



OBJECTIVES	STANDARDS
• Work together in small groups to find the terminal velocity of spherical objects. • Determine mass and frontal area are the variables required to find terminal velocity. • Use scales to find the mass and tape measures to find the circumference of the given object(s). • Compute frontal area of the objects using geometric formulas, calculators and SI units. • Input mass and frontal area into Excel spreadsheet to calculate the predicted terminal velocity of the objects. • Rank objects by mass, frontal area, and a ratio of mass/frontal area to determine what is the best predictor for terminal velocity. • Compare actual terminal velocities to predicted values and discuss possible explanations for differences. • Recognize the value of wind tunnel testing for obtaining accurate information regarding how objects interact with fluids.	<u>Science:</u> MS-PS2-2 MS-PS2-4 MS-PS3-1 MS-ETS1-1 MS-ETS1-3 MS-ETS1-4 <u>Math :</u> MP.1-8 6.NS.B.3 6.EE.A.1-2 6.EE.B.6-7 6.RP.A.1 7.G.B.4 7.EE.B.3-4 7.RP.A.2