

Name: _____

Hour: _____

The Life and Death of a Star

Quilt Activity

Your group will make a quilt that tells part of the story of a star. Each member of your group will be responsible for one square on your quilt. You will present the quilt to the class with your group.

Which quilt will your group make? _____

Which square are you responsible for? _____

In your square you will include the following.

- State the answers to the following questions.
 - What is a star's absolute magnitude? (p. 703)
 - What does the H-R diagram show? (p. 704)
 - Describe the two forces that are balanced in a stable main-sequence star. (p. 708)
- State the **Four** most important big ideas that you read from your assigned topic.
- Draw at least one picture that illustrates at least one of the big ideas from your assigned topic.
- Your square must be **Colorful!!**

Quilt One: Star Birth

- **Square 1: Hertzsprung-Russell Diagram (H-R diagram) (p. 704)**
- **Square 2: Star birth & Protostar stage (p. 707-708)**
- **Square 3: Main Sequence Stage (p. 708)**
- **Square 4: Red-Giant Stage (p. 709)**

Quilt Two: Death of a Star

- **Square 1: Burnout & Death, Death of Low-Mass Stars (p. 710)**
- **Square 2: Death of Medium-Mass Stars (p. 710)**
- **Square 3: Death of Massive Stars (p. 711)**
- **Square 4: H-R Diagram and Stellar Evolution & Nucleosynthesis (p. 711-712)**

Quilt Three: Stellar Remnants

- **Square 1: White Dwarfs (p. 713)**
- **Square 2: Neutron Stars (p. 713)**
- **Square 3: Supernovae (p. 713)**
- **Square 4: Black Holes (p. 714)**

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Star Quilt Activity Worksheet

Which quilt will your group make? _____

Which square are you responsible for? _____

1. What is a star's absolute magnitude? (p. 703)
2. What does the H-R diagram show? (p. 704)
3. Describe the two forces that are balanced in a stable main-sequence star. (p. 708)
4. List the **Four** big ideas that you learned from your assigned topic.
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5. What picture(s) will you draw? How does it connect to the big ideas that you listed?
6. In the space below, outline what you plan to say during your groups' presentation.