Name:_____ Period:_____

Freefall Lab

Question: **Can you describe the type of motion that a free falling object has?**

Hypothesis:

Procedures:

Equipment:

Data:

Height (m)	V_0	$a=\Delta v/\Delta t$ (m/s^2)
	0	
	0	
	0	
	0	
	0	
	≠0	
	≠0	
	≠0	
	≠0	
	≠0	

AVERAGE:_____

Analysis:

- **If you just "drop" or release the object, what can you assume about its initial position (Y_0) and initial velocity (v_0)?**

- **Re-write the equations if both values above were zero**

- **What did you observe about the acceleration when initial velocity was zero?**

- **Look at your data, what difference did it make to the acceleration if the initial velocity was not zero?**

- **What is the connection between a falling object's acceleration and gravity?**

- **Explain what you think would happen if you did this experiment on the moon?**

- **Explain what you think would happen if you did this experiment on the space station?**