Unit Overview – Patterns & Probability of Inheritance

Essential Questions

- How are patterns of heredity predicted?

■ I totally get it

☒ I kinda get it

☐ I don't get it

Enduring understanding	Important to know and do	Worth being familiar with
❑ Understand that traits are passed to offspring in specific patterns ❑ Offspring get their traits from their biological parents ❑ Show patterns of traits using Punnett squares and pedigree charts	❑ If you know the parents' alleles for a trait, use a Punnett square to predict the probable genotypes of the offspring. ❑ Compare and contrast pedigree charts and Punnett squares ❑ Using your knowledge about dominant and recessive alleles, determine the traits of a set of parents. ❑ How does knowing if a trait is dominant or recessive assist in predicting the likelihood of passing the trait on to an organism's offspring?	❑ Explain why pedigrees and Punnett squares cannot always be used when dealing with polygenic traits. ❑ Using your knowledge about pedigrees, create a family pedigree that traces a specific trait through at least 3 generations of your family.

Vocabulary to master

❑ Alleles	❑ Dependent Event	❑ Dihybrid Cross	❑ Dominant Allele
❑ Genotype	❑ Independent Event	❑ Monohybrid Cross	❑ Phenotype
❑ Probability	❑ Punnett Squares	❑ Recessive Allele	❑ Gene