Ch. 10 Study Guide

Directions: You must complete this study guide in its entirety and turn it in through Archie **by the end of your class period on May 5th.** All answers *must be handwritten (half of the credit will be taken from each question not hand written)* and should have as much detail as possible. This covers all questions that could be asked, so use your notes and complete this early.

Define Parallax (Ch 13 Lesson 1)

Explain how astronomers measure the distance between the Earth and far stars (Ch 13 Lesson 1)

Define Apparent Magnitude (Ch 13 Lesson 1)

What variable is related to a stars Apparent Magnitude? (Ch 13 Lesson 1)

Define Luminosity (Ch 13 Lesson 1)

What variables are related to a stars Luminosity? (Ch 13 Lesson 1)

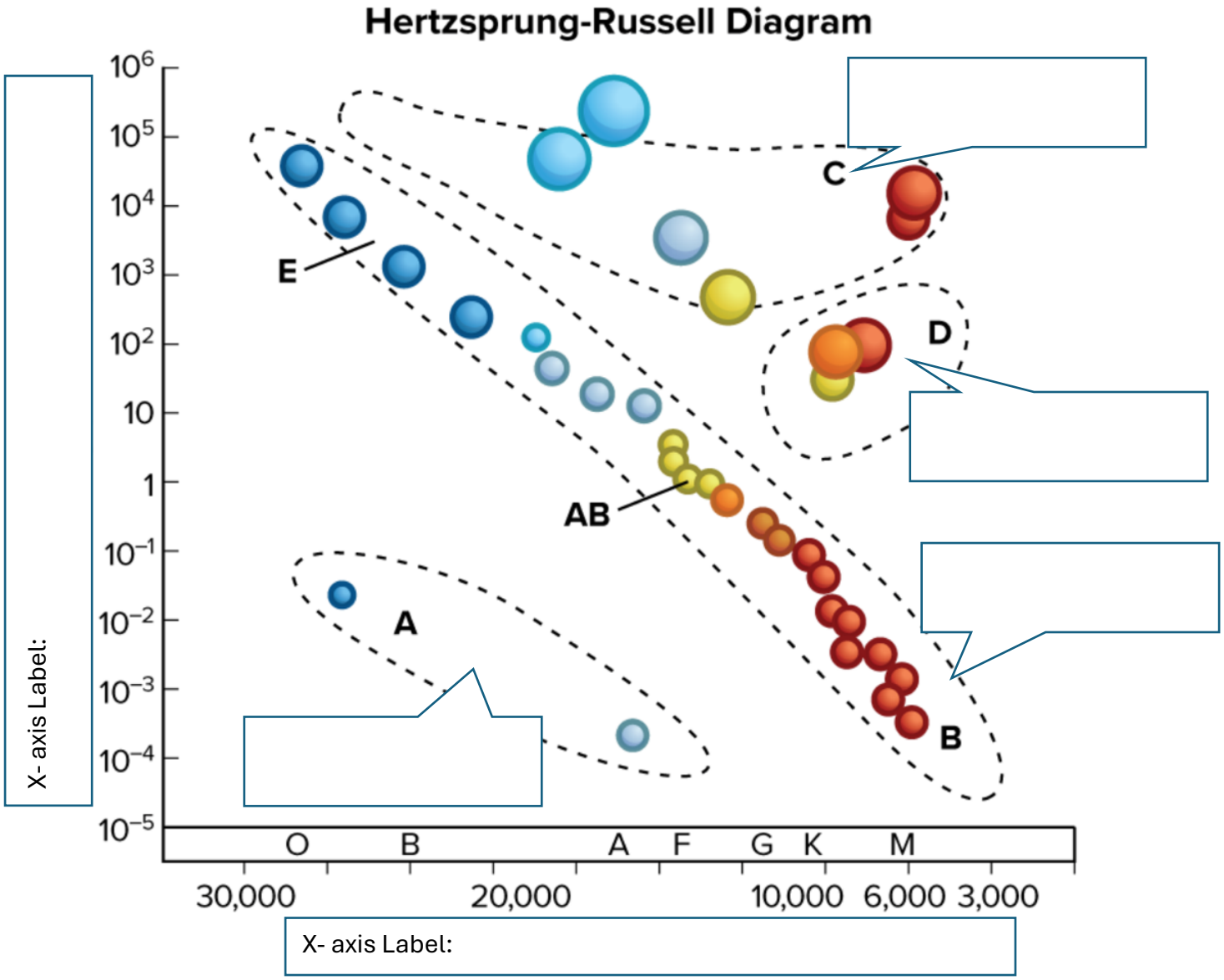
How are telescopes and spectroscopes each used DIFFERENTLY to study stars (Ch 13 Lesson 1)

List the layers of a star and their main features (Ch 13 Lesson 2)

Layer	Main Feature(s)

Define nuclear fusion. Which layer of a star is the primary location for fusion? (Ch 13 Lesson 2)

Fill out the missing axis labels and star categories of the Hertzsprung-Russel Diagram and use it to answer the question that follows

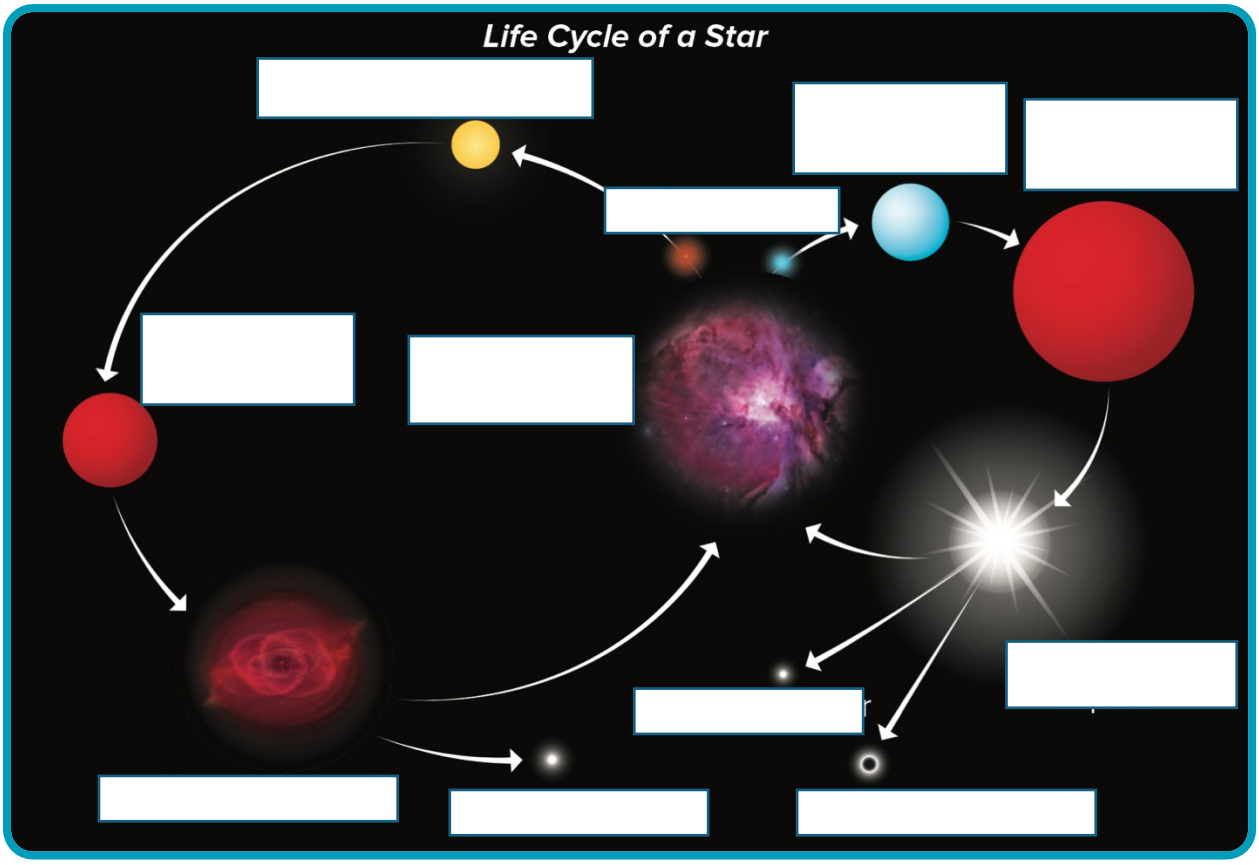


Use the diagram above to answer the following question. Proxima Centuri is a red dwarf star on the main sequence. At which region on the diagram does this star belong? Circle the letter

A B C D E

What color are the hottest stars? What color are the coldest stars? (Ch 13 Lesson 2)

Label the parts of the star life cycle diagram (Ch 13 Lesson 2)



What determines whether a star will take the path of becoming a supernova or if it will just stay a white dwarf? (Ch 13 Lesson 2)

High mass stars burn their fuel _____ than low mass stars. (Ch 13 Lesson 2)

Describe the special process that occurs in the core of a supergiant star to form a supernova. (Ch 13 Lesson 2)

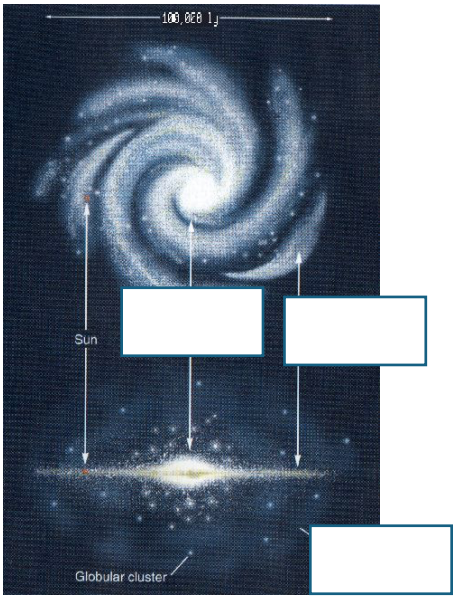
Order the following terms in order from smallest scale to largest scale. (Ch 13 Lesson 3)

Moon	Solar System	Planet
Galaxy	Sun	Universe

Fill out the table highlighting the important properties of the three different types of galaxies. (Ch 13 Lesson 3)

	Irregular	Spiral	Elliptical
Rank their sizes (smallest, middle, largest)			
Describe their shape			
Rank their ages (youngest, middle, oldest)			
Do they have a lot of gas and dust? (yes or no)			

Label the parts of a spiral galaxy using the diagram of the Milky Way. Then, identify important parts in each of the 3 main regions. (Ch 13 Lesson 3)



Region	Important Components
Nuclear Bulge	
Disk	
Spherical halo	