CO_2 DRAGSTER VOCABULARY

abrasive paper (sand paper) - heavy paper coated on one side with sand or other abrasive material and used for smoothing surfaces.

acceleration - an increase in velocity of a moving body

aerodynamics - the study of how air and gases flow

asymmetry - lack or absence of symmetry which can be found in something that has two sides or halves that **do not have the same** size, shape, and position.

axle - a rod on which a wheel turns

balsa wood - a soft, very lightweight wood material that grows in the rainforest of South America.

bandsaw - a power cutting tool which uses a blade consisting of a continuous band of metal with teeth along one edge

CADD (also called CAD) - acronym stands for **computer aided drafting and design** (or simply **computer aided drafting**). This is drafting or design work using computer systems to assist in the creation of detailed plans that would otherwise be done by using basic hand drafting skills.

concept sketch - communicates graphically the details and the general look and feel of the design without engineering details such as measurements (dimensions), notes, and scale.

CO_2 cartridge - a canister containing compressed carbon dioxide (CO_2), which is a gas mixture of carbon and oxygen.

deceleration - the decrease in velocity of a moving body

dimensioning – in drafting, it is defining and communicating engineering measurements and tolerances uses a symbols.

drafting - the skill set of drawing accurate, detailed plans that visually communicate how something functions or is to be constructed

drag - the friction that holds a vehicle back

drill press - upright drilling machine in which the **drill** is pressed to the work by a hand lever or by power.

engineering – the practical use of math, science, and technology to design solutions for problems.

file - small sharp teeth on some or all of its surfaces; used for smoothing **wood** or metal

final drawing - the last drawing, it has all the details and is drawn to perfection

force - the cause that puts a resting object into motion

friction - the resistance to motion of two moving objects or surfaces that touch

gravity - the force that pulls things down toward the surface of earth

inerta - resistance of any physical object to any change in its state of motion. Object at rest tend to stay at rest until another force acts on it. Objects in motion tend to stay in motion until another force acts on it.

jet propulsion - thrust produced by passing a jet of matter (typically air or water) in the opposite direction to the direction of motion. This is Newton's Third Law applied.

manufacturing – the use of tools, and processes to change the size and shape of materials for making products.

mass - the amount of physical matter that an object contains. Measurable in wieght.

momentum - product of the weight (mass)and speed (velocity) of an object. Momentum = mass x velocity.

Newton's Third Law - for every action or force there is a reaction force that is equal in size, but opposite in direction.

prototype - the version of an invention

scale - A proportion used in determining the dimensional relationship of a representation to that which it represents. Eg. An object drawn at a ½ scale is drawn at ½ of the actual size of the object (also referred to as 50% scale, 1 to 2, 1:2, 1" = 2", 1cm = 2cm, etc.)

specifications - detailed information or instructions

speed - the rate of movement or motion

symmetry - the quality of something that has two sides or halves that **are the same or very close** in size, shape, and position.

thrust - to push something suddenly and hard

3D Modeling - process of developing a realistic representation of any three-dimensional object by using computer software to draw and scale details for length, width, and height.

thumbnail sketch - a small, undetailed drawing that is done quickly to express an idea.

velocity - for speed of an object as recorded at a specific point or time.