Bouncing Ball Exponential Lab

Instructions:

1. Drop a ball from 100 centimeters above the floor. Record 100 cm as bounce number 0.
2. Measure and record the height it reaches on the first bounce.
3. Measure and record the height it reaches on the second bounce, third bounce, etc.
4. Continue until the ball bounce height is too small to measure.
5. Repeat the experiment three times and find the average height for each bounce.
6. Graph the bounce height as a function of the bounce numbe4.
7. Write an equation for the function.
8. Explain the equation in your own words.

Bounce Number	Bounce Height in centimeters			
	Trial 1	Trial 2	Trial3	Average
0				
1				
2				
3				
4				

Optional activity:
1. Try the experiment with a different ball and graph it on the same graph as the first ball to compare the two balls. Which ball has a greater rate of decay?