Fun Facts:

**M13: HERCULES CLUSTER**

Computer Code: M13

* **Other Names:**
  + Great Hercules Cluster
  + NGC 6205
  + It is not the same thing as the Hercules Cluster of Galaxies, so be careful if you Google it
* **Basics:**
  + Description: Globular cluster in Hercules
    - Unlike open clusters, globular clusters are tightly bound together by gravity, and contain very old, mostly red stars
    - Considered to be the finest globular cluster in the northern hemisphere
  + Visual Magnitude: +5.78 (just barely visible with naked eye in clear, dark skies)
    - Can be viewed with binoculars or small telescope
  + Apparent Size: 3.4 arcminutes
  + Distance: 23,000 light years away
    - Light we’re seeing now left M13 around 25,000 BC.
    - Here’s what was going on with the Earth in 25,000 BC:
      * Late Stone Age
      * Humans were migrating around the globe, settling into rudimentary camps…humans had not yet crossed the Bering Strait land bridge into North America
      * The oldest known piece of pottery that we have dates from this time
      * The first relics of religion & spirituality start appearing (altars in Spain date from this time)
  + Diameter: 145 light years across
* **History:**
  + First discovered by Edmond Halley in 1714, who noted that “it shows itself to the naked eye when the sky is serene and the Moon absent.”
  + Charles Messier cataloged it in 1764.
  + It is also reported in John Bevis’ Celestial Atlas.
  + In 1787, Sir William Herschel pronounced it “a most beautiful cluster of stars, exceedingly compressed in the middle, and very rich.”
* **Other Notes:**
  + Contains several hundred thousand stars
  + Toward the center, stars are 500 times more concentrated than our solar neighborhood…if the Earth was there, the sky would be filled with thousands of stars brighter than Venus or Sirius
  + It is 12 billion years old, nearly as old as the Milky Way.
  + It orbits outside the Milky Way disk.
  + While it is pretty old, it does contain one young blue star, Barnard No. 29, which must’ve gotten caught in its gravity.
  + Arecibo Message:
    - In 1974, the Arecibo radio telescope transmitted a message to M13. This cluster was chosen because of its star density. But the message won’t reach M13 for 25,000 more years and when it arrives, M13 will no longer be where the message was aimed. This was more a technological demonstration than a serious attempt to contact alien life because the signal could only be received by an identical radio telescope.