

BALLOON 'BIG BANG' LAB RUBRIC

Student Name: _____

CATEGORY	10	8	6	4
Classroom conduct/ teamwork	Cooperatively worked w/partner in a focused manner to complete lab. Sought clarification through careful reading, followed by appropriate questions.	Worked cooperatively with partner but did not complete equal amount of work. Asked a few questions w/out reading. Generally stayed on task.	Contributed minimally to lab exercises (passive observer riding on coattails). Commonly asked questions for clarification w/out 1 st reading the lab. Commonly off task.	Was confrontational w/partner or did not participate. Majority of time spent on tasks other than the lab.
Table	Clean, easy-to-read, complete table presented with appropriate labels for rows and columns. Calculations made correctly.	Fairly clean, relatively easy-to-read, mostly complete table presented with appropriate labels for rows and columns. Most calculations correct.	Basic data presented, lacking neatness/clarity. Mistakes frequently made on calculations.	Table missing or largely incomplete.
Graph	Axes are clearly labeled and increments are appropriate. Data points are correctly plotted and a best-fit line is correctly drawn. Graph paper is used.	Few missing labels or incorrect data points. Data increments generally make good sense. Best-fit line may be incorrect. Graph paper used.	Several missing labels, many incorrect data points, or incorrect increments. Graph is sloppy or graph paper is not used.	No graph was completed or a very poor graph was drawn, not on graph paper, and labels/data/best-fit line are missing.
Analytical questions	Thorough and correct answers are given for all questions.	Relatively thorough and generally correct answers provided to majority of questions.	Piecemeal or incorrect answers given to several questions.	Answers do not address questions or were not completed.

27/40

Letter	B	C	D	E	F	G	H	I
1 st meaning	40	50	61	50	120	71	67	65
10 yr	50	80	138	150	220	162	150	148
Incasing distance	40	30	77	100	100	91	83	83
Rate increase	4	3	7.7	10	10	9.1	8.3	8.3
Projected distance 20 yrs	128	128	240	270	330	270	270	280
20 yr median	82	80	160	110	130	125	110	108
% error	56.1	54.1	80	165	200	145	160	142