



**BIOLOGY**  
**REVISION SHEET**  
**FINAL EXAM**  
**TERM-II**  
**GRADE 10**  
**Session: 2018-19**

**Note: The students should first study from their textbook and then try to solve this revision sheet independently**

**Materials included in the exam:**

**CHAPTER 5 & 6**

**Sections: (5.2) (6.1) (6.2) & (6.3)**

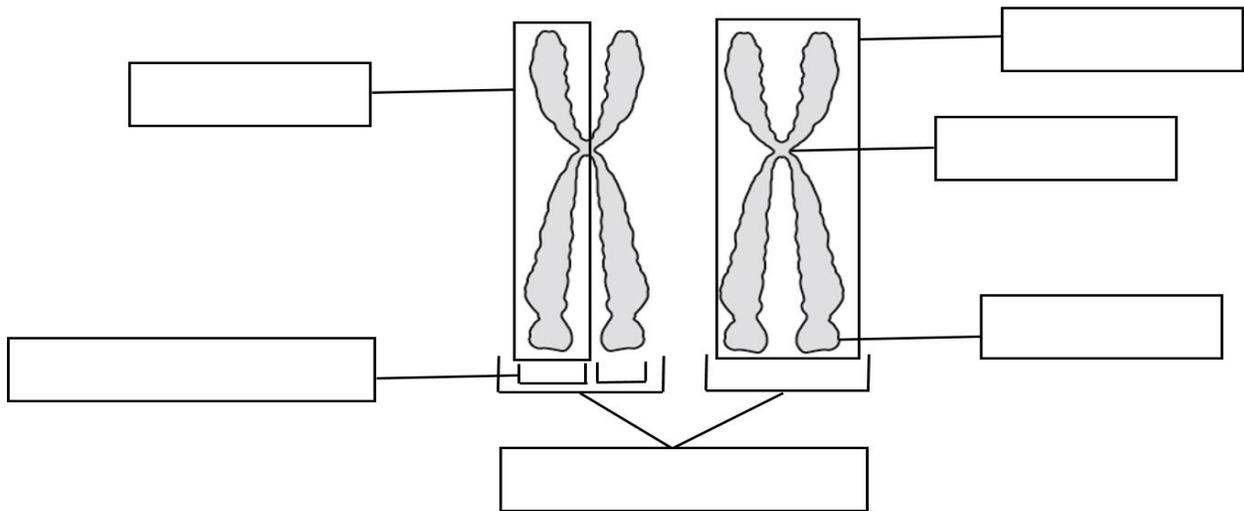
**Textbook Pages:**

**Chapter 5: 134-138**

**Chapter 6: 162-173**

**Student Name: .....**

**Q1: Label the missing:**



**Q2: Fill the table below to compare and contrast between mitosis and meiosis:**

	Mitosis	Meiosis
Where it occurs?		
When it occurs?		
Number of <u>daughter</u> cells and if they are (haploid / diploid)		
Characteristics of daughter cells		
Number of divisions		
Similarities	<ul style="list-style-type: none"> <li>•</li> <li>•</li> </ul>	

**Q3: Answer the following questions briefly:**

1. What is histone?

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2. What is the law of segregation?

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3. Give TWO examples of somatic cells and TWO examples of sex cells (gamete). Then write where each one of them locate in the human body?

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4. What is the meaning of sexual reproduction?

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5. What is the difference between autosome and a sex chromosome?

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6. What is gametogenesis?

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7. How sperm cell and egg cell differs?

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8. What is the difference between homologous chromosome and sister chromatids?

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9. Why is it important that Mendel began with purebred plants?

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10. During which phase do homologous chromosomes separate?

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11. What is the sex of a person with two X chromosomes?

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12. What does an egg contribute to an embryo? What does a sperm contribute to an embryo?

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13. Where are polar bodies made, in the male or in the female?

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14. What is genetics?

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15. Whose early work is the basis for much of our current understanding of genetics?

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16. How did Mendel's views on inheritance differ from the views of many scientists of his time?

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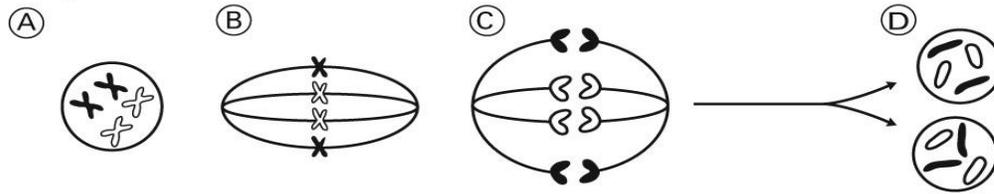
17. Define the term "traits" and then give TWO examples of traits.

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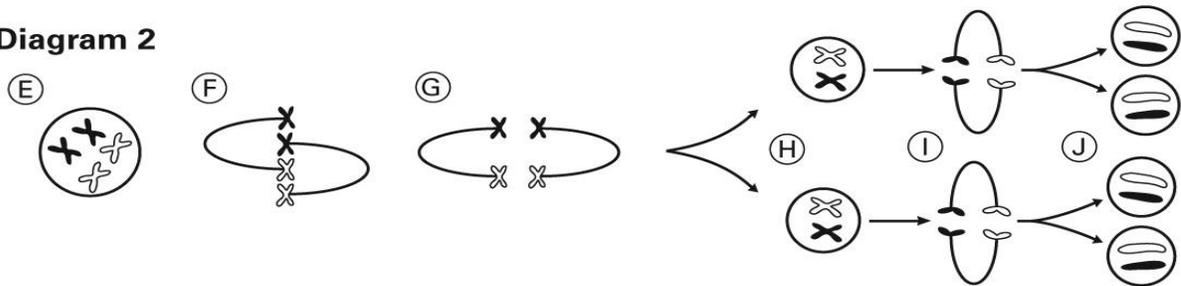
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**Q4: Use the diagram below to answer the following questions:**

**Diagram 1**



**Diagram 2**



1. What is the term used to name the stage shown in part F of the diagram 2?  
Describe the events that take place during this stage.

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2. What is the term used to name the stage shown in part D of the diagram 1?  
Describe the events that take place during this stage.

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3. Write the letter that shows the division of sister chromatids.

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4. Write the term used to describe the cells in part J of diagram 2. Describe two differences between the cells in part J and the cells in part D.

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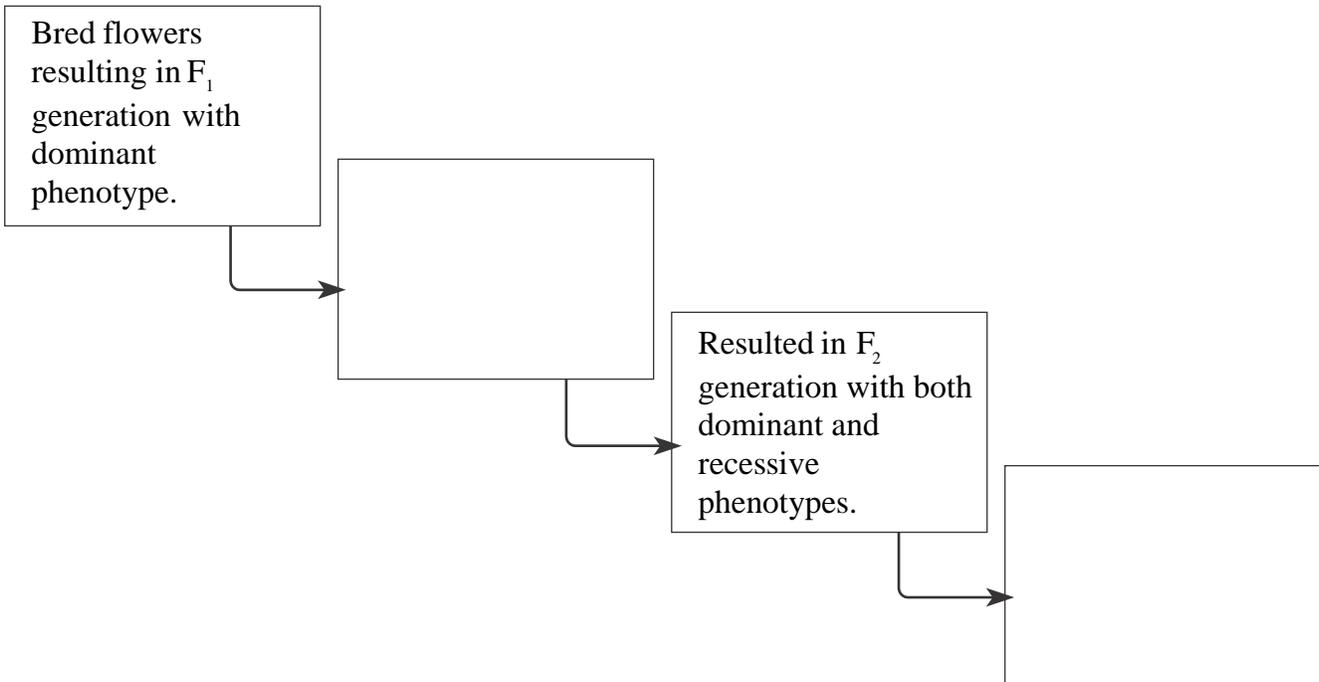


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**Q5: Fill in the sequence diagram below to summarize Mendel's experimental process.**



**Q6: Fill in the concept map below to summarize what you know about chromosomes.**

