

BYA Class 8

- Constellations - Spring: Bootes (and Arcturus), Virgo (and Spica), Leo (and Regulus)
- Comets
 - Physics
 - Dirty Snowballs, 1 to 10's miles diameter, ices and dust
 - orbit (elliptical), close to sun - tail which points away from sun,
 - Short and long period
 - Halley = short (76 yrs)
 - Hyakutake and Hale-Bopp = long (millions of years)
 - Observing
 - naked eye, binoculars, dark location
- Meteors (Shooting Stars)
 - sporadic meteors (≈ 15 min)
 - shower meteors
 - meteor storms
 - fireballs
- Meteor Showers
 - (from dead comets)
 - Perseid's (August 12)
 - Geminid's (Dec 14)
 - Naming; radiant point
- Meteorites
 - (from busted asteroids)
 - Falls, Finds
 - 4.6 billion years old
 - Irons
 - Sikhote Alin (Siberia 1947)
 - Canyon Diablo (Meteor Crater Arizona; $\approx 50,000$ yrs)
 - Gibeon (old)
 - Stones
 - NWA
 - Stony Irons
 - Pallasites
 - Carbonaceous chondrites
 - Allende (Mexico 1969)
- Earth Impacts
 - Meteor Crater Arizona; $\frac{3}{4}$ mile x 500', $\approx 50,000$ yrs old
 - Tunguska, Siberia (1908)
 - Kentland, Indiana (old, millions of years)
- Mass Extinctions - KT
 - Chicxulub (≈ 67 million yrs old!, dinosaur extinction)