

Project: Star Clusters

Look at the star cluster through both the finder scope as well as through the telescope.

1. How many stars can you see with the naked eye?

How many stars can you see through the finder scope?

How many stars can you see through the telescope?

How do you explain this difference?

2. What color are the stars in the cluster?

Based on this, how would their temperatures compare to that of the Sun? Explain why.

The luminosity of a star depends in part on the temperature of the star (for most stars, hotter stars are more luminous than cooler stars). The life expectancy of a star depends on how quickly it burns its fuel (measured by how luminous it is).

3. Based on your answer above, what can you determine about the ages of these stars, given their temperature? Explain.

Astronomers assume that the stars in the cluster all formed at around the same time.

4. Based on this, what you can you say about the entire star cluster?