Analyzing One-Dimensional Motion Project

You and your group members are going to use a ball and inclined plane to demonstrate and analyze one-dimensional motion via, vector diagrams, P-t, v-t graphing, and the kinematic equations.

You will first need to collect data from your ball about your ball's motion:

-Design a 1-D TWO-direction path (North-South, East West) for your ball to travel

-It MUST go a minimum of 40m above the origin

-A minimum of 30m behind the origin

-It MUST have at least THREE changes in direction

ON A POSTER YOU AND YOUR GROUP WILL DISPLAY THE ANALYSIS OF YOUR BALL'S MOTION

THE POSTER MUST HAVE:

-An explanation of the purpose of this project

A vector diagram of your ball's motion

-Have a Position-Time graph that reflects the motion of your ball

-Have a velocity-time graph that reflects the motion of your ball

-All four Kinematic equations listed on the poster and an explanation of what they are

-An example calculation for four of the five Kinematic Equation variables using your data

-Two pictures that represent the project

- Be neat -Be colorful

-Be accurate (units, graph scales, graph labels direction, correct math)