Life Cycle of Stars

Use the "Life Cycle of a Star" reference sheets and the internet to help draw, label sketches and answer the following questions.

- 1. In your notebook diagram and label the life cycle of a low-medium mass star.
- 2. In your notebook diagram and label the life cycle of a massive star.

Questions

- 1. How does the size of a star affect the life cycle of the star?
- 2. How does nuclear fusion affect the life cycle of a star?
- 3. What is the significance of the life cycle of stars for our solar system?
- 4. Can the life cycle of a star be studied directly? Explain
- 5. Explain what will happen to the Sun as it ends its main-sequence?
- 6. Explain what happens to the most massive stars when they end their main-sequence?
- 7. Grab a chromebook with a partner and figure out how all the elements on the period table besides Hydrogen are formed. What types of stars form elements? During what stage do certain elements form?
- 8. Research the nebular theory, draw and explain how our solar system formed.
- 9. Why do terrestrial rocky planets form closer to the Sun and gaseous planets form farther away?