Friday Night Science Assignment May 1, 2015 6-8:30

Attend the Friday night Science event at Allan Hancock College. For more information on how to get there, where to park, etc. please google "Friday Night Science" or visit http://www.hancockcollege.edu/fridaynightscience/.

There will be approximately 40-50 hands-on demonstrations of various scientific principles. You are to study some of these demonstrations, sketch how the demonstrations work, and write a few brief sentences discussing the scientific principles at work in the demonstrations.

You must choose six total demonstrations.
You are to choose three demonstrations from Group 1
You are to choose one demonstration from each of the other groups (3 additional demos in total).
For each demo sketch a figure showing how the apparatus was set-up. Label the figure with important pieces of equipment. For many demos you should draw both a before and an after picture.
In a few sentences, explain the scientific concepts demonstrated (see the next page for a template).

Group 1: Mechanics (choose three)	Swing a cup of water on a tray Tsunami Tank Shake Table Chladni Plates Ocylinderscope Find Your Center of Mass Bike Wheel Gyro Snake Pendulum Momentum Machine Resonant Rings on a speaker Square Wheels, Round Road Moment of Inertia Wands High Road, Low Road Cable Spool attached to a string
Group 2: Electricity & Magnetism (choose one)	Van de Graaff generator Tesla Coil Homopolar motor Pedal Generator Seismograph Superconductor on magnetic Möbius strip
Group 3: Pressure & Sound (choose one)	Bernoulli Levitator Bubbles suspended on CO_2 Whispering Gallery Magdeburg Plates Bed of Nails
Group 4: Light and Optics (choose one)	Thin Film Bubble Three Little Pigments (Color Subtraction) Colored Shadows (Color Addition) Concave Mirrors Everyone is You and Me Blue Sky Orange Sun

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE

Demonstration Name:_____

Name of Student Facilitator:_____

Sketch of demonstration

BEFORE	**AFTER**

Explanation of Scientific Concept:

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE

Demonstration Name:_____

Name of Student Facilitator:_____

Sketch of demonstration

BEFORE	**AFTER**

Explanation of Scientific Concept:

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE

Demonstration Name:_____

Name of Student Facilitator:_____

Sketch of demonstration

BEFORE	**AFTER**

Explanation of Scientific Concept:

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE

Demonstration Name:_____

Name of Student Facilitator:_____

Sketch of demonstration

BEFORE	**AFTER**

Explanation of Scientific Concept:

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE

Demonstration Name:_____

Name of Student Facilitator:_____

Sketch of demonstration

BEFORE	**AFTER**

Explanation of Scientific Concept:

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE

Demonstration Name:_____

Name of Student Facilitator:_____

Sketch of demonstration

BEFORE	**AFTER**

Explanation of Scientific Concept:

This publication/event was developed with the support of a Hispanic Serving Institution STEM & Articulation grant from the U.S. Department of Education.

ALLAN HANCOCK COLLEGE