SPRING 2 NOTES (April)

ASTERISM: Usually an apparent relationship

Part of a constellation, maybe related to cultural significance, more visible, part of an older or more traditional "relationship":

EX: The Sickle of Leo, Big Dipper of Ursa Major/ Little Dipper of Ursa Minor

Combination of stars, constellations or parts of constellations

EX: Lakota "Race Track" (Winter Hexagon), Summer Triangle

CLUSTERS: Gravitationally associated upon formation; true visual, observable group Cancer:

Open Star: Lower density of Thousands to Tens of Thousands of younger stars Similar, distinct compositions; formed in same molecular cloud; see slide diagram Stars migrate from a region of space as they age; cluster has no organized shape Found in regions of active star formation in Spiral and Irregular galaxies

EX: M44 = Præsepe Manger or BeeHive to Galileo in Cancer

EX: M45 (Pleiades) in Taurus

Globular: Higher density of Millions of older stars; stronger gravitational attraction Stars seldom migrate from region; cluster has an elliptical appearance Low number of younger stars, usually a result of collisions

Very similar composition; abundance of heavy (greater than H, He) metal elements; see slide diagram

Usually found above and below the center of rotation of galaxies

Seldom found in "open" space

Also found in the outer **Halo Region** along the disc of galaxies

EX: around 200 around the Milky Way central bulge and halo***

****Capricorn Scorpio****

EX: M13 Hercules Cluster EX: M3, M53 near Boötes

EX: over 12,000 around Elliptical Galaxy M87 (Virgo) central bulge and halo