



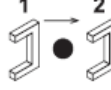
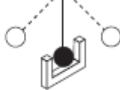









普通物理實驗報告

實驗名稱： _____

班級：

組別：

組員姓名：	_____	_____	_____
基本分數 50			
實驗數值 20			
理論數值 10			
圖表 10			
問題 10			
其他評分			
總評分：			

Quick Cross-Reference for Suggested Activities and Smart Timer Modes					
TIME	One Gate 	Fence 	Two Gates 	Pendulum 	Stopwatch 
	<ul style="list-style-type: none"> Use the time measurement to calculate the speed of a cart. 	<ul style="list-style-type: none"> Use time measurements to determine the acceleration of a cart or the acceleration due to gravity of a Picket Fence. 	<ul style="list-style-type: none"> Use the time measurement to calculate the launch speed of a ball. Operate the Time-of-Flight Accessory 	<ul style="list-style-type: none"> Measure the period of a pendulum. 	<ul style="list-style-type: none"> Time students running. Operate Free Fall Adapter and Laser Switch.
SPEED	One Gate (cm/s) 	Collision (cm/s) 	Pulley (rad/s) 	Pulley (rev/s) 	
	Measure the speed of a cart.	Measure the initial and final speeds of two carts during a collision for conservation of momentum.	Measure one speed on a Smart Pulley.	<ul style="list-style-type: none"> Continuously monitor angular speed in conservation of angular momentum experiments. 	
ACCEL	One Gate (cm/s²) 	Linear Pulley (cm/s²) 	Angular Pulley (rad/s²) 	Two Gates (cm/s²) 	
	<ul style="list-style-type: none"> Measure acceleration of a cart at one point on the track. Measure the acceleration due to gravity (g) of a Picket Fence. 	Measure the acceleration of a hanging mass in rotational inertia experiments.	Measure the acceleration of a hanging mass in rotational inertia experiments.	Measure the average acceleration of a cart over the whole length of the track.	
COUNTS	30 seconds	Counts for 60 seconds	5 minutes	Manual	
	<ul style="list-style-type: none"> Count blocking events for the specified period of time. Measure radiation emission events with the GM Tube/Power Supply. 				

按「1」四次 選擇量測的主類別 [COUNTS]

按「2」三次 選擇量測的次類別 [30 seconds]

按「3」一次 準備啟動或停止 Start / Stop

【例題】量測飛輪的轉速

讀數：30 秒 → 720 次；**10 次/秒 → 1 轉/秒**

結果：10 秒 → 240 次；轉速=24 次/秒=2.4 轉/秒；週期：1 轉=1/2.4 秒

【記錄】 壓克力轉盤單價 4,200，轉動前請注意轉動範圍，以避免撞破轉盤。

一、反射面遠離基座

發射頻率 f_0	輸出電壓	卅秒計數	轉盤週期 t_0	移動速度 v_r	接收頻率 f''	頻率差 Δf	聲速 v
	1V						
	2V						
	3V						
	4V						
	5V						
	6V						
	7V						
	8V						
	9V						
	10V						
	11V						
	12V						
	13V						
	14V						
	15V						

二、反射面接近基座

發射頻率 f_0	輸出電壓	卅秒計數	轉盤週期 t_0	移動速度 v_r	接收頻率 f''	頻率差 Δf	聲速 v
	1V						
	2V						
	3V						
	4V						
	5V						
	6V						
	7V						
	8V						
	9V						
	10V						
	11V						
	12V						
	13V						
	14V						
	15V						

【討論】