Ch 8 practice questions

1. In order to fit within a cell, DNA becomes more compact by

a. breaking apart into separate genes.

b. extending to form very long, thin molecules.

c. wrapping tightly around associated proteins.

d. being enzymatically changed into a protein.

2. Chromatids are

a. dense patches within the nucleus.

b. bacterial chromosomes.

c. duplicate halves of a chromosome.

d. prokaryotic nuclei.

3. A protein disk that attaches two chromatids to each other in a chromosome is called a

a. chloroplast. c. gamete.

b. centromere. d. centriole.

4. The chromosomes in your body

a. exist in 23 pairs.

b. include two sex chromosomes.

c. include 44 autosomes.

d. All of the above

5. A student can study a karyotype to learn about the

a. molecular structure of a chromosome.

b. genes that are present in a particular strand of DNA.

c. medical history of an individual.

d. number of chromosomes present in a body cell.

6. A diploid cell is one that

a. has two homologues of each chromosome.

b. is designated by the symbol 2*n*.

c. has chromosomes found in pairs.

d. All of the above

7. diploid : body cell :: haploid :

a. sex chromosome c. reproductive cell

b. chromosome d. zygote

8. The diploid number of chromosomes in a human skin cell is 46. How many chromosomes are in a human egg cell?

a. 46 c. 23

b. 92 d. 12.5

9. Binary fission

a. occurs when two cells collide with each other.

b. produces excess energy.

c. creates new species.

d. is the process by which bacteria reproduce.

10. The chromosome of a bacterium

a. is wrapped around proteins.

b. has a circular shape.

c. occurs in multiple pairs within the cell.

d. is found within the nucleus.