**BIOLOGY 2022-23 January 11, 2023**

**Today’s Agenda (Day 85)**

1. HOUSEKEEPING ITEMS

🡪 Chapter 11 Vocabulary

1. Homework Check:

🡪 SCIENCE FAIR: Literature Review and Reverence Page

🡪 Ch 11 Reading Guide Questions

1. Class Activity:

🡪 Day 7: Science Fair

\*Finalize Experimental Design – identify variables (controls, independent, dependent), outline materials needed and procedures (step-by-step); OR Sketch of Prototype Design --include materials needed and timeline of how prototype will be constructed

\*Prepare to have materials ready to begin experimental study/prototype construction for MONDAY!

🡪DAY 4: Chapter 11 PPT Review

1. **Section 11.2 – Complex Patterns of Inheritance**
2. **Section 11.3 – Chromosomes and Human Heredity**

HOMEWORK:

* READ: Chapter 11 – Complex Inheritance and Human Heredity
* COMPLETE:
* **STUDY**: Chapter 11 Test

**CHAPTER 12 VOCABULARY**

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| --- | --- | --- | --- | --- |
| 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:

* **TEST: Ch 11🡪 Thursday, Jan. 12**

**BIOLOGY 2022-23 READING GUIDE**

**Chapter 11 Human Heredity Reading Guide**

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|  Review pages 296 - 315 in the Glencoe Science *Biology*Textbookand answer the following questions.1. What is a **carrier**?  What is the genotype of a carrier?
2. Describe what each symbol represents in the pedigree below:

  Icon  Description automatically generated with medium confidence 1. How is it possible that one of the children in the following pedigree expresses Tay-Sachs?

Chart, box and whisker chart  Description automatically generated1. How can pedigrees be used to infer genotypes?
2. Can two parents with **albinism** (a recessive genetic disorder) have an unaffected child?  Explain.
3. What is **incomplete dominance**?  Give an example.
4. This shows the crossing of snapdragons. What is the phenotypic ratio for this incomplete dominant cross?

A picture containing text, clock, gauge  Description automatically generated1. How does **codominance** differ from **incomplete dominance**?
2. Explain how coat color in rabbits is inherited.
3. What are the two types of **sex chromosomes**?  What is the genotype of a male?  Female?
4. What does the condition shown here cause in cats?

Diagram  Description automatically generated1. Why are males more likely to be affected **by sex-linked traits**?
2. Study this Punnett square. Why does the father not have **color blindness**?

Table  Description automatically generated1. How can the environment affect phenotype?
2. How is a **karyotype** prepared?
3. What are **telomeres**?  What may telomeres be involved with?
4. Describe what happens during **nondisjunction**.
5. Why is **down syndrome** called **trisomy 21**?
6. What can parents do if they are unsure if they are a **carrier** for a genetic disease?
7. Describe the risks and benefits for two types of **fetal testing**.
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