

Friday Night Science Assignment

Attend the Friday night Science event at Allan Hancock College. The event runs from 6-8:30 pm on Friday May 3. 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 Group 2, one from Group 3, and one from Group 4.

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 after picture.

In a few sentences, explain the scientific concepts at work demonstrated (see the next page for a template).

<p>Group 1: Mechanics (choose three)</p>	<p>Shoot the Monkey Table Cloth Trick Whack a Stack Snake Pendulum Momentum Machine Rotating Reference Frame Rolling Race High road Low Road Viscosity Tubes Protractor and building height Tennis ball on a rod oscillator Resonant Rings on a speaker</p>
<p>Group 2: Electricity & Magnetism (choose one)</p>	<p>Magnetic braking Jacob’s ladder Magnetic suction (doorbell) Coil with iron filings Magnet near a TV or Computer Monitor</p>
<p>Group 3: Pressure & Sound (choose one)</p>	<p>Echo Tube Whispering gallery Pipes of Pan Magdeburg hemispheres Balancing ball in airstream</p>
<p>Group 4: Light and Optics (choose one)</p>	<p>Walk-in Kaleidoscope Pinhole Camera Hallway Thin film bubble Bouncing laser beam Everyone is you and me (two way mirror) Diffraction Patterns</p>

Demonstration Name: _____

Name of Student Facilitator: _____

Sketch of demonstration

BEFORE		AFTER

Explanation of Scientific Concept:

Demonstration Name: _____

Name of Student Facilitator: _____

Sketch of demonstration

BEFORE		AFTER
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Explanation of Scientific Concept:

Demonstration Name: _____

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Explanation of Scientific Concept:

