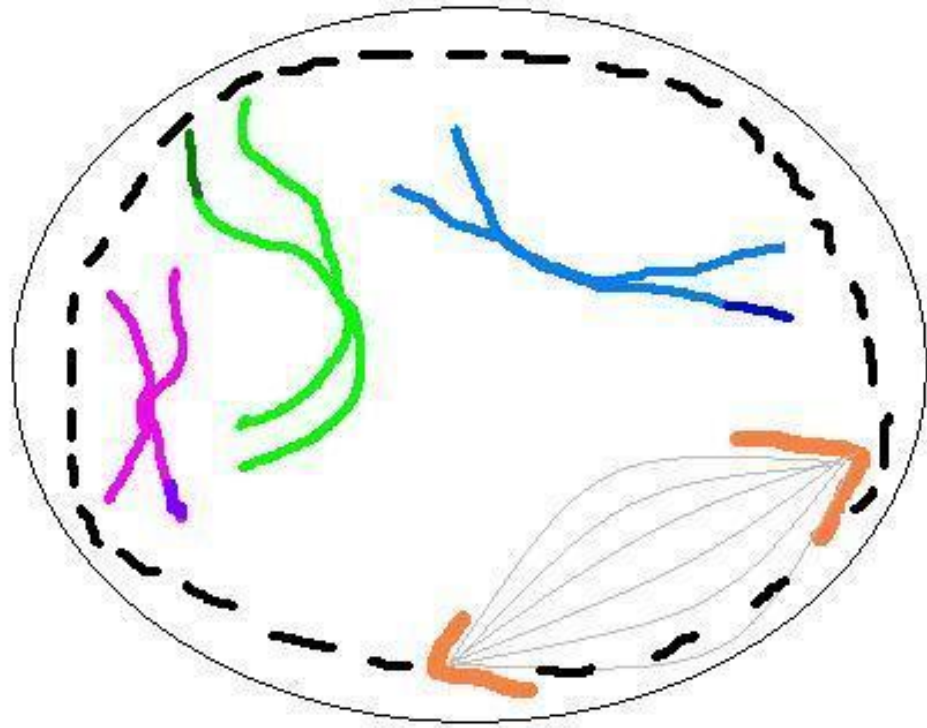


MM Review

Directions: For each scene or description that follows, identify the stage of **Mitosis** or **Meiosis**. Also indicate if the scene or description is found in **BOTH** Mitosis & Meiosis or **NEITHER**.

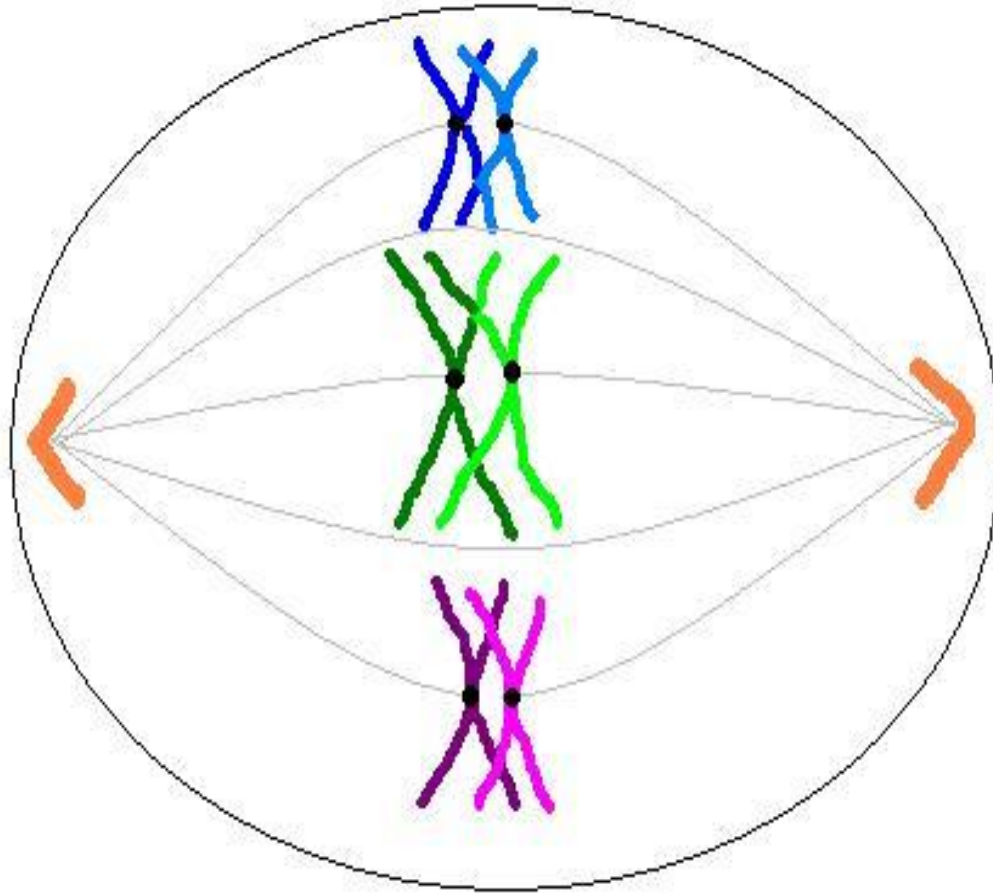
1

(n)



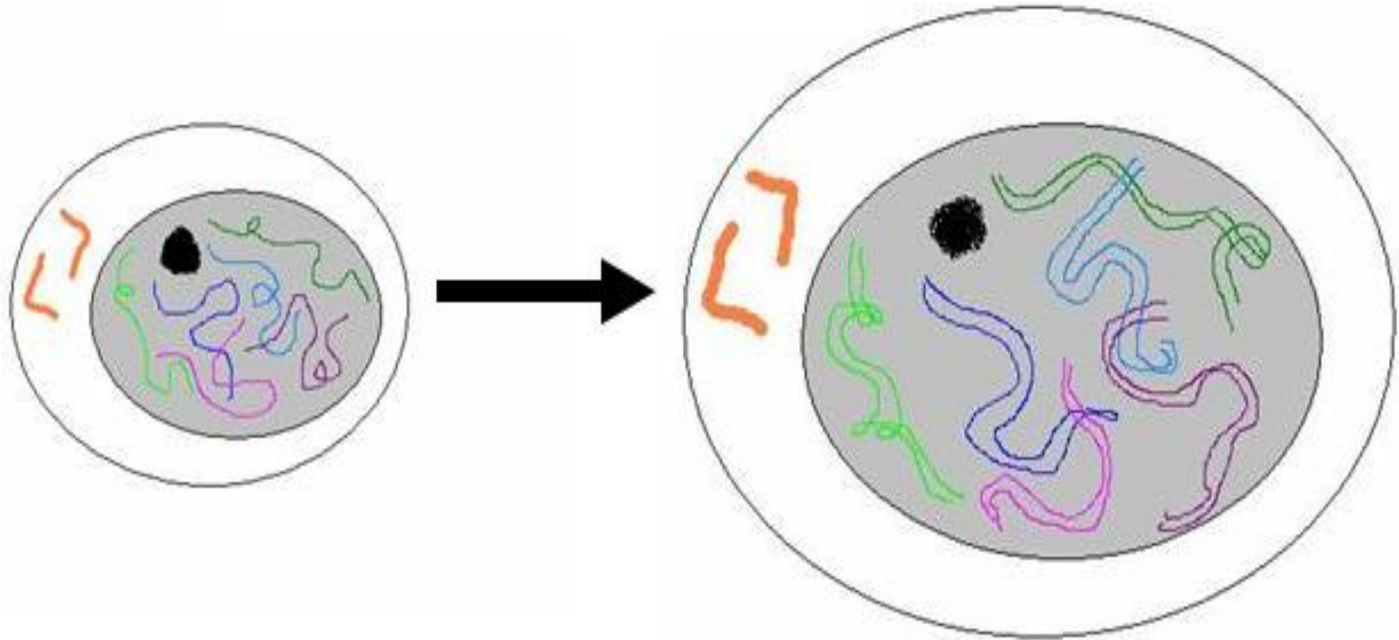
2

(2n)



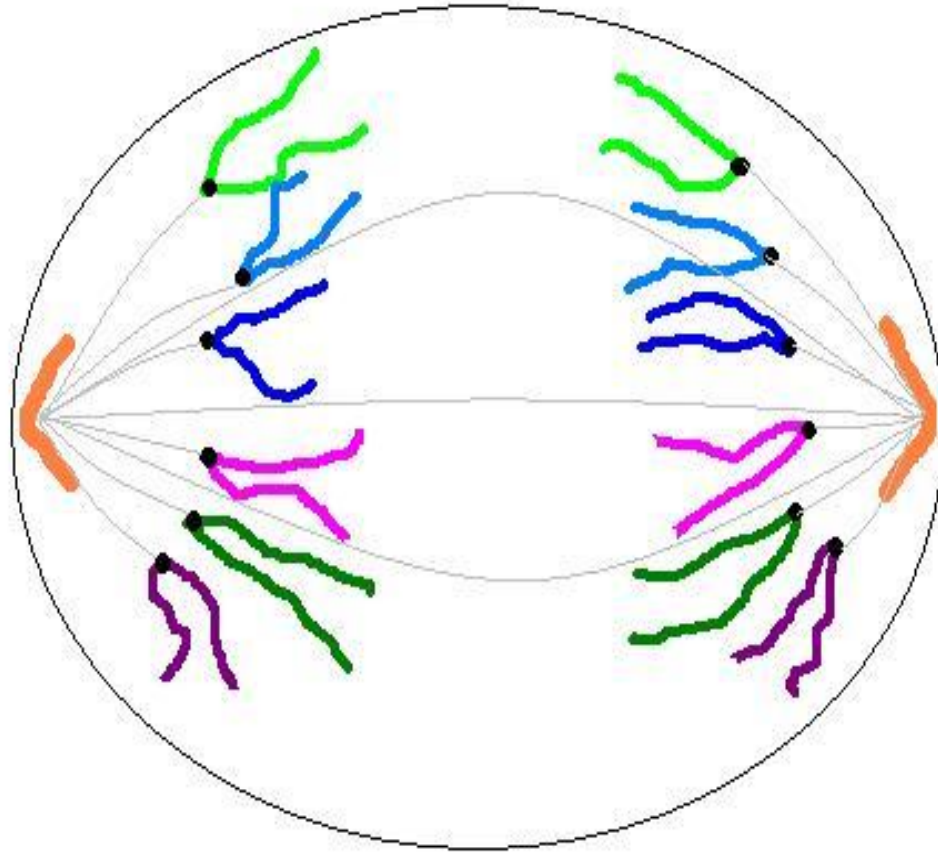
3

DNA Replication

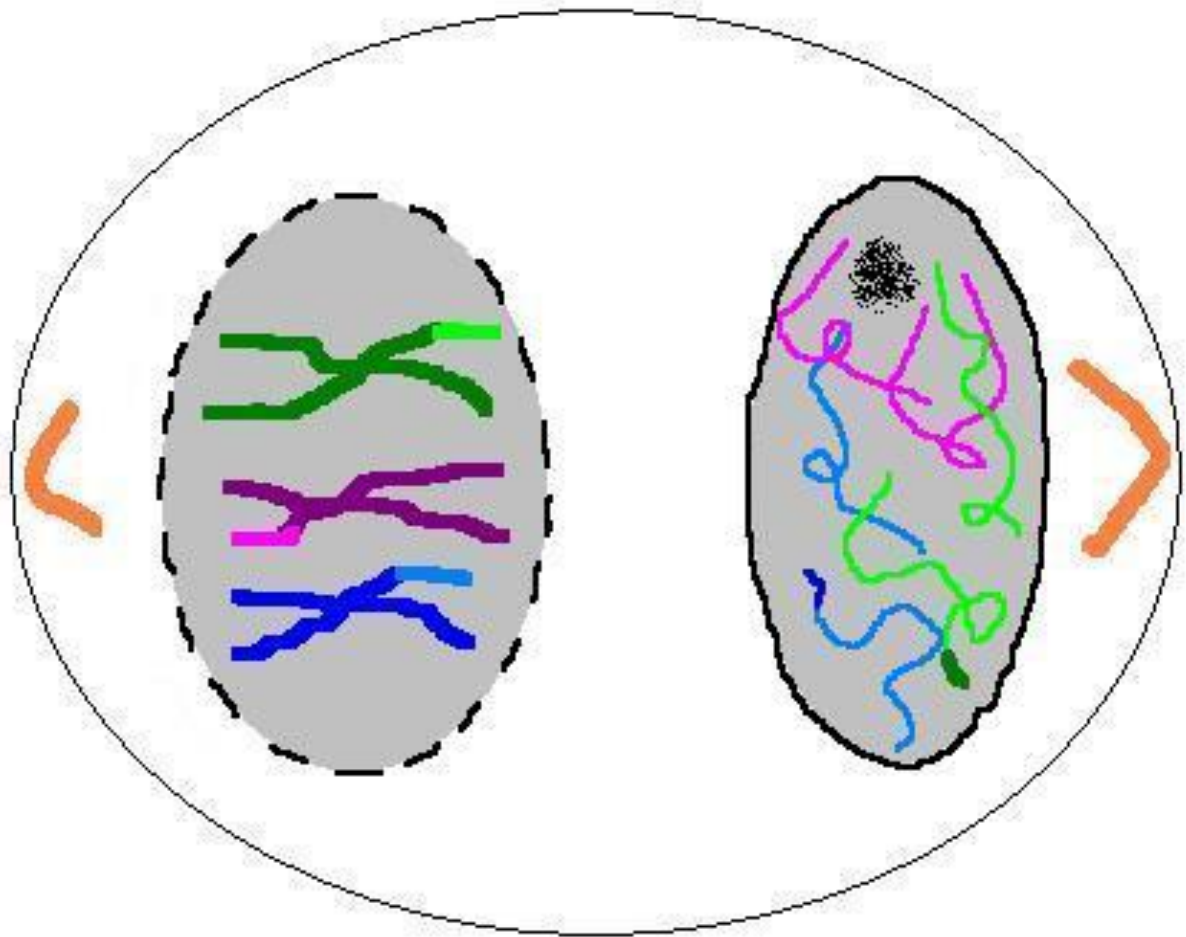


4

(2n)

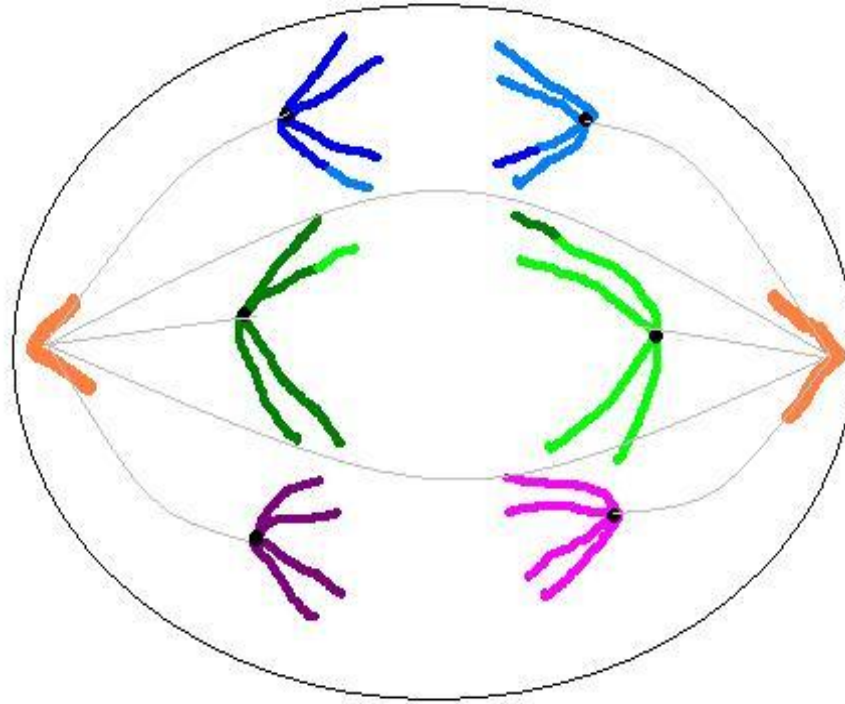


5



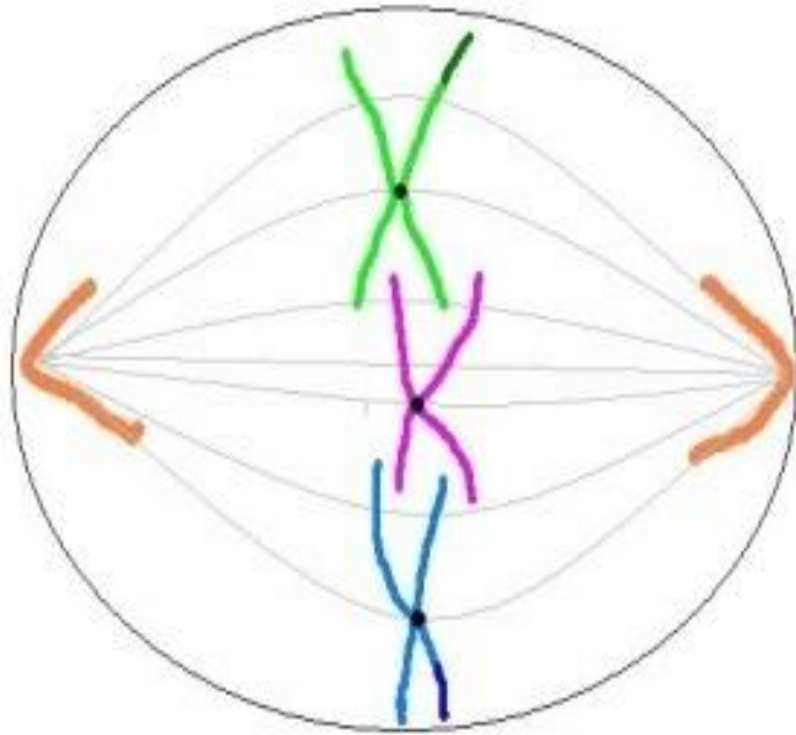
6

(2n)



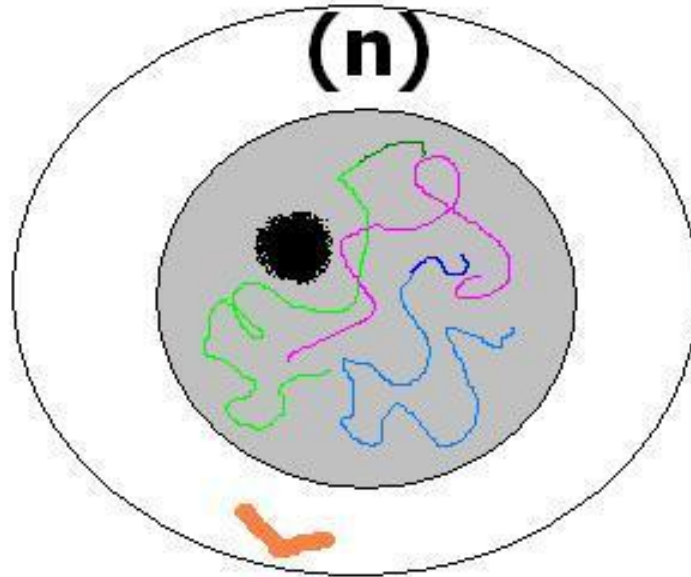
7

(n)

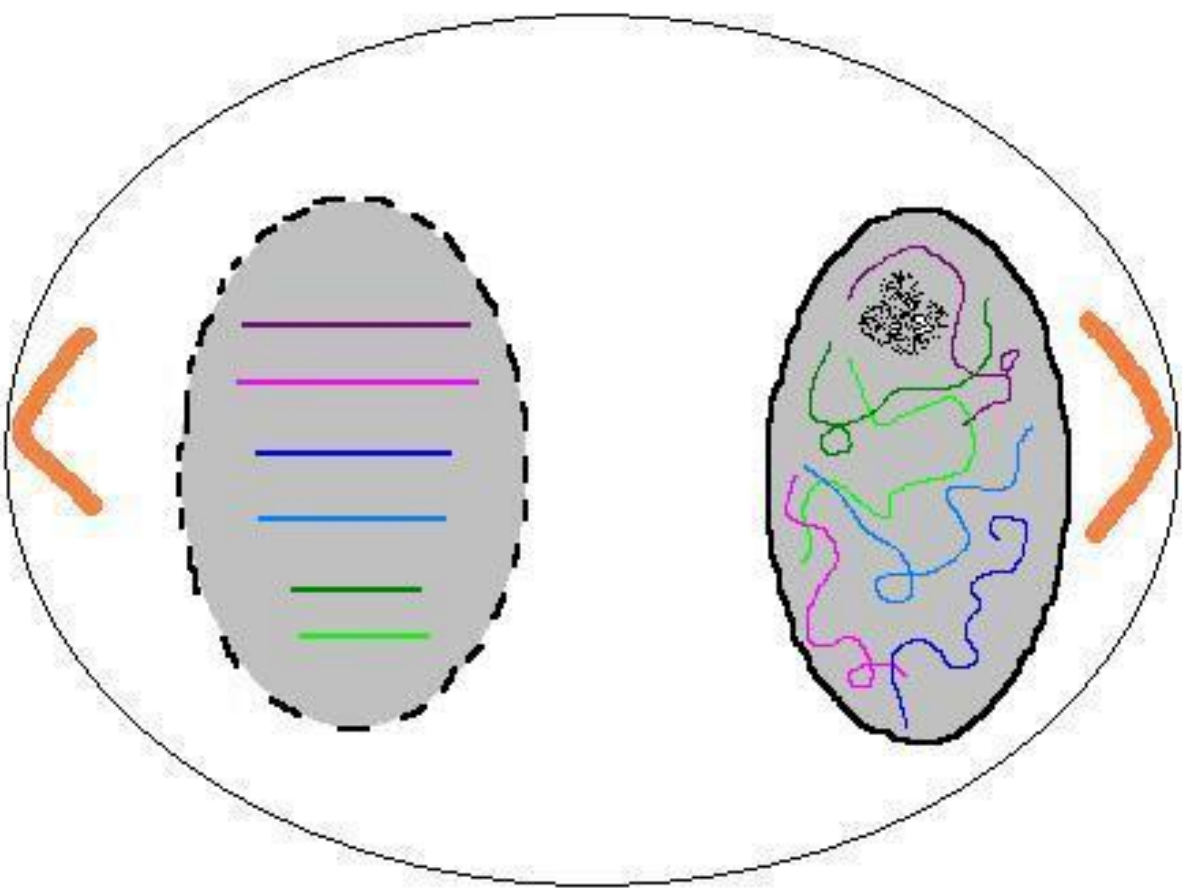


8

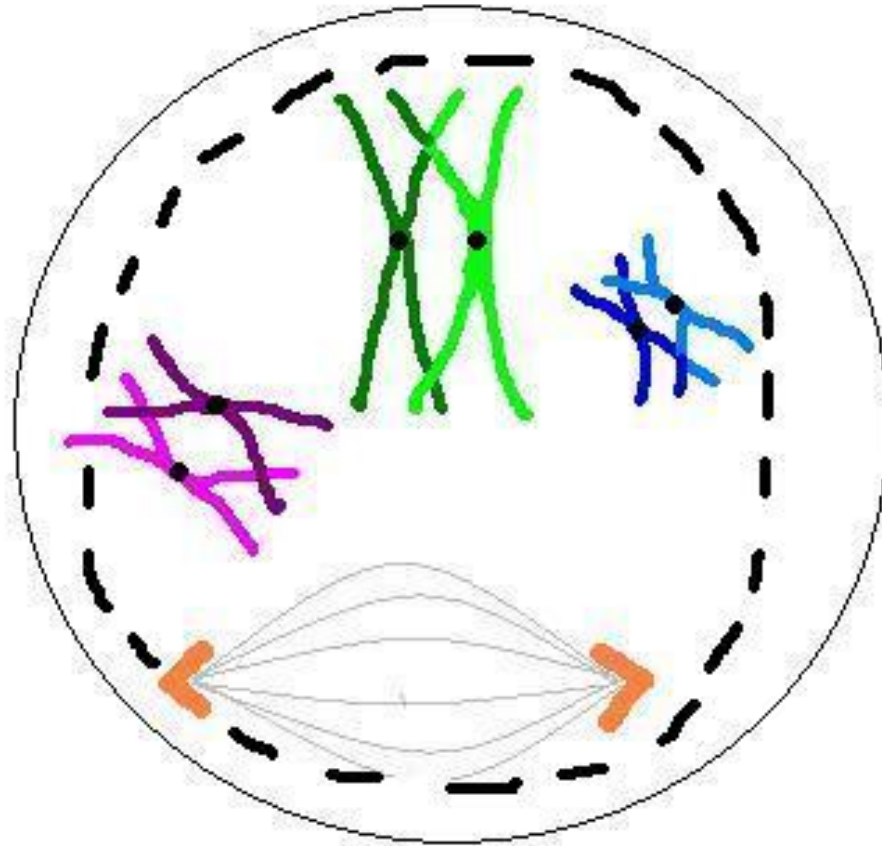
NO DNA Replication



9

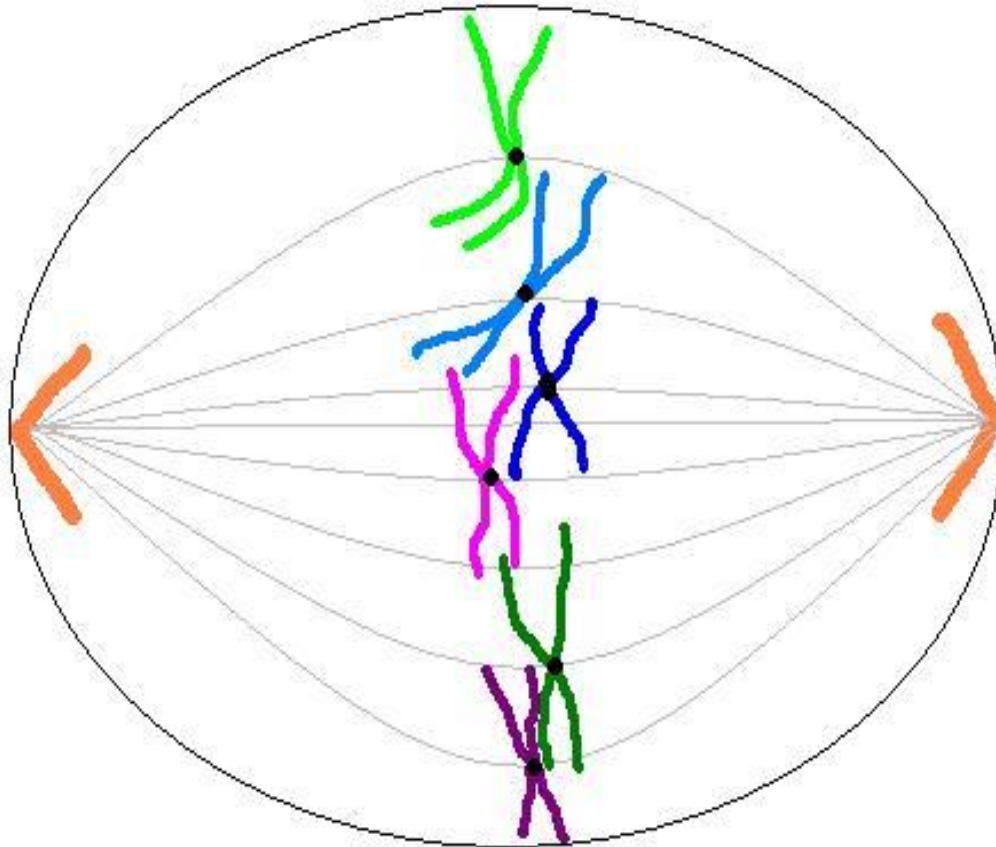


10



11

(2n)



12. DNA exists as chromatin, growth and DNA replication occur, and the nucleolus is visible
13. Homologous chromosome pairs separate and “double” chromosomes move to opposite poles as spindle fibers retract
14. “Double” chromosomes line up **single file** along the equator of this **Diploid** cell
15. “Double” chromosomes line up **single file** along the equator of this **Haploid** cell
16. Homologous chromosomes align side-by-side and **crossing-over** may “blend” the DNA into new gene combinations

17. “Single” chromosomes uncoil back into chromatin as the spindle disappears from this **Diploid** cell
18. “Single” chromosomes uncoil back into chromatin and cytokinesis happens producing 4 **haploid** gametes
19. Chromatin coils tightly into visible “double” chromosomes as the nuclear membrane disappears from this **Diploid** cell
20. Spindle fibers retract, ripping the “double” chromosomes in half at the centromere
21. Homologous chromosome pairs line up straddling the cell’s equator

Indicate if each description belongs to Mitosis, Meiosis, BOTH or NEITHER

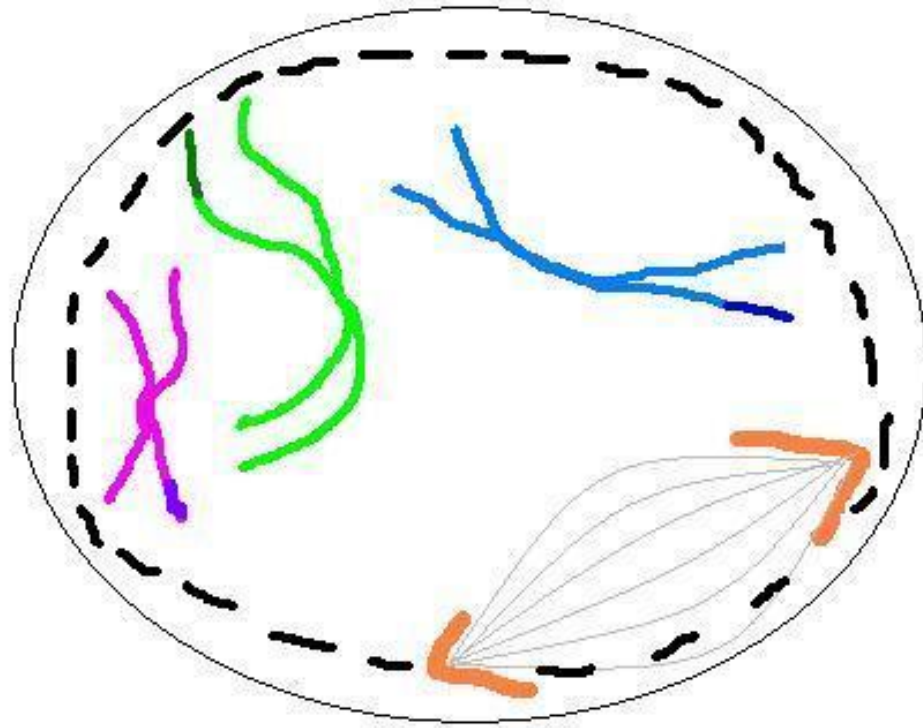
22. begins with a Diploid cell
23. produces diploid daughter cells
24. produces daughter cells with “single” chromosomes
25. produces daughter cells with “double” chromosomes
26. allows for new gene combinations as paired chromosomes trade genes through “crossing over”
27. produces haploid sperm or egg
28. functions in growth and repairing injuries
29. involves ripping “double” chromosomes into “single” chromosomes

MM Review

Directions: For each scene or description that follows, identify the stage of **Mitosis** or **Meiosis**. Also indicate if the scene or description is found in **BOTH** Mitosis & Meiosis or **NEITHER**.

1

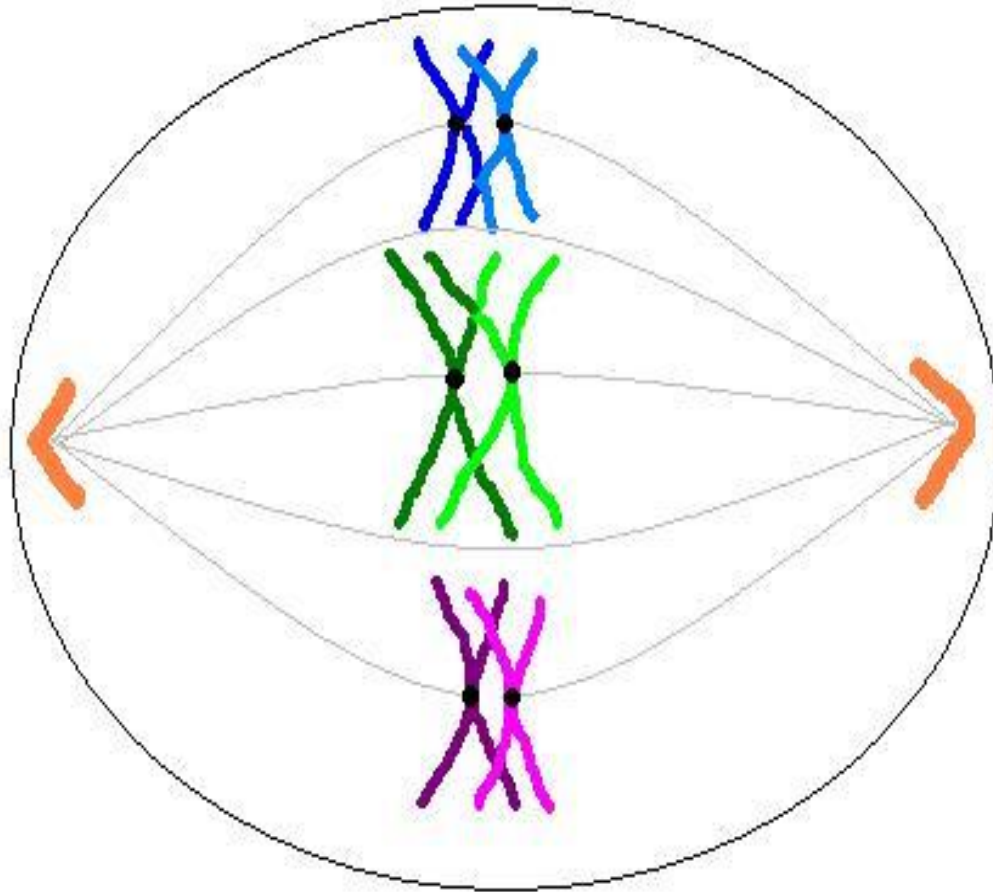
(n)



Prophase 2 Meiosis

2

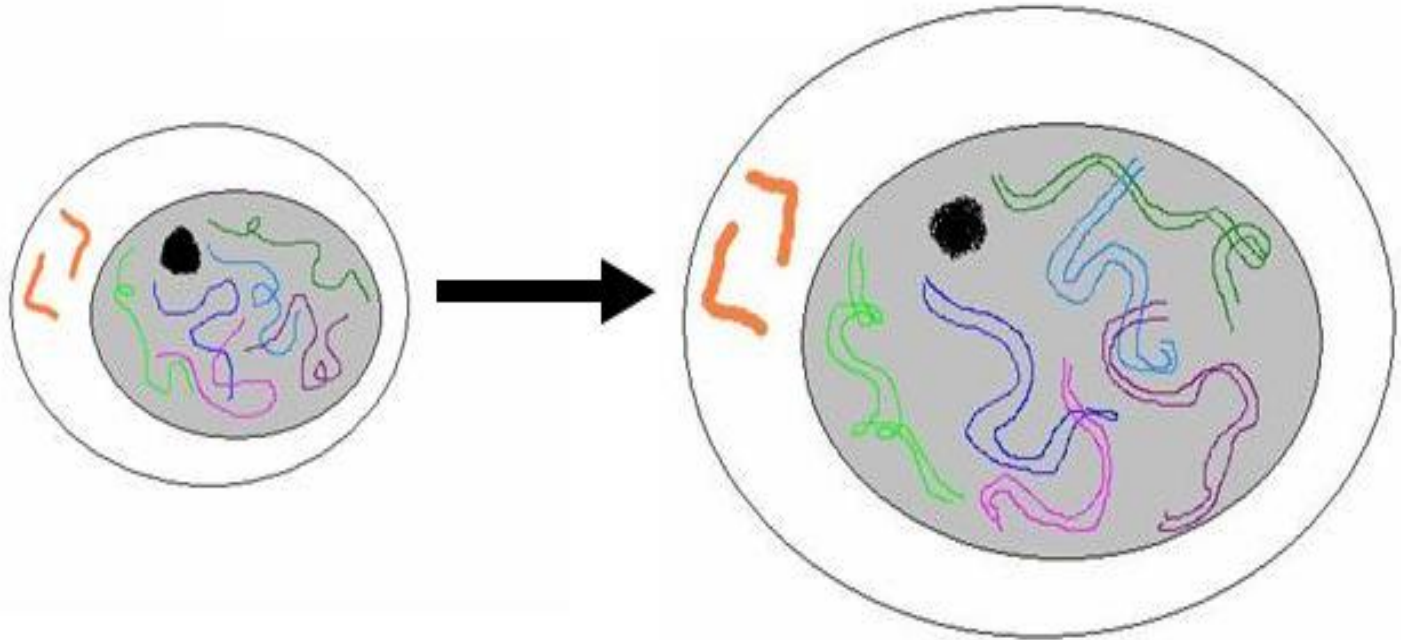
(2n)



Metaphase 1 Meiosis

3

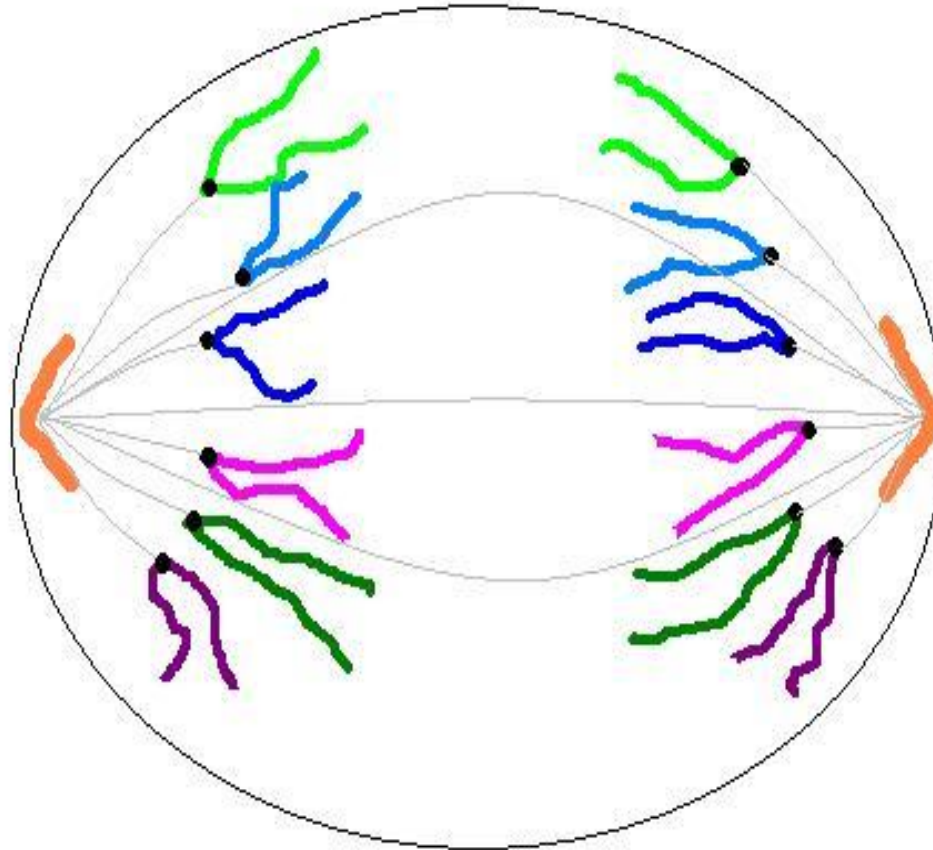
DNA Replication



Interphase ... Mitosis & Interphase 1 Meiosis **BOTH**

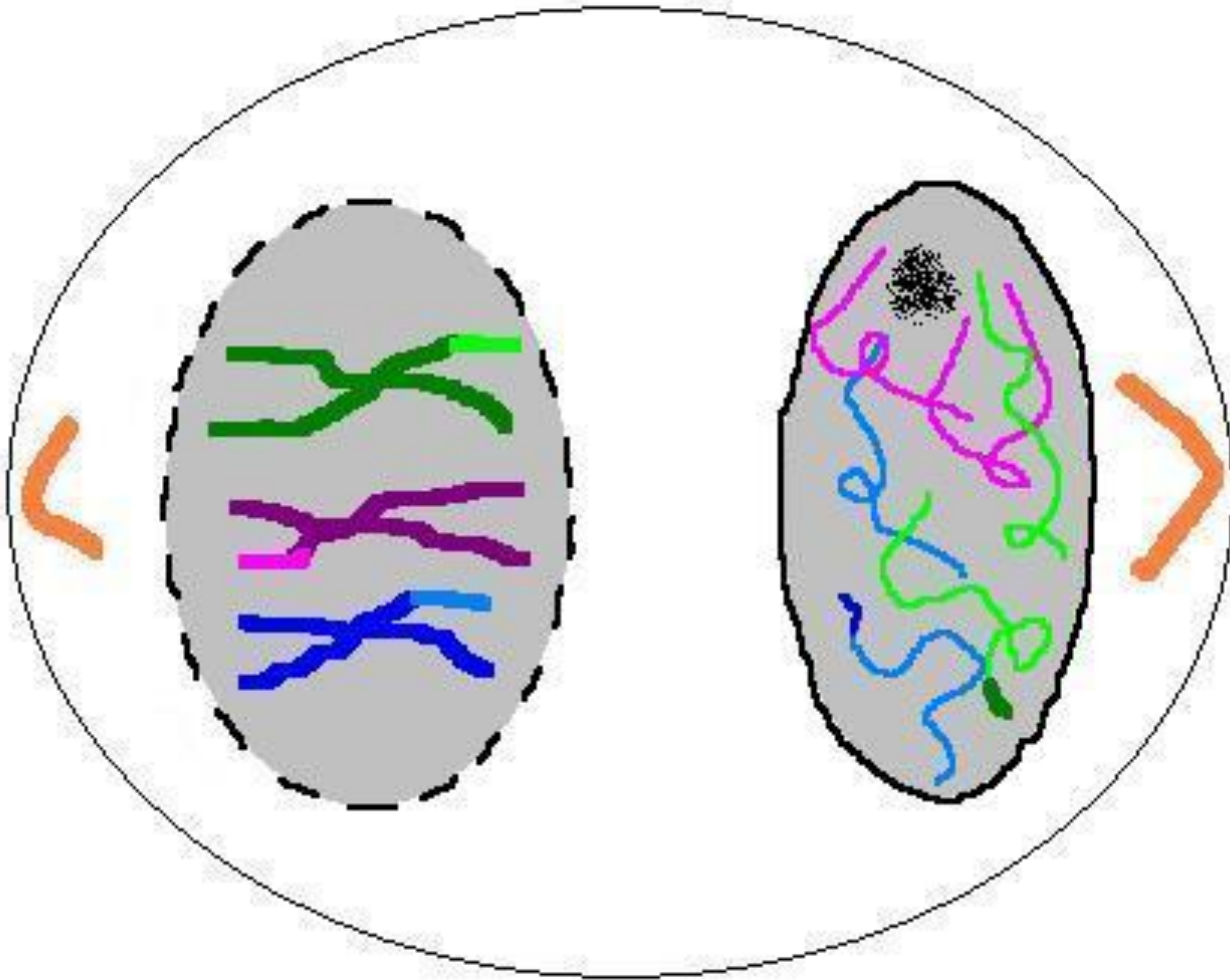
4

(2n)



Anaphase Mitosis

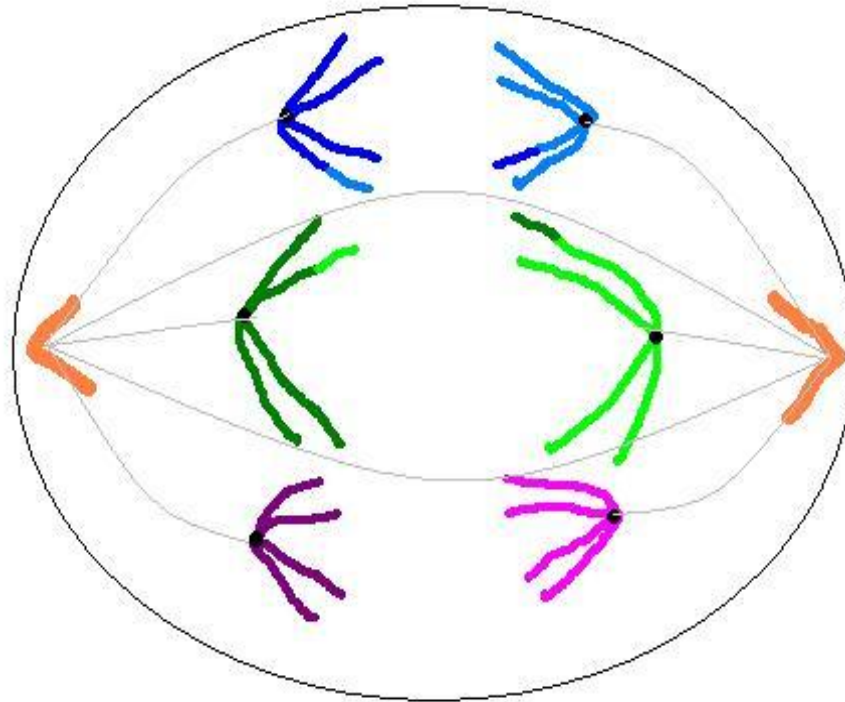
5



Telophase 1 Meiosis

6

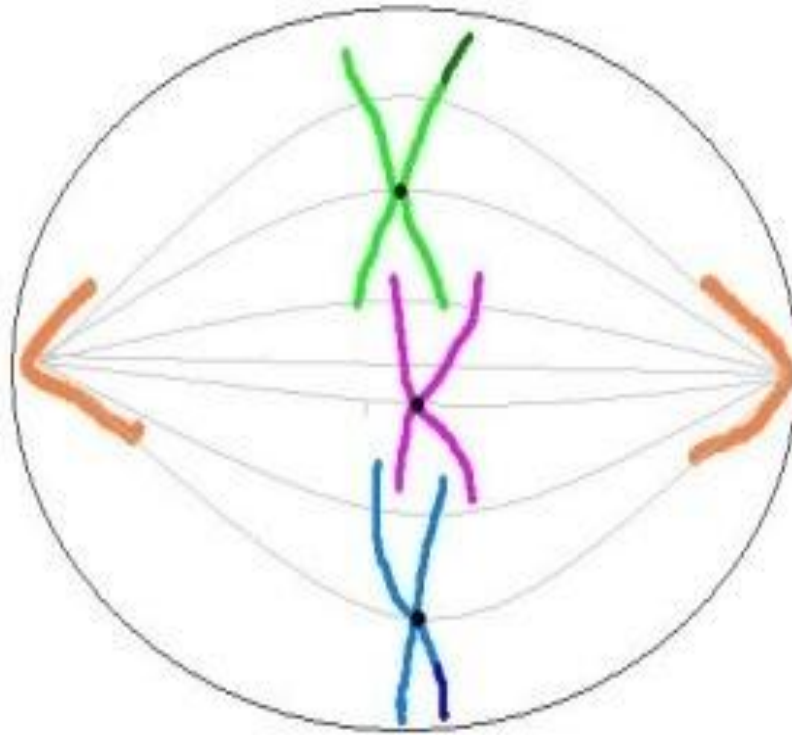
(2n)



Anaphase 1 Meiosis

7

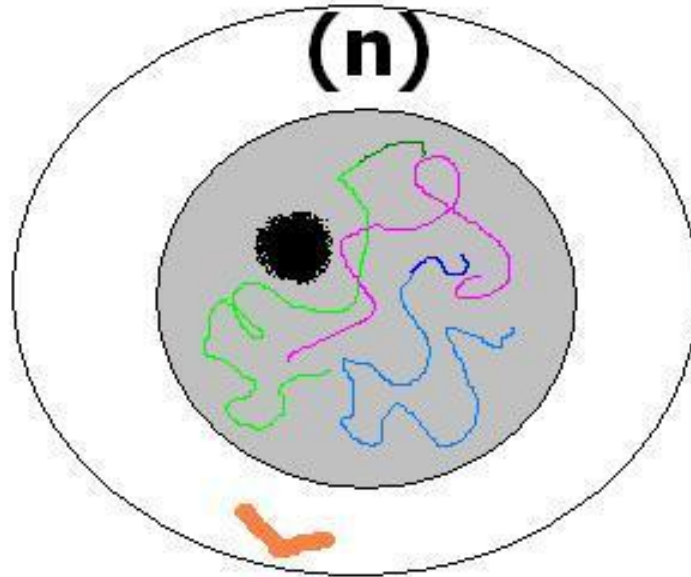
(n)



Metaphase 2 Meiosis

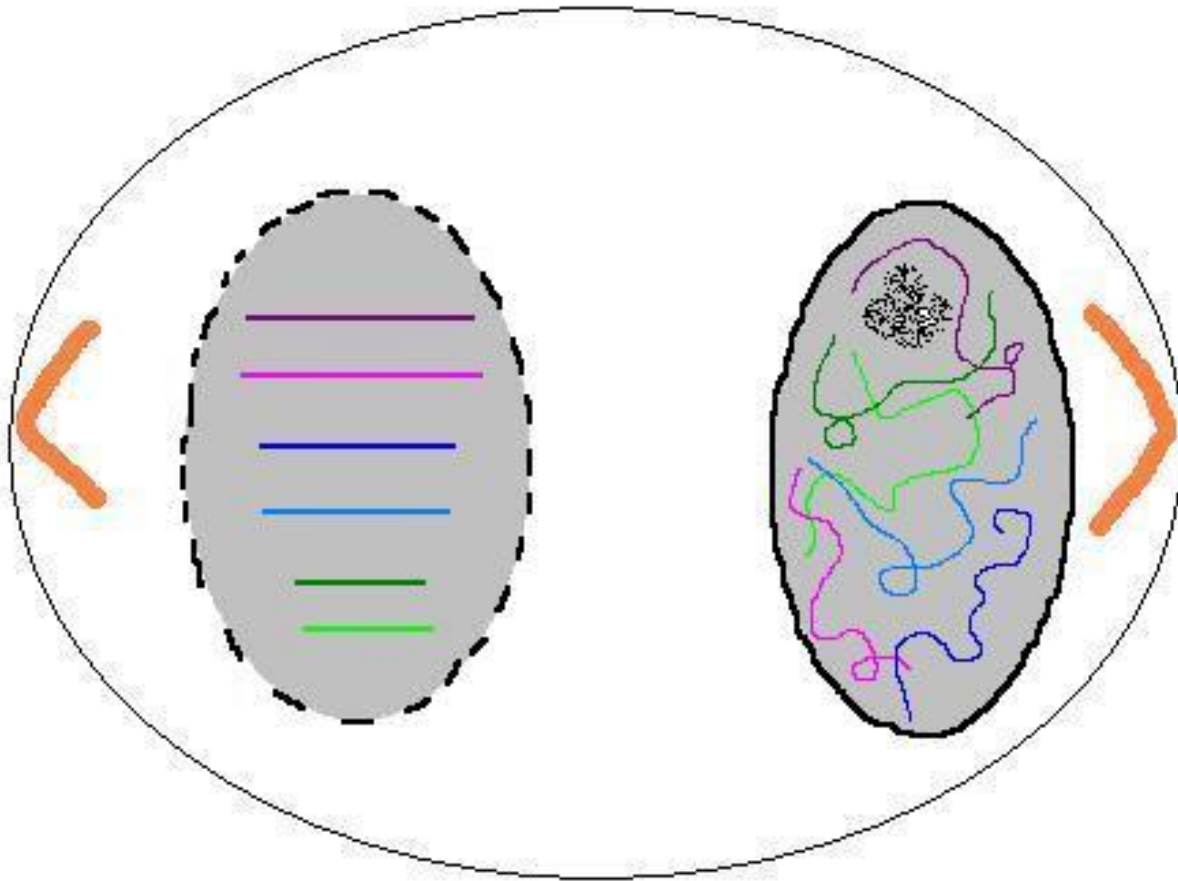
8

NO DNA Replication



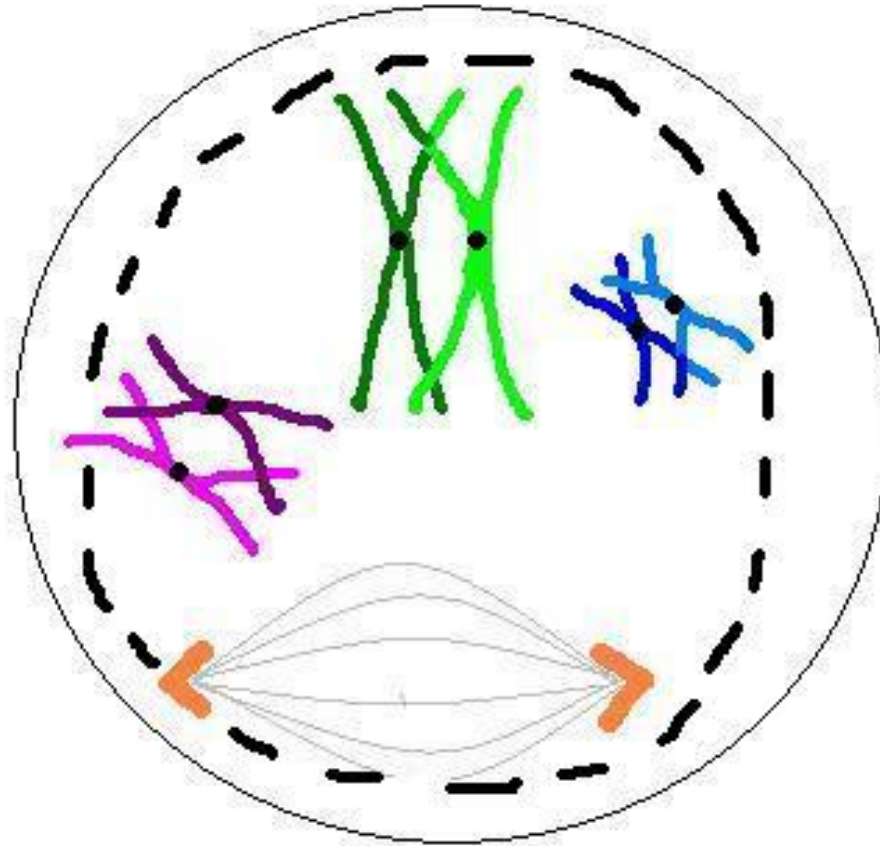
Interphase 2 Meiosis

9



Telophase Mitosis

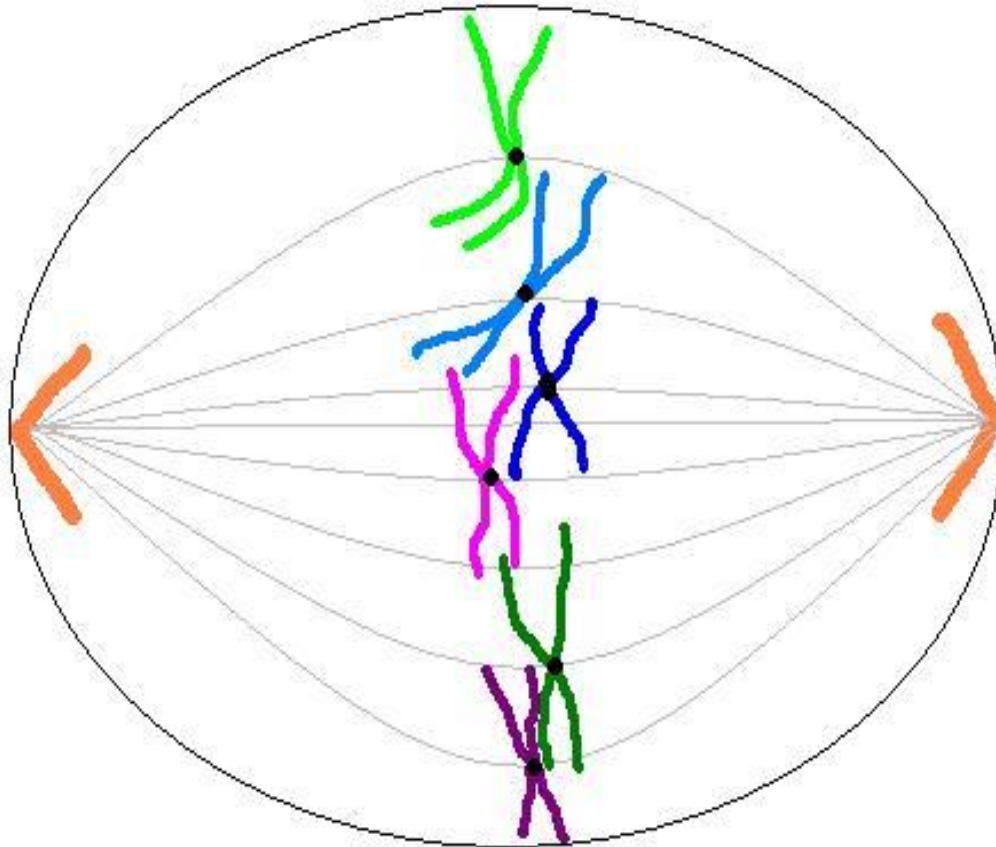
10



Prophase 1 Meiosis

11

(2n)



Metaphase Mitosis

12. DNA exists as chromatin, growth and DNA replication occur, and the nucleolus is visible Interphase (Mitosis) & Interphase 1 (Meiosis) **BOTH**
13. Homologous chromosome pairs separate and “double” chromosomes move to opposite poles as spindle fibers retract Anaphase 1 (Meiosis)
14. “Double” chromosomes line up **single file** along the equator of this **Diploid** cell
 Metaphase (Mitosis)
15. “Double” chromosomes line up **single file** along the equator of this **Haploid** cell
 Metaphase 2 (Meiosis)
16. Homologous chromosomes align side-by-side and **crossing-over** may “blend” the DNA into new gene combinations

 Metaphase 1 (Meiosis)

17. "Single" chromosomes uncoil back into chromatin as the spindle disappears from this **Diploid** cell Telophase (Mitosis)

18. "Single" chromosomes uncoil back into chromatin and cytokinesis happens producing 4 **haploid** gametes Telophase 2 (Meiosis)

19. Chromatin coils tightly into visible "double" chromosomes as the nuclear membrane disappears from this **Diploid** cell

Prophase (Mitosis) & Prophase 1 (Meiosis) **BOTH**

20. Spindle fibers retract, ripping the "double" chromosomes in half at the centromere Anaphase (Mitosis) & Anaphase 2 (Meiosis) **BOTH**

21. Homologous chromosome pairs line up straddling the cell's equator

Metaphase 1 (Meiosis)

Indicate if each description belongs to Mitosis, Meiosis, BOTH or NEITHER

22. begins with a Diploid cell BOTH
23. produces diploid daughter cells (Mitosis)
24. produces daughter cells with “single” chromosomes
BOTH
25. produces daughter cells with “double” chromosomes
Neither
26. allows for new gene combinations as paired chromosomes
trade genes through “crossing over” Meiosis
27. produces haploid sperm or egg Meiosis
28. functions in growth and repairing injuries (Mitosis)
29. involves ripping “double” chromosomes into “single”
chromosomes BOTH