

# ASTRONOMY WEBQUEST..... EXPLORE THE UNIVERSE!

Use the suggested websites to answer the following questions in your science notebook.  
Label each section and remember to use complete sentences.



## General Astronomy

<http://starchild.gsfc.nasa.gov/docs/StarChild/questions/question19.html>

1. What is a light year?
2. What is a parsec?
3. What is an astronomical unit?



## Stars

<http://www.kidsastronomy.com/nebulae.htm>

4. What is a nebula?
5. How are stars born?

[http://aspire.cosmic-ray.org/labs/star\\_life/starlife\\_equilibrium.html](http://aspire.cosmic-ray.org/labs/star_life/starlife_equilibrium.html)

6. What happens to stars as they age?
7. What are red giants?
8. What is a white dwarf?

<http://www.atlasoftheuniverse.com/globular.html>

9. What is a Globular Cluster?

<http://spider.seds.org/spider/MWGC/mwgc.html>

10. What is the relationship between Globular Clusters and the Milky Way?

## Lifecycle of a Star

<http://www.enchantedlearning.com/subjects/astronomy/stars/lifecycle/>

<http://btc.montana.edu/ceres/html/LifeCycle/starsbackground.htm>

[http://www.windows.ucar.edu/tour/link=/the\\_universe/Nebula.html](http://www.windows.ucar.edu/tour/link=/the_universe/Nebula.html)

[http://www.windows.ucar.edu/tour/link=/the\\_universe/Strange.html](http://www.windows.ucar.edu/tour/link=/the_universe/Strange.html)

[http://www.windows.ucar.edu/tour/link=/the\\_universe/Galaxy.html](http://www.windows.ucar.edu/tour/link=/the_universe/Galaxy.html)

[http://www.ioncmaste.ca/homepage/resources/web\\_resources/CSA\\_Astro9/files/html/module2/module2.html#6](http://www.ioncmaste.ca/homepage/resources/web_resources/CSA_Astro9/files/html/module2/module2.html#6)

[http://imagine.gsfc.nasa.gov/docs/science/know\\_l2/pulsars.html](http://imagine.gsfc.nasa.gov/docs/science/know_l2/pulsars.html)

[http://imagine.gsfc.nasa.gov/docs/science/know\\_l1/pulsars.html](http://imagine.gsfc.nasa.gov/docs/science/know_l1/pulsars.html)



11. Stars and planets are made from gases in a \_\_\_\_\_.
12. The Milky Way Galaxy is approximately \_\_\_\_\_ light years across.
13. How much longer will our Sun last? \_\_\_\_\_
14. Lifetimes of stars range from \_\_\_\_\_ to \_\_\_\_\_ years.

15. Our star orbits the centre of our galaxy about once every \_\_\_\_\_ years.
16. A teaspoon of material from a neutron star can weigh about \_\_\_\_\_.
17. Stars are made mainly from the gases \_\_\_\_\_ and \_\_\_\_\_.
18. Describe the stages of a star's life cycle in the correct order.
19. What is a supernova?
20. What are the possible end-products of a supernova?
21. What is a pulsar?
22. How is a pulsar formed?

## Universe

[http://starchild.gsfc.nasa.gov/docs/StarChild/universe\\_level2/universe.html](http://starchild.gsfc.nasa.gov/docs/StarChild/universe_level2/universe.html)

23. What is a black hole?
24. Quasar is short for...
25. How much energy do quasars give off?
26. What gives a star its light?
27. Copy the table in your notebook and sketch 3 types of **Galaxy**.

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28. Which galaxy most closely resembles our galaxy?

Read the following background articles on how the universe began, and how galaxies merge and collide.

[http://www.space.com/scienceastronomy/051212\\_mystery\\_monday.html](http://www.space.com/scienceastronomy/051212_mystery_monday.html)

[http://www.space.com/scienceastronomy/merging\\_blackhole\\_021119.html](http://www.space.com/scienceastronomy/merging_blackhole_021119.html)

[http://www.space.com/scienceastronomy/astronomy/spongy\\_universe\\_010522-1.html](http://www.space.com/scienceastronomy/astronomy/spongy_universe_010522-1.html)