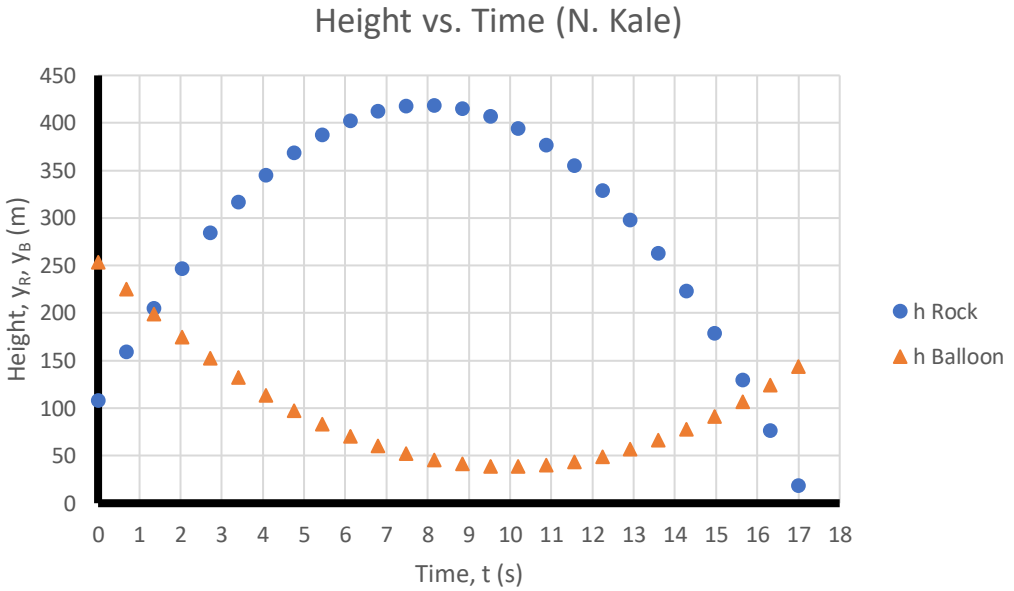
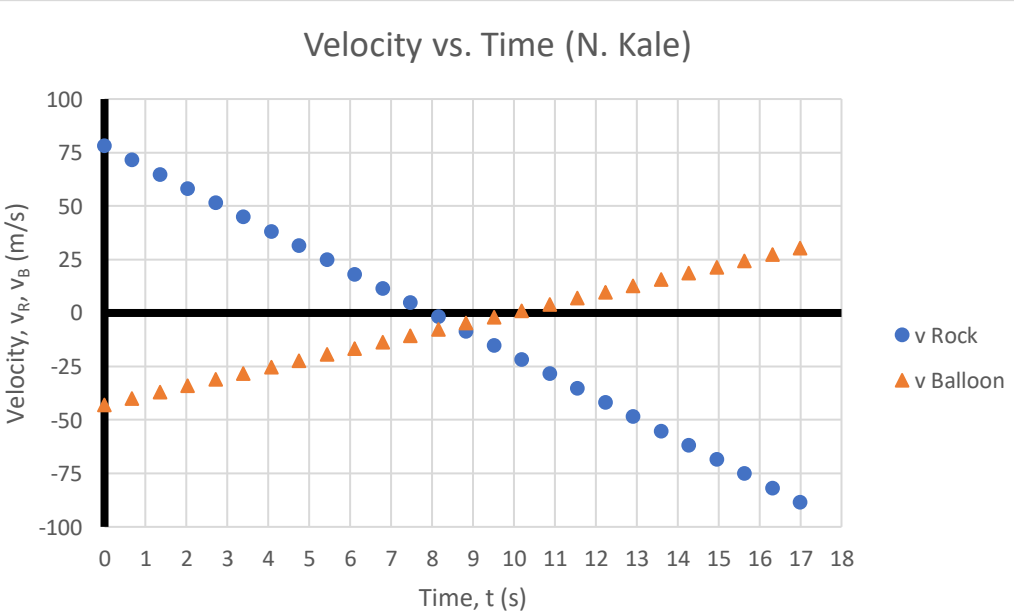
Rock Givens		
y_{R0} =	108	(m)
v_{R0} =	78	(m/s)
a_R =	-9.8	(m/s^2)

Balloon Givens		
y_{B0} =	253	(m)
v_{B0} =	-43	(m/s)
a_B =	4.3	(m/s^2)

Δt =	0.68	(s)

	t	y_R	v_R	y_B	v_B	(y_R-y_B)
N	(s)	(m)	(m/s)	(m)	(m/s)	(m)
0	0.0	108.0	78.0	253.0	-43.0	-145.0
1	0.7	158.8	71.3	224.8	-40.1	-66.0
2	1.4	205.0	64.7	198.5	-37.2	6.5
3	2.0	246.7	58.0	174.2	-34.2	72.5
4	2.7	283.9	51.3	151.9	-31.3	132.0
5	3.4	316.6	44.7	131.7	-28.4	184.9
6	4.1	344.7	38.0	113.3	-25.5	231.3
7	4.8	368.3	31.4	97.0	-22.5	271.2
8	5.4	387.3	24.7	82.7	-19.6	304.6
9	6.1	401.8	18.0	70.4	-16.7	331.5
10	6.8	411.8	11.4	60.0	-13.8	351.8
11	7.5	417.3	4.7	51.7	-10.8	365.6
12	8.2	418.2	-2.0	45.3	-7.9	372.9
13	8.8	414.6	-8.6	40.9	-5.0	373.7
14	9.5	406.5	-15.3	38.5	-2.1	368.0
15	10.2	393.8	-22.0	38.1	0.9	355.7
16	10.9	376.6	-28.6	39.7	3.8	336.9
17	11.6	354.9	-35.3	43.2	6.7	311.6
18	12.2	328.6	-42.0	48.8	9.6	279.8
19	12.9	297.8	-48.6	56.3	12.6	241.5
20	13.6	262.5	-55.3	65.9	15.5	196.6
21	14.3	222.6	-61.9	77.4	18.4	145.3
22	15.0	178.3	-68.6	90.9	21.3	87.4
23	15.6	129.3	-75.3	106.4	24.3	22.9
24	16.3	75.9	-81.9	123.9	27.2	-48.0
25	17.0	17.9	-88.6	143.4	30.1	-125.4

Neil Kale **August 30, 2019** **Section L**

Modified Rock and Balloon Model