

11. Using Figure 10-3, which process would result in the formation of chromosome C from chromosomes A and B?

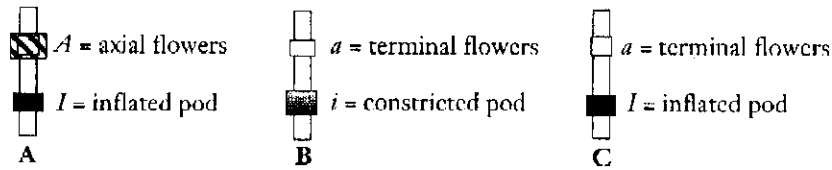


Figure 10-3

- a. asexual reproduction
- b. independent assortment
- c. crossing over
- d. segregation

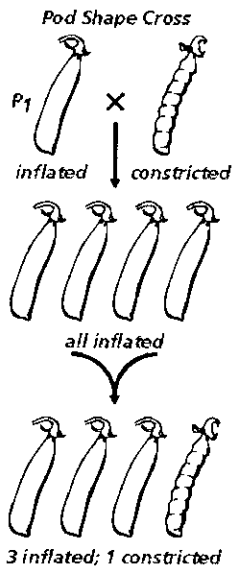


Figure 10-5

12. What is the genotype of generation 1 in Figure 10-5?

- a. *II*
- b. *Ii*
- c. *ii*
- d. *I*

- _____ 21. Which stage of meiosis is responsible for the law of independent assortment?
- metaphase I
 - prophase I
 - telophase I
 - metaphase II
- _____ 22. A true-breeding tall pea plant is crossed with a true-breeding short pea plant, and all the offspring are tall. What is the most likely genotype of the offspring assuming a single-gene trait?
- tt
 - Tt
 - TT
 - TT or tt
- _____ 23. If two heterozygous individuals are crossed, what percent of their offspring are also expected to be heterozygous?
- 0
 - 50
 - 75
 - 100

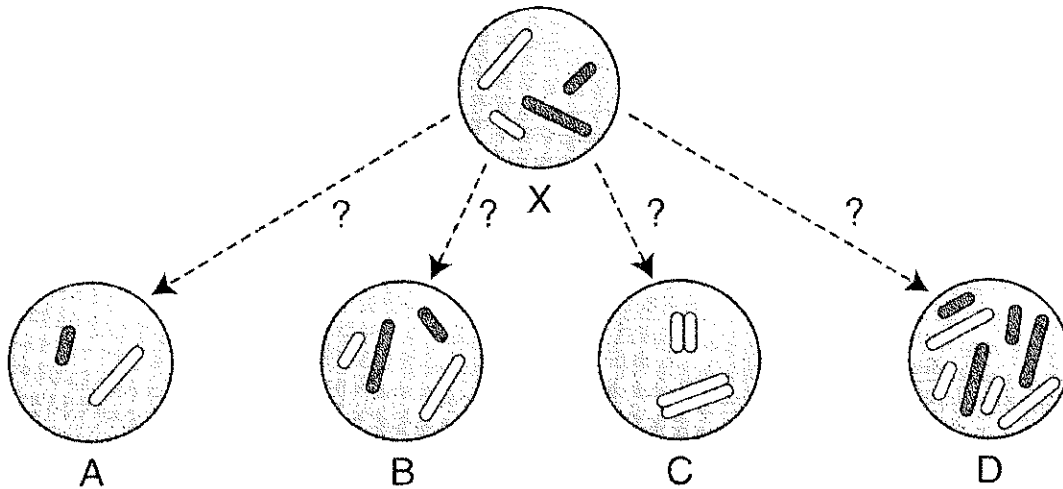


Figure 10-9

- _____ 24. Consider the cell labeled X in Figure 10-9 containing 4 chromosomes. Which of the four cells below it represents a healthy gamete that could be produced from this cell?
- A
 - B
 - C
 - D

Name: _____

ID: A

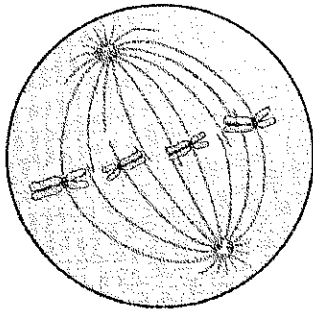


Figure 10-10

- _____ 25. Which stage of meiosis is represented in Figure 10-10?
- a. anaphase I
 - b. metaphase I
 - c. anaphase II
 - d. metaphase II