Benchmark Study Guide Physical Science

SC.912.N.3.3: Explain that scientific laws are descriptions of specific relationships under given conditions in nature but do not offer explanations for those relationships

SC.912.P.12.3: Interpret and apply Newton's three laws of motion.

SC.9.12.P.12.4 Describe how gravitational force between 2 objects depends on their masses and the distance between them

SC.912.P.10.10: Compare the magnitude and range of the 4 fundamental forces (gravitational, electromagnetic, weak nuclear, strong nuclear).

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** Newton's Three Laws of Motion ***identify** four fundamental forces	I can… ***Compare and contrast** scientific law and scientific theory ***Explain** each of Newton's Three Laws of Motion ***Explain** how mass and distance of objects affect gravitational force ***Compare** the magnitude and range of the 4 fundamental forces	I can… • **Analyze** investigations related to laws of motion

Summative Assessment will be administered:

Date: Thursday, Oct. 20th

HOMEWORK:

Note Textual Features, including the figures, read, and create two column notes. <u>Include a summary of your notes</u>

We will use the following pages below from your Science textbook to learn the benchmarks.

(These Dates Do Not Change)

Check the box after each homework assignment is completed. Include you final grade for each quiz on the line.

❑ *_____ 12.2 Newton's First and Second Laws of Motion (p. 363-369)
Due: Monday, October 9th

❑ *_____ 12.3 Newton's Third Law of Motion and Momentum (p.372-377)
Due: Thursday, Oct. 11th

❑ *_____ 12.4 Universal Forces (p. 378-382) **Due**: Monday, Oct. 16th

❑ ***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:

★ Target learning goal

ELEMENTS	0=F	1=D	C=2	3=B	4=A
1. Define: scientific law, scientific theory, force, newton, net force, gravity, inertia, mass, weight, electromagnetic force, strong nuclear force, weak nuclear force, gravitational force,					
2. Distinguish between scientific law and scientific theory					
3**. Explain** Newton's Three Laws of Motion and describe how objects are affected by each law					
4. Explain how mass and distance affect the gravitational force acting on an object					
5. Compare the magnitude and range of the four fundamental forces					

Report to Mrs. Willis in Portable H-105

Excel Time: 12:37-1:00 - 12:00- 12:23 Wed

Mon.	Tues.	Wed.	Thurs.	Fri.

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

Student Name: _____

What did I do to prepare: Circle all the apply:

Tracked learning, Two Column Notes, Viewed Power Point in Schoology, Quizlet, Other

It is time to take the test.

Predict your grade:_____ Record your actual grade: _____

Analyze _____

_____