

INTERNATIONAL BACCALAUREATE

Form 4/PSOW

Internal assessment cover sheet: Group 4 (Except Design Technology)

SUBMIT TO: **MODERATOR**
SCHOOL CODE: **0 0 0 4 7 4**

ARRIVAL DATE: **20 APR (20 OCT)**
SCHOOL NAME: **Mt. Rainier High School**

Session: **May/November 2010**

Write legibly using black ink and retain a copy of this form.

Subject: IB Physics

Level: HL

Candidate Name:

Session Number:

0	0	0	4	7	4			
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Date(s)	Outline of Experiments/Investigations/Projects	ICT	Topic/O ption	Time	LEVELS AWARDED		
					D	DCP	CE
15-Sep-2008	The Moving Man: Simulation to investigate the graphical nature of motion	5	2	1			
23-Sep-2008	Motion: Investigating motion using one of the kinematic equations	1	2	2			
7-Oct-2008	Force: Design an experiment to investigate Newton's Laws of Motion	1	2	2			
10-Oct-2008	Force in One Dimension Simulation: Investigating Newton's 2nd Law	5	2	1			
21-Oct-2008	Water Bottle Rocket Lab: Investigating optimal amount of water for maximum range.		9	2			

Please fill in the ICT column using the numbers below to show when the student experienced each of these applications:

- 1 - Datalogging
- 2 - Graph Plotting Software
- 3 - Spreadsheets
- 4 - Database
- 5 - Computer Model/Simulation

Group 4 project mark for PS
(Same mark for students doing two subjects)

/6

Two highest
levels
achieved

/6

/6

/6

Summative mark for MS

/6

0 /48

Moderator	/6	/6	/6	Senior Moderator	/6	/6	/6
	/6	/6	/6		/6	/6	/6

To be completed by teacher

Name: **Richard Roths**

Signature: _____

Date: _____

Candidate Declaration: I confirm that this work is my own work and is the final version. I have acknowledged each use of words or ideas of another person, whether written, oral or visual.

Candidate Signature: _____

Date: _____

International Baccalaureate
4/PSOW Reverse

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0	0	0	4	7	4	0	0	0
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Date(s)	Outline of Experiments/Investigations/Projects	ICT	Topic/ Option	Time	LEVELS AWARDED		
					D	DCP	CE
27-Oct-2008	Projectile Motion Simulation: Exploring the properties that describe ballistic motion.	5	9	1			
4-Nov-2008	Fight Science: Exploring impact forces for kicks and punches	1	2	1			
18-Nov-2008	Hohmann Transfer Orbits - Using a real-time planetary orbit simulation and applying Kepler's 3rd Law to calculate travel times to other planets.	5	2,6	2			
2-Dec-2008	Egg Drop Experiment: Exploring ways to protect an egg as it impacts the ground.		2	2			
20-Jan-2009	Calorimetry: Measuring the specific heat of oil		3	2			
3-Feb-2009	Waves: Design an experiment to investigate the properties of waves.		4,11	2			
25-Feb-2009	John Travoltage: Exploring accumulation of static charge	5	5	1			
26-Feb-2009	Group 4 - Field trip to a local park. Investigations varied.			10			
5-Mar-2009	Electric Field Hockey Simulation - Using a self-designed array of anchored charges to navigate a test charge through an obstacle course.	5	5,6	1			
12-Mar-2009	Static Charges - Demonstrations and explorations of static charge devices	5	5,6	1			
19-Mar-2009	Electric Field - Using carbon surfaces to map equipotential lines		5,6	2			
24-Mar-2009	Ohm's Law: An exploration into Ohm's Law and resistivity		5	2			
7-Apr-2009	Circuit Diagrams - Simulation to explore current and voltages in circuits	5	5	1			
21-Apr-2009	FM Transmitter	5	5	1			
19-May-2009	Biot-Savart Law - Investigating the relationship between magnetic force and distance	1	6	1			
2-Jun-2009	Magnetic Shielding - An exploration into the shielding effects of a variety of metals on magnetic fields.	1	6	1			
16-Sep-2009	Design Experiment: Polarization		11,A	2			

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4/PSOW Reverse

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					D	DCP	CE
28-Sep-2009	Radiation Fields: Simulation to investigate near and far field properties	5	6,G	1			
16-Oct-2009	Lens Optics: Simulation that investigates image properties from lenses	5	G	1			
20-Oct-2009	Snell's Law: Experiment to determine the index of refraction of glass		4	1			
27-Oct-2009	Design Experiment: Determine the index of refraction of a liquid		4	2			
16-Nov-2009	Wave Interference: Determining the wavelength of a He-Ne laser	2	4,11,G	1			
23-Nov-2010	Wave Speed: Using an interferometer to measure the speed of microwaves	2	4,11,G	1			
1-Dec-2010	Spectroscopy: Using a diffraction grating to identify the spectra of a gas	2	4,11,G	1			
6-Jan-2010	The Photoelectric Effect: Simulation to investigate PE effects		13	1			
9-Feb-2010	PN Junction Diode: Simulation to investigate IV characteristics of diodes.	5	C,F	1			
18-Feb-2010	Design Experiment: Student created practical	2		2			
3-Mar-2010	Design Experiment: Half-Life		7,13	2			
16-Apr-2010	g-forces: Collecting data on fair ride accelerations	1	2	5			

Total Hours

60