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 help, partial success at score 2.0 content & score 3.0 content	I can... *Define each vocabulary word in this unit * Identify a structure of DNA and RNA *Identify the steps for DNA replication * Compare and contrast transcription and translation	I can… • Explain the steps for DNA replication • Explain the steps related to transcription • Explain the steps related to translation	I can… *Design a model of DNA *Analyze how transcription effects gene expression * Analyze how translation effects gene expression

Summative Assessment will be administered:
Date: Monday, Nov. 19th

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 benchmarks.

(These Dates Do Not Change)

Place completed homework in your binder

Record your quiz score for each lesson.

_____ 13.2 The Structure of DNA (p. 418-423) Due: Nov. 1st

_____ 13.3 DNA Replication (p. 424-427) Due: Nov. 5th

_____ 14.1 RNA (p. 440-444) Due:. Nov. 7th

_____ 14.2 Ribosomes and Protein Synthesis (p. 445-450) Due: Nov. 9th

_____ 14.4 Mutations (p. 457-461) Due: Nov. 13th

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 SCHOOLOGY for resources.

Access Schoology:
http://stjohnsschools.schoology.com/
Username: The letter s with student number followed by @stjohns.k12.fl.us
Password:

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

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

Record your Quizlet scores here _____

Record your Study Island score here _____

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. You must earn 80% on the Study Island Practice Session to qualify for Grade Recovery.

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: _____

_____

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