Unit 11: The Sun and Components of the Universe Review

1. Nebula -

2. Galaxy -

3. The Sun -

4. H-R Diagram –

5. Magnitude /Luminosity –

6. Black Hole -

7. What group of stars does the Sun belong to on the H-R diagram?

8. What is the hottest color of star according to the H-R diagram?

9. What is the coolest color of star?

10. Where are hot stars located on the H-R diagram?

11. Where are cooler stars located on the H-R diagram?

12. What type of star will become a black hole?
13. What characteristics do scientists use to classify stars?

14. What will our Sun become after it runs out of hydrogen?

15. In order to find the temperature of a star, scientists look at the stars' ________________

16. What galaxy is our Sun located in?

17. Where in that galaxy is our Sun located?

18. What is the closest star to the Earth?

19. What force holds a galaxy and stars together?

20. The process that stars use to produce energy is called ________________

21. What elements have to fuse together in order for stars to produce energy?

22. Why does our Sun appear brighter than any other star in the galaxy?

23. What are all galaxies made of?

24. How do scientists classify galaxies?

25. What is the Universe mostly made of?
<table>
<thead>
<tr>
<th>Type of Galaxy</th>
<th>Types of stars found in this galaxy</th>
<th>Picture</th>
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<tbody>
<tr>
<td>Elliptical Galaxy</td>
<td></td>
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<tr>
<td>Spiral Galaxy</td>
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<tr>
<td>Irregular galaxy</td>
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26. What are the steps in the life cycle of a **main sequence star**?

![Diagram of life cycle of a main sequence star]

27. What are the steps in the life cycle of our **SUN**?

![Diagram of life cycle of the Sun]

28. Name the steps in the life cycle of a **Supergiant**?

![Diagram of life cycle of a Supergiant]
1. Which group of stars are hot, but dim? 

2. Name a Main sequence star that is NOT our Sun. 

3. Which has a hotter surface temperature, a Supergiant or a White Dwarf? 

4. What color is Rigel? 

5. What are the 4 categories listed in bold on the H-R Diagram?
   A) 
   B) 
   C) 
   D) 

6. What star is brighter than Aldebaran, but dimmer than Spica? 

7. What star is hotter than 40 Eridani? 

8. What is the brightest star on the H-R Diagram? 

9. What is the hottest star on the H-R Diagram?