Benchmark Mastery Study Guide

SC.912.L.16.3 Describe the basic process of DNA replication & how it relates to the transmission & conservation of the genetic information

SC.912.L.16.5 Explain the basic processes of transcription & translation, & how they result in the expression of genes

Learning Goal

Level 1	Level 2	Level 3	Level 4
With or without help I can… *Define each vocabulary word in this unit	I can… *Identify the steps for DNA replication	I can… • Explain DNA replication	I can… *Design a model of DNA

Summative Assessment will be administered:

Date: Thursday, Oct. 29th

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.

* 12.2 The Structure of DNA (p. 344-348) Due: Thursday Oct. 15th
*12.3 DNA Replication (p. 350-353) Due: Monday Oct. 19th

*13.1 RNA (p. 362-365) Due: Wednesday, Oct. 21st

*13.2 Ribosomes and Protein Synthesis (p. 366- 371) Due: Friday, Oct. 23rd

*13.3 Mutations (p. 372-376) Due: Monday Oct. 26th

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 password of JS03052002

ELEMENTS	0=F	1=D	C=2	3=B	4=A
1. Define: replication, DNA polymerase, telomere, RNA, messenger RNA, ribosomal RNA, transfer RNA, transcription, RNA polymerase, promoter, intron, exon, polypeptide, genetic code, codon, translation, anticodon, gene expression, mutation, point mutation, frameshift mutation, mutagen, polyploidy					
2. Describe: the structure and function of deoxyribose nucleic acid					
3. Explain: DNA replication					
4. Identify: the steps in RNA					
5. Explain: the process of RNA replication					
6. Explain how mutations affect genes					

Score	Description
4	I am confident and understand this information. I know all of this information and more, so much that I can teach it to others!
3	I am confident that I understand the information and can discuss or apply it with accuracy.
2	I know the basic information but with minor errors. However, if I could use a self-generated resource I am confident I would do well.
1	I know the basic information of the element with or without help.
0	Even with the use of help I do not understand or cannot discuss this information.

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

Grade Recovery will be administered on Tuesday morning between 8:30 - 9:10

Student Name: _____

It is time to take the test.

Predict your grade:_____ Record your actual grade: _____