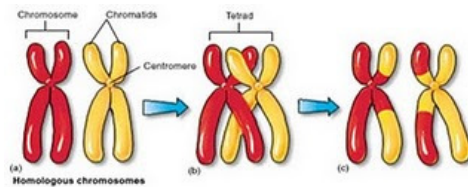
Question

- _____ occurs between nonsister chromatids genetic exchange between chromosomes provides new combination of genes that are different from either parent.



Answer

- Crossing over

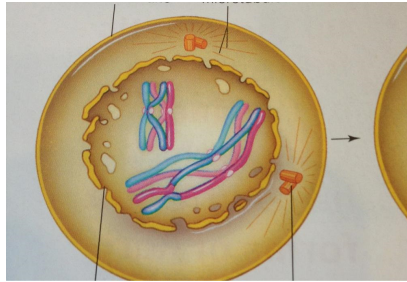


Question

- During what phase of Meiosis does Crossing over take place?

Answer

- Prophase I

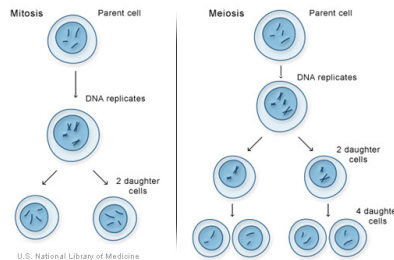


Question

- Chromosome become visible only when _____ is about to begin.

Answer

- Cell division

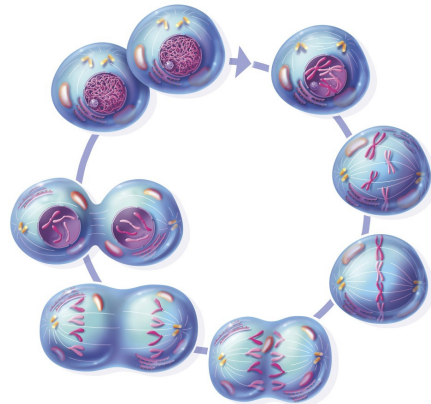


Question

- When a cell divides through mitosis, the two cells made at the end are genetically _____ to the parent.

Answer

- Identical

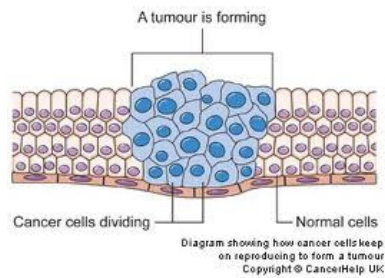


Question

- Cells lose the ability to control their growth rate is called _____?

Answer

- Cancer

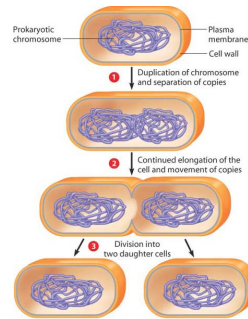


Question

What type of cell division do bacteria use?

Answer

- **Binary fission** is the reproduction of single-celled organisms



Question

- What is an advantage of sexual reproduction vs asexual reproduction?

Answer

- Genetic variation

Question

- What are the two types of cells that humans have? One type is made through mitosis, the other through meiosis

Answer

- Somatic (body cells)
- Gametes (sex cells)

Question

- What are the first 22 chromosomes, which do not determine the sex of an organism?

Answer

- Autosomes

Question

- In Meiosis if the parent cell has 60 chromosomes, then how many will the daughter cells have?

Answer

- 30 chromosomes

Question

- Name a type of cell that is a haploid cell.

Answer

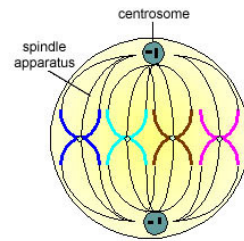
- Gametes (eggs and sperm)

Question

- What is the propose of the spindle fibers?

Answer

- To help separate or divide chromosomes.



Question

- **Centrioles** are only found in animals and not in plants.

- True or False

Answer

- True

Question

- Mitosis and Meiosis both start with diploid cells however what kind of cells do they end up with.
- A. Mitosis end up with _____ cells
- B. Meiosis en up with _____ cells

Answer

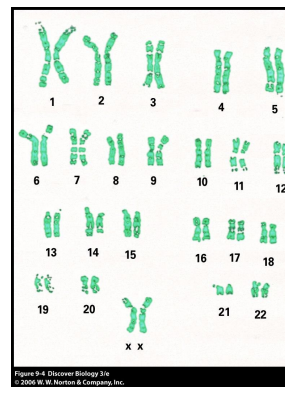
- A. Diploid
- B. Haploid

Question

- Similar chromosomes in structure and genetic information are called _____ . One from mom and one from dad.

Answer

- Homologous Chromosomes



Question

- The production of gametes and becoming mature is called _____ .

Answer

- Gametogenesis

Question

- Unique body cells that have the ability to turn into specialized cells are called _____.

Answer

- Stem cells

Question