Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Parent Initials: \_\_\_\_\_\_\_\_\_\_

**Unit 4-Universe**

Vocabulary:

* Stars
* Life cycle
* Nebulae
* Galaxy
* Elliptical
* Spiral
* Irregular
* Electromagnetic Spectrum
* Hertzsprung-Russell Diagram
* Sun
* Light years
* Speed of light
* Gravity
* Force
* Solar System
* Wavelengths
* Frequency
* Light Waves
* Radio Waves

1. **Structure of the Universe**

You should be able to:

* Explain that gravity governs the motion of the solar system
* Know the difference between stars, nebulae, and galaxies
* Name different stages in the star life cycle
* Recognize and name the 3 different types of galaxies
* Know that Earth is on a spiral galaxy named the Milky Way
* Plot the suns location on the Milky Way galaxy

1. **HR Diagram**

You should be able to:

* Use the HR diagram
* Explain that the sun is a medium sized yellow star
* Compare other stars to our Sun

1. **EM Spectrum**

You should be able to:

* Name the different waves in the EM spectrum
* Explain characteristics of light waves
* Explain characteristics of radio waves
* Tell what ROY G BIV stands for
* Explain how the EM spectrum is used to gain information about the universe

1. **Light Years**

You should be able to:

* Understand that a light year is a measurement and ***NOT*** time