

Chapter 30 Stars, Galaxies, Universe Test: Earth Science, Mr. Traeger

Name: _____

Period: _____

Date: _____

Section	Major Questions to be asked and/or tasked to be measured	Where do I find the information and/or where did we learn this?
30.1	<u>Characteristics of Stars</u> <ul style="list-style-type: none"> What is the difference between astronomy and astrology? What determines a person's sign of the zodiac? What are constellations? Do the same constellations appear throughout the whole year? What is significant about the North Star (Polaris)? What is the apparent magnitude of a star? How is it different from absolute magnitude? What is a light year? How far away is one light year? What is parallax and how do we use it to measure distances to stars? How do you draw a parallax diagram? *How do we measure distance using $d = 1/p$? What stars are hotter? Blue, yellow, white, or red? What is luminosity and absolute magnitude? What happens to the habitability of a planetary system if you move closer to the host star? Farther? 	<ul style="list-style-type: none"> Section 30.1 Homework Star Light, Star Bright Star Characteristics Lab Chapter 30 PowerPoint on Traeger's web site Starry Night Section E Activities: Stars and Constellations
30.2	<u>Stellar Evolution</u> <ul style="list-style-type: none"> What is the Hertzsprung-Russell (H-R) diagram and how do we use it to know the life stage of a star? How is a star born? How do stars live their main sequence lives? How do stars die? (See life cycle of stars on pages 786-787) What are the remains of stars? Black Holes, etc. What is a black hole? Why are they black? *What is the event horizon? Singularity of a black hole? How do gravity and fusion determine the size of a star? Which stars burn fuel quicker and die younger in a supernova? What will be the fate of our sun, a main sequence star? 	<ul style="list-style-type: none"> Section 30.2 Homework Chapter 30 PowerPoint on Traeger's web site Hertzsprung Russell Diagram Activity <i>Life and Death of Stars</i> Video and Questions
30.3 & 30.4	<u>Star Groups and The Big Bang Theory</u> <ul style="list-style-type: none"> What are galaxies and what are the different types of galaxies? What is the theory for the origin of the Universe? How did we get to this theory? Is our Universe expanding? How do we know? Be able to explain red shift of galaxies as evidence for the expansion of the Universe. 	<ul style="list-style-type: none"> Section 30.3 & 30.4 Homework Chapter 30 PowerPoint on Traeger's web site Galaxies and Expanding Universe Activity <i>Alien Galaxies</i> Video and Questions