

In-class activity 19

This assignment is worth a maximum of 4.0 points, and is due in class today. No in-class assignment is accepted after the end of class.

Work cooperatively and collaboratively as a team on this in-class assignment. Each person in your group will be awarded the same points as the entire assignment. *Turn in this sheet at the end of class, and attach another page if necessary.*

Assemble Your Group

1. [0.5 points.] Find your assigned group members, and sign in below.

Team member: _____

Team member: _____

Team member: _____

Team member: _____

Milky Way "Populations"

2. [2.0 points.] (Cf. Seeds and Backman, *Perspectives in Astronomy, 1/e*, Thomson Brooks/Cole, 2008, pp. 187-190.) Fill in the diagram¹ on the next page illustrating Milky Way features and stars. Every one of the 10 rounded corner boxes should have an entry from the list below. Each term should only be used once.

0-9 billion years ago
11-13+ billion years ago
disk stars
flat circles
globular clusters
older and newer
only older
randomly tipped ellipses
strong metal lines
weak metal lines

¹ Photo credits: NASA, JPL-Caltech, R. Benjamin (University of Wisconsin), R. Hurt (SSC-Caltech) (Milky Way representation); W. Keel *et al.*, University of Alabama in Tuscaloosa (47 Tucanae cluster).