Heredity: Medel/Genetics/Punnett Squares

Marzano Framework Biology HS

Start Date: January 16, 2012 End Date: February 03, 2012

Why is it important?

Enduring Understandings	Essential Questions	Key Vocabulary
		genetics
Be familiar with Gregor Mendel's studies on heredity and use Puniest squares to predict the results of monohybrid and	What is a monohybrid cross and what is its genotypic/phenotypic ratios?	heredity
dihybrid genetic crosses.	What is a dihybrid cross and what is its genotypic/phenotypic	trait
, ,	ratios?	pollination
	What did Mendel's studies on heredity involve?	self-pollination
	How did Mendel's discoveries affect modern genetics? Why is a Punnett Square used?	cross-pollination
		true-breeding
		P generation
		F1 generation
	Learning Targets	F2 generation
	Compare and contrast monohybrid and dihybrid crosses.	dominant
	Discover Mendel's principles of heredity.	recessive
	Construct a Punnett square.	law of segregation
	Identify Mendel's discoveries and their uses in modern genetics.	law of independent assortment
	Recognize the differences between phenotype and genotype.	molecular genetics
		allele
		genotype
		phenotype
		homozygous
		heterozygous
		probability
		monohybrid cross
		Punnett Square
		genotypic ratio
		phenotypic ratio
		testcross
		complete dominance
		incomplete dominance

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	codominance
	dihybrid cross

Standards

OH_Academic_Content_Standards - Science (2011) - Biology

Content 1 Heredity

- 1.1 Cellular genetics
- 1.5 Modern genetics

Why am I teaching?

Unit Objectives

Be familiar with Gregor Mendel's studies on heredity. Use Punnett squares to predict the results of monohybrid and dihybrid genetic crosses.

What additional resources do I need?

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Notes	Web 2.0 tools	Resources	
		PowerPoint Notes	
		Worksheets	
		DVD's	
		Lab: Mendel/Sutton	
		Lab: Fruit Flies	
		Lab: Genetic Child	

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Standards Summary - Heredity: Medel/Genetics/Punnett Squares

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No Plan Available

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Standards

OH_Academic_Content_Standards - Science (2011) - Biology Content 1 Heredity 1.1 Cellular genetics 1.5 Modern genetics

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