

SES4U

Google Sky Star Grouping Worksheet

Name: _____

Purpose

In this activity, you will use Google Sky to locate certain features in the night sky and answer the following questions.

1. Determine your zodiac sign and locate this constellation in the night sky. Record its right ascension and declination. Also, remember to include the name of this constellation.
2. What is the ecliptic and how is it related to the zodiac constellations?
3. Answer the following questions about star clusters.
 - a. What are star clusters?
 - b. How is a globular cluster different from an open cluster?
 - c. A good example of an open cluster is the Pleiades. Locate this open cluster and record its stellar coordinates (Right Ascension and Declination). Also, please provide one fact about this cluster.
 - d. A good example of a globular cluster is Messier 3 (M3 – a part of the Canes Venatici constellation). Locate this globular cluster and record its stellar coordinates. Please provide at least one fact about this cluster too.
4. What is a binary star?
5. Answer the following question about Sirius.
 - a. Locate the binary star Sirius and provide its coordinates.
 - b. What constellation is it in?
 - c. Approximately how far away is this binary star system?
6. Locate the spiral galaxy of Andromeda and records its coordinates.
 - a. How far away is this galaxy?
 - b. Is this galaxy larger or smaller than the Milky Way? Explain your answer.
7. What is a hypergiant? _____ Locate one of them using Google Sky and provide the following:
 - a. Its distance from Earth.
 - b. Its coordinates in the night sky.