ESS 200 (Stapleton)
Stargazing Homework
Alternative Assignment

Name:			

## 36 Points Total

Point values are in parentheses ()

## 1. Polaris (North Star)

- a. Use words and a drawing to show how to use the Big Dipper to find Polaris.
  - i. (4) Create a scale drawing of Polaris and the Big Dipper. For full credit, the proportions must be reasonably accurate.
  - ii. (2) Label the *pointer stars* in the Big Dipper.
  - iii. (2) Use an arrow to show how to use the pointer stars to find Polaris.
  - iv. (2) Show the "distance" from Polaris from the Big Dipper. You could, for example, use the distance between the pointer stars as your unit of measurement. You could then tell how many of those units you would have to travel from the Big Dipper to reach Polaris.
- b. (3) List three interesting facts about North Star.

## 2. Sirius and the constellation Orion

- a. Use words and a drawing to show how to use the constellation Orion to find Sirius.
  - i. (4) Create a scale drawing of Orion and Sirius. For full credit, the proportions must be reasonably accurate.
  - ii. (6) On your constellation Orion, label the positions of Betelgeuse, Bellatrix, and Orion's belt.
  - iii. (2) Use an arrow to show how to use Orion's belt to find Sirius.
  - iv. (2) Show the distance between Orion and Sirius. For example, if you use the length of Orion's belt (3 stars) as a unit of measure, how many of those units separate Orion from Sirius?
- b. (3) List three interesting facts about Sirius.
- c. (3) List three interesting facts about Betelgeuse.
- d. (3) List three interesting facts about Bellatrix.