

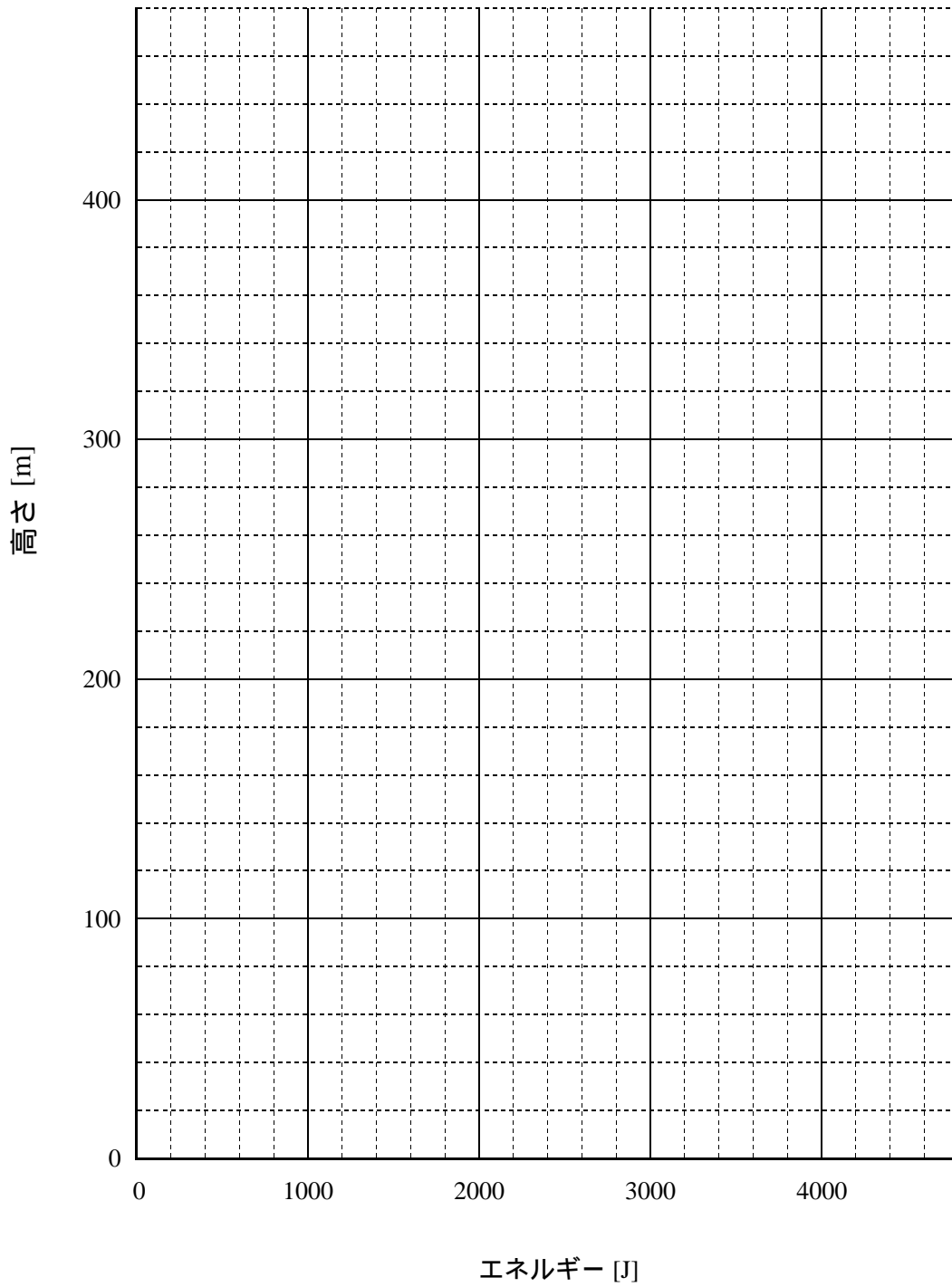
自由落下の位置エネルギーと運動エネルギー

		落下距離 s [m]	到達時の速さ v [m/s]
the Empire State Building in New York	from the top	443	93.18
	75% of the way up	332.25	80.7
	50% of the way up	227	66.7
the Golden Gate Bridge in San Francisco	from the top	221.5	65.89
	75% of the way up	170.25	57.77
	50% of the way up	113.5	47.17
the Statue of Liberty on Ellis Island	from the top	46.5	30.19
	75% of the way up	34.88	26.14
	50% of the way up	23.25	21.35
a table	from the top	1.2	4.85
	75% of the way up	0.9	4.2
	50% of the way up	0.6	3.43

		落下距離 s [m]	到達時の速さ v [m/s]	443-s [m]
		0	0	443
a table	50% of the way up	0.6	3.43	442.4
a table	75% of the way up	0.9	4.2	442.1
a table	from the top	1.2	4.85	441.8
the Statue of Liberty	75% of the way up	23.25	21.35	419.75
the Statue of Liberty	50% of the way up	34.88	26.14	408.12
the Statue of Liberty	from the top	46.5	30.19	396.5
the Golden Gate Bridge	50% of the way up	113.5	47.17	329.5
the Golden Gate Bridge	75% of the way up	170.25	57.77	272.75
the Empire State Building	75% of the way up	221.5	65.89	221.5
the Golden Gate Bridge	from the top	227	66.7	216
the Empire State Building	50% of the way up	332.25	80.7	110.75
the Empire State Building	from the top	443	93.18	0

地上高 443 m の所から，物体を落下させた場合の途中のエネルギー

地上からの高さ h [m]	通過時の速さ v [m/s]	物体の持つ力学的エネルギー		
		位置エネルギー (mgh) U [J]	運動エネルギー (1/2mv ²) K [J]	合計 U + K [J]
443	0			
442.4	3.43			
442.1	4.2			
441.8	4.85			
419.75	21.35			
408.12	26.14			
396.5	30.19			
329.5	47.17			
272.75	57.77			
221.5	65.89			
216	66.7			
110.75	80.7			
0	93.18			



組 番 氏名