Benchmark Mastery Study Guide

SC.912.L.16.1 Use Mendel's laws of segregation and independent assortment to analyze patterns of inheritance.

SC.912.L.16.2 Discuss observed inheritance patterns caused by various modes of inheritance, including dominant, recessive, codominant, sex-linked, polygenic and multiple alleles

Learning Goal

Level 1	Level 2	Level 3	Level 4
With or without help I can… *With help, partial success at score 2.0 content & score 3.0 content	I can... *Define each vocabulary word in this unit *Identify inheritance patterns caused by various modes of inheritance	I can… ***Explain** how probability can be used to predict traits ***Use** a punnett square to determine percentages, ratios and fractions of traits ***Compare and contrast** incomplete dominance and codominance * **Compare and contrast** phenotype and genotype ***Distinguish** between a monohybrid and a dihybrid ***Explain** how pedigrees can be used to analyze human inheritance	I can… * Design Punnett squares to predict and analyze phenotype and genotypes of organisms

Summative Assessment will be administered:

Date: Monday, January 22nd

HOMEWORK:
Mark the text, including the figures, read, and create two column notes.

We will use the following pages below from your Science textbook to learn the above benchmarks.
(These Dates Do Not Change)
Record your quiz grade on each line below

- ❑ _____*11.1 The Work of Gregor Mendel (p. 308-312) Due: Jan 9th
- ❑ _____*11.2 Applying Mendel's Principles (p. 313- 318) Due: Jan 11 th
- ❑ _____*11.3 Other Patterns of Inheritance (p. 319- 321) Due: Jan 16th
- ❑ _____* 14.1 Human Chromosomes (p. 392- 397) Due: Jan 18th

You will have a quiz after reading each lesson above. You will be permitted to use your two column notes. (There are no quiz corrections)

See EDMODO for resources.

Accessing your online science textbook:
go to http://teachers.stjohns.k12.fl.us/willis-t/ click on online textbook

Username: ***55 + Student Number***
Password: ***Capitalized First and Last Initial* + Full Birthdate in Numeric Form.***
Example: Student John Smith who was born on March 5, 2002 would have a

ELEMENTS	0=F	1=D	C=2	3=B	4=A
1. Define: genetics, fertilization, trait, hybrid, gene, allele, principle of dominance, segregation, gamete, probability, homozygous, heterozygous, phenotype, genotype, Punnett square, independent assortment, incomplete dominance, codominance, multiple allele, polygenic trait, genome, karyotype, sex chromosome, autosome, sex-linked gene, pedigree					
2. Explain how probability can be used to predict traits					
3**. Use** a punnett square to determine percentages, ratios and fractions of traits					
4. Compare and contrast incomplete dominance and codominance					
5. **Compare and contrast** phenotype and genotype					
6. Distinguish between a monohybrid and a dihybrid					
7. Explain how pedigrees can be used to analyze human inheritance					

You must include a minimum of three dates for each element until you reach a level B

Report to Mrs. Willis in H-105 EXCEL SESSION B	
Tues.	Thurs.

IF YOU HAVE INCOMPLETE HOMEWORK YOU DO NOT QUALIFY FOR GRADE RECOVERY.

Grade Recovery will be administered on Tuesday and Thursday during Excel Session B

Student Name: _____

What did I do to prepare: Circle all that apply: *Tracked learning, Two Column Notes, Viewed Power Point in Schoology, Quizlet, Study Island, Other:* _____

Predict your grade:_____ Record your actual grade: _____

Analyze: _____

_____