**BIOLOGY 2021-22 November 16, 2021**

**Today’s Agenda (Day 56)**

1. HOUSEKEEPING ITEMS
2. Homework Check:

🡪 Lab Report: Fermentation in a Bag

🡪Ch 10 Vocabulary

🡪 Ch 10 Reading Guide

1. Class Activity:

🡪QUIZ: Chapter 9\_10 Vocabulary

\*Go to [www.socrative.com](http://www.socrative.com) 🡪 enter room “MSBBIOLOGY” 🡪 enter ID #

🡪CONT’D: Chapter 10 PPT Review

1. **Section 10.2 – Mendelian Genetics**
2. Section 10.3 – Gene Linkage and Polyploidy

HOMEWORK:

* READ: Chapter 10 – Sexual Reproduction & Genetics
* COMPLETE: Chapter 11 & 12 Vocabulary
* STUDY: Chapter 10 Test

**CHAPTER 11 VOCABULARY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Autosome | Carrier | Codominance | Epistasis | Incomplete dominance |
| Karyotype | Multiple alleles | Nondisjunction | Pedigree | Polygenic trait |
| Sex chromosome | Sex-linked trait | telomere |  |  |

**CHAPTER 12 VOCABULARY**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Codon | DNA polymerase | Double helix | Gene regulation | Intron |
| Exon | Messenger RNA | Mutagen | Mutation | Nucleosome |
| Okazaki fragment | Operon | Ribosomal RNA | RNA | RNA polymerase |
| Semiconservative replication | Transcription | Transfer RNA | translation |  |

REMINDERS:

* ~~Chapter 10 Reading Guide~~ – Nov. 16
* **~~QUIZ: Chapter 9\_10 Vocabulary 🡪 Nov. 16~~**
* **TEST: Chapter 10 🡪 Nov. 18**
* Chapter 11 Vocabulary – Nov. 19
* **TEST: Chapter 11 🡪 Nov. 23**
* Chapter 12 Vocabulary – Nov. 29
* **TEST: Chapter 12 🡪 Nov. 30**
* **QUIZ: Ch 11\_12 Vocabulary** 🡪 **Dec. 2**
* **TEST: Chapter 13 🡪 Dec. 7**

**BIOLOGY 2021 -222 READING GUIDE**

**Chapter 10 - Sexual Reproduction & Genetics**

DIRECTIONS: Refer to your textbook to respond to the following questions.

1. What are homologous chromosomes. Give an example of a trait found on homologous chromosomes.
2. What are gametes? What is fertilization?
3. What are the only haploid cells found in humans?
4. How do gametes form? Describe this process.
5. What does Meiosis I start with? What does Meiosis II end with?
6. What is the unique step in prophase 1?
7. What happens in metaphase I that is unique to meiosis?
8. DRAW the picture below and label each phase of meiosis that you have drawn.
9. Describe one event that is happening for each of the pictures you just drew.
10. Compare and contrast mitosis and meiosis.
11. How does meiosis provide variation?
12. What advantage do organisms have that reproduce sexually versus asexually?
13. What is heredity? Who carried out the first studies in heredity?
14. How did Mendel perform cross-pollination of his pea plants? How did he prevent self-fertilization?
15. Describe the results Mendel got when he crossed pure-breeding yellow seed plants with pure-breeding green seed plants crossed their offspring?
16. How did Mendel determine which trait was dominant and which was recessive?
17. Why did the green-seed form of the trait not appear in the F1 generation?
18. What does homozygous mean? What does heterozygous mean? Give an example of each.
19. What it a phenotype? What is a genotype? Give two possible genotypes for a yellow seed phenotype.
20. What is the law of segregation?
21. Yy could be described as \_\_\_\_\_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_\_.
22. Why were Mendel’s first experiments called monohybrid crosses?
23. How is the law of independent assortment related to meiosis?
24. What is the genotype ratio for a Tt to Tt cross?
25. What is the phenotype ratio for a Tt to Tt cross?
26. What is meant by “linked genes”?
27. What do chromosome maps show?
28. Compare and contrast polyploidy in humans and plants.