# 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/guestions/guestion19.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

- 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/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.ht ml#6

http://imagine.gsfc.nasa.gov/docs/science/know\_l2/pulsars.html http://imagine.gsfc.nasa.gov/docs/science/know\_l1/pulsars.html

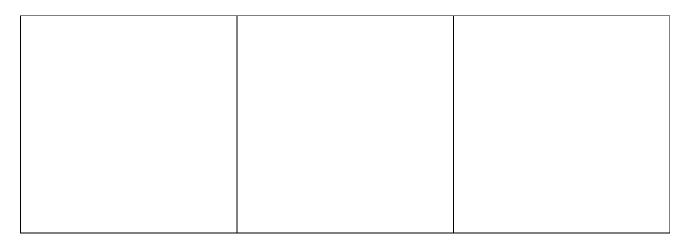
- 11. Stars and planets are made from gases in a \_\_\_\_\_
- 12. The Milky Way Galaxy is approximately \_\_\_\_\_\_ light years across.
- 13. How much longer will our Sun last?
- 14. Lifetimes of stars range from \_\_\_\_\_\_ to \_\_\_\_\_ years.

- 15. Our star orbits the centre of our galaxy about once every \_\_\_\_\_\_ years.
- 16. A teaspoon of material from a neuron 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

- 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.



28. Which galaxy most closely resembles our galaxy?

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

<u>http://www.space.com/scienceastronomy/051212\_mystery\_monday.html</u> <u>http://www.space.com/scienceastronomy/merging\_backhole\_021119.html</u> <u>http://www.space.com/scienceastronomy/astronomy/spongy\_universe\_010522-1.html</u>