Lesson 1 Rocketry vocabulary/concepts Sept. 7, 2017

* Model rocketry vs high-power rocketry
* Motor class (based on total impulse: “A” vs “B” vs etc., high-power starts with “H”)
* Motor thrust (Boost Phase)
* Burn-out (then Coast Phase)
* Apogee (peak of flight)
* Descent (under parachute)
* Parachute and shroud lines
* Drogue (small parachute – ejected at apogee)
* Main (larger parachute – ejected close to the ground) (dual deploy)
* Ejection charge (in particular, the built-in automatic (timed) “motor eject”)
* Altimeter Two or Three (data logger)
* “Real” Altimeter (can fire ejection charges for drogue and main)
* Av-bay (short for “avionics bay”)
* Nose-cone
* Airframe (body tube)
* Coupler tubing (to connect body tube sections – av-bay is inside a section of coupler tube)
* Eye-bolts
* Recovery harness (called a “shock cord” for model rockets)
* Quick-link
* Fins (rear)
* Canards (forward fins)
* Bulk-plate (all the way across)
* Centering ring (hole in it to keep things centered, such as the motor-mount tube)
* Thrust ring (model rocket)
* Motor-mount tube
* Gunpowder-based model rocket motor
* Ammonium perchlorate high-power rocket motors
* Nozzle
* Motor retention (against moving both up and down during flight)
* Propellant grains
* High-power motor “reload”
* High-power motor case (required by some manufacturers, especially for Cesaroni motors)
* “Delay grain” (burns slowly till it reaches the motor eject)
* “Split rocket” (for education/exhibition – shows inside of rocket)
* Parachute protection
  + Use “rocket barf” (rather than paper wadding) for model rockets
  + Use flame-proof cloth for high-power rockets (will study piston protection too, later)
* Super glue vs two-component epoxy
* Strapping tape (AKA filament tape) – exceptionally strong