Here are some blank charts for student groups to use for their own made up data..

Time elapsed (t)	Average speed (s)	Falling speed (s)	Distance (d)	Height (h)
Secs from drop	from drop to now	at that instant	fallen	at that instant
0 sec	XXXX	0 ft/sec	0 ft	(you choose)
				ft
	ft/sec	ft/sec	ft	ft
	ft/sec	ft/sec	ft	ft
(you choose)	(calculation # 1)	(calculation # 2)	ft	0 ft
sec	ft/sec	ft/sec		

Begin to fill in the above table by making up your own initial height (you choose – upper right) from which to drop a pebble and making up the time (you choose – lower left) that it takes to fall to the ground.

Calculation # 1: Average speed during the entire fall is total distance fallen that you chose divided by total time of fall that you also chose.

Calculation # 2: Speed at which the object strikes the ground is twice the average speed found in calculation # 1

Calculation #3: The gravitational constant	is the speed at which	the object strikes the
ground divided by the total falling time that	you chose above.	a =

Now you can fill in a chart from scratch. Make sure you have the proper units in each block.

Time elapsed (t)	Average speed (s)	Falling speed (s)	Distance (d)	Height (h)
	from drop to now	at that instant	fallen	at that instant
0	XXXX	0	0	
				-
				0