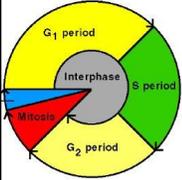
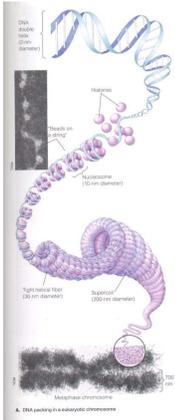


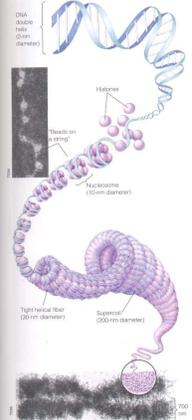
Cellular Reproduction Review

By Ken Pitts

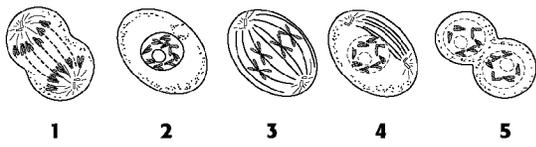



Histones are

- A. Nitrogenous bases
- B. Centromeres
- C. Proteins DNA coils around to fit within a cell
- D. Chromatin



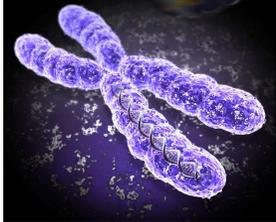
Which of the following cells is in prophase?



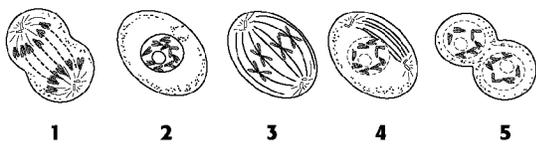
1 2 3 4 5

Duplicate halves of this replicated chromosome are known as

- A. chromosomes
- B. The centromere
- C. chromatid
- D. chromatids



Which of the following cells is in anaphase?

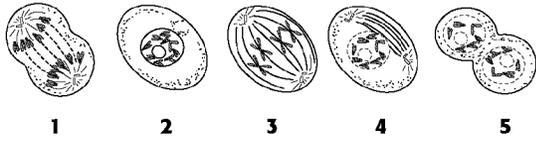


1 2 3 4 5

Chromosomes of prokaryotes and eukaryotes

- A. Are both circular
- B. Both contain DNA
- C. Both have chromatids before mitosis
- D. Both are in a nucleus during most of the cell cycle.

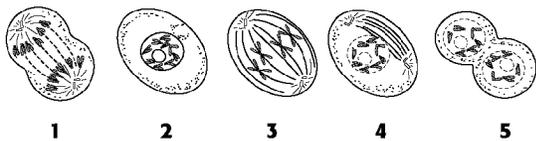
Which of the following cells is in metaphase?



The diploid number in human liver cells is 46. How many chromosomes are in sperm cells?

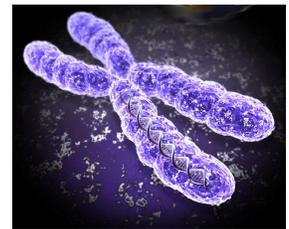
- A. 46
- B. 92
- C. 32
- D. 23

Which of the following cells is in telophase?

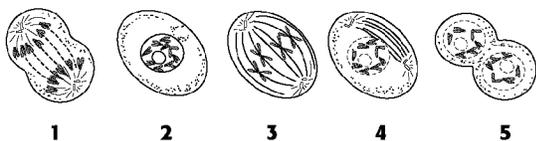


During anaphase of mitosis the sister chromatids will become

- A. chromosomes
- B. centromere
- C. chromatin
- D. chromatids

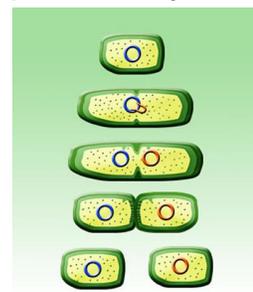


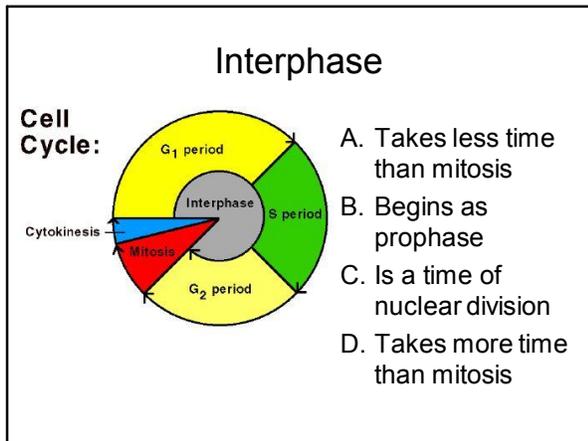
Which of the following cells is in interphase?



Bacteria reproduce by

- A. Binary fission
- B. Mitosis
- C. Meiosis
- D. Cytokinesis





If an organism's diploid number of chromosomes is 180 the haploid number is

A. 360
 B. 36
 C. 60
 D. 90

The nucleus of a eukaryotic cell divides during the process of

A. meiosis
 B. cytokinesis
 C. telophase
 D. mitosis

Cytokinesis differs in

A. bacteria and prokaryotes
 B. plant and animal cells
 C. humans and chimps
 D. sheep and dogs

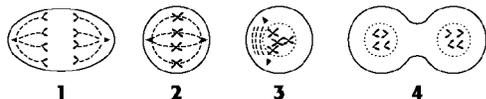
During cytokinesis in plant cells

A. A cell plate forms between the cells
 B. A cleavage furrow forms between the cells
 C. Centrioles disappear
 D. Chromosomes reappear

During cytokinesis in animal cells

A. A cell plate forms between the cells
 B. A cleavage furrow forms between the cells
 C. Centrioles disappear
 D. Chromosomes reappear

Please give the correct sequence for the following cells in mitosis

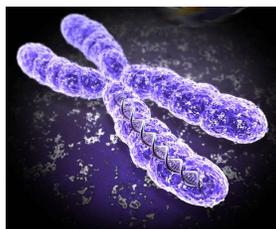


G1 – S – G2 – M – C stands for

- A. The stages of the cell cycle
- B. The stages of mitosis
- C. The stages of meiosis
- D. The stages of binary fission

The protein disk that holds the sister chromatids together is the

- A. chromosomes
- B. centromere
- C. chromatin
- D. chromatids

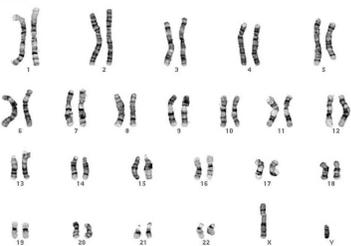


Asexual reproduction in prokaryotes by binary fission has one advantage over meiosis and sexual reproduction:

- A. It creates more variety than meiosis
- B. It is faster than meiosis
- C. It uses chromatids.
- D. It takes two parents.

The following karyotype is a

- A. Klinefelter
- B. Human male
- C. Human female
- D. Down syndrome child



Microtubules

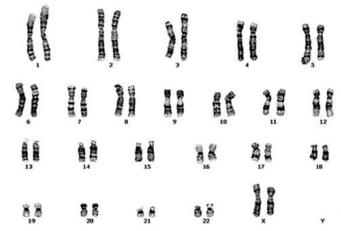
- A. Create movement in cells
- B. Are what the spindle fibers are made of
- C. Are what chromosomes are made of
- D. Are what chromatin is made of

If a cell has 100 replicated chromosomes and goes through the cell cycle and mitosis

- A. The resulting 2 cells have 50 chromosomes
- B. The resulting 4 cells have 50 chromosomes
- C. The resulting 4 cells will have 100 chromosomes
- D. The resulting 2 cells will have 100 chromosomes

The following karyotype is a

- A. Human Klinefelter
- B. Human male
- C. Human female
- D. Down syndrome child

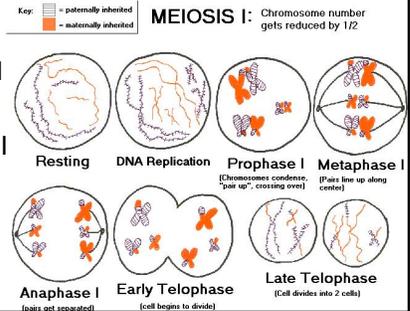


If a cell has 100 replicated chromosomes and goes through meiosis

- A. The resulting 2 cells have 50 chromosomes
- B. The resulting 4 cells have 50 chromosomes
- C. The resulting 4 cells will have 100 chromosomes
- D. The resulting 2 cells will have 100 chromosomes

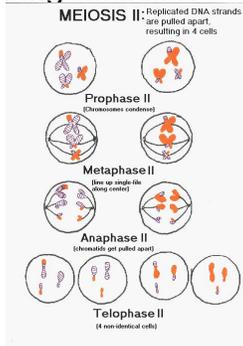
Homologues separate in meiosis during which phase?

- A. Anaphase I
- B. Anaphase II
- C. Telophase I
- D. Telophase II



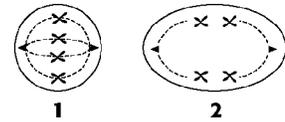
Replicated chromosomes break at the centromere during meiosis?

- A. Anaphase I
- B. Anaphase II
- C. Telophase I
- D. Telophase II



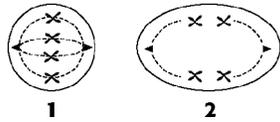
If the diploid number is 4 for the cells in the diagram, then

- A. Cell number 1 is in mitosis
- B. Cell 2 is in mitosis
- C. Cell 1 is in meiosis
- D. Cell 2 is in cytokinesis



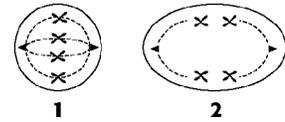
If the diploid number is 4 for the cells in the diagram, then

- A. Cell number 1 is in meiosis
- B. Cell 2 is in mitosis
- C. Cell 2 is in meiosis
- D. Cell 1 is in cytokinesis



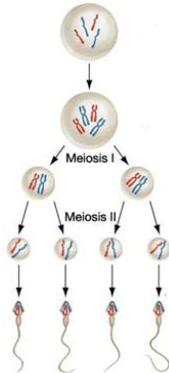
If the diploid number is 4 for the cells in the diagram, then

- A. Cell number 1 is prokaryotic
- B. Cell 2 is forming gametes
- C. Cell 1 is forming gametes
- D. Cell 2 is cloning itself



The diagram is showing

- A. Oogenesis
- B. Spermatogenesis
- C. Binary fission
- D. mitosis



Crossing over occurs during

- A. Interphase
- B. Prophase I
- C. Metaphase I
- D. Anaphase I
- E. Telophase I



Crossing over and resulting genetic recombination

- A. Decreases variation
- B. Increases the number of cells
- C. Decreases chances a population will survive
- D. Increases variation in a population



The diagram is showing

- A. Oogenesis
- B. Spermatogenesis
- C. Binary fission
- D. mitosis

