

Name _____ ReTEST Date _____ Hour _____

- All Practice work MUST be completed prior to the first test date
- ReTest Practice must be completed and checked by the day prior to retesting
- You must schedule a retest time with your teacher

Astronomy #4 - The Moon, the Stars & the Galaxy

ReTest Practice

1. Compare the following, in terms of size, to each other. Place in order from LARGEST (1) to Smallest (6). solar system planet moon universe star galaxy

2. The moon orbits the Earth making it what is called a natural _____.

3. The moon is getting _____ ((closer to, further away from) the Earth every year. What is the approximate distance of the change? _____

4. Identify the length of time it takes for each of the following situations to take place.

_____ The time required for the moon to revolve (orbit around) the Earth.

_____ The time required for the moon to make one full rotation.

5. What affect does the moon's rotation and revolution have on the face of the moon that we see on Earth?

Rotation -

Revolution -

6. The moon has many craters. Explain why.

7. Little kids think the moon gives off its own light which is why we can see it. EXPLAIN the light of the moon.









8. As the moon moves AWAY from the sun and more and more of the moon becomes visible,

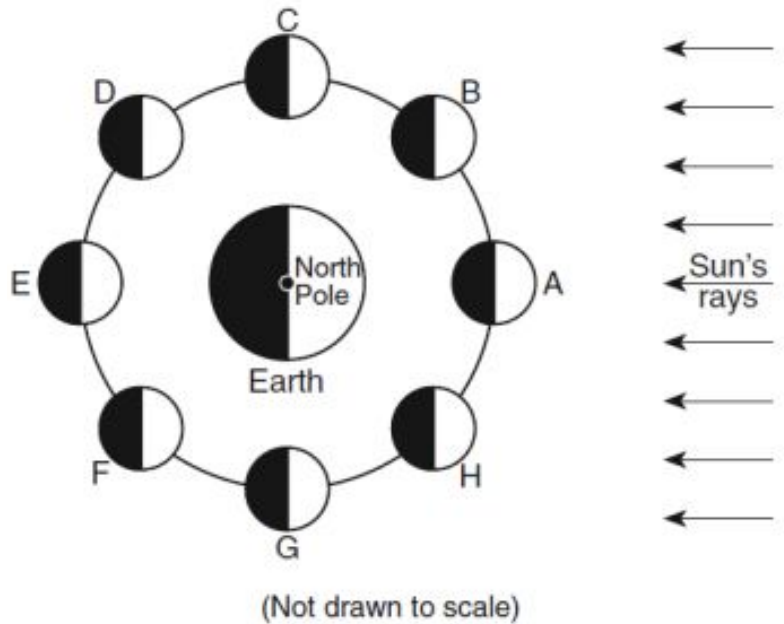
we call this _____. As it moves TOWARD the sun and becomes less visible we call it _____.

9. Describe at least two differences between a gibbous moon and a crescent moon.

Gibbous Moon	Crescent Moon

10. Use the diagram below to name and illustrate the phases of the Moon as you would see them from Earth.

- A. _____ 
- B. _____ 
- C. _____ 
- D. _____ 
- E. _____ 
- F. _____ 
- G. _____ 
- H. _____ 



11. Draw the correct positions of the Earth, Moon and Sun for a LUNAR eclipse to occur.

12. Draw the correct positions of the Earth, Moon and Sun for a SOLAR eclipse to occur.

13. What is the source of energy for the stars allowing them to shine?

14. What are the two types of energy we receive on Earth from the sun?

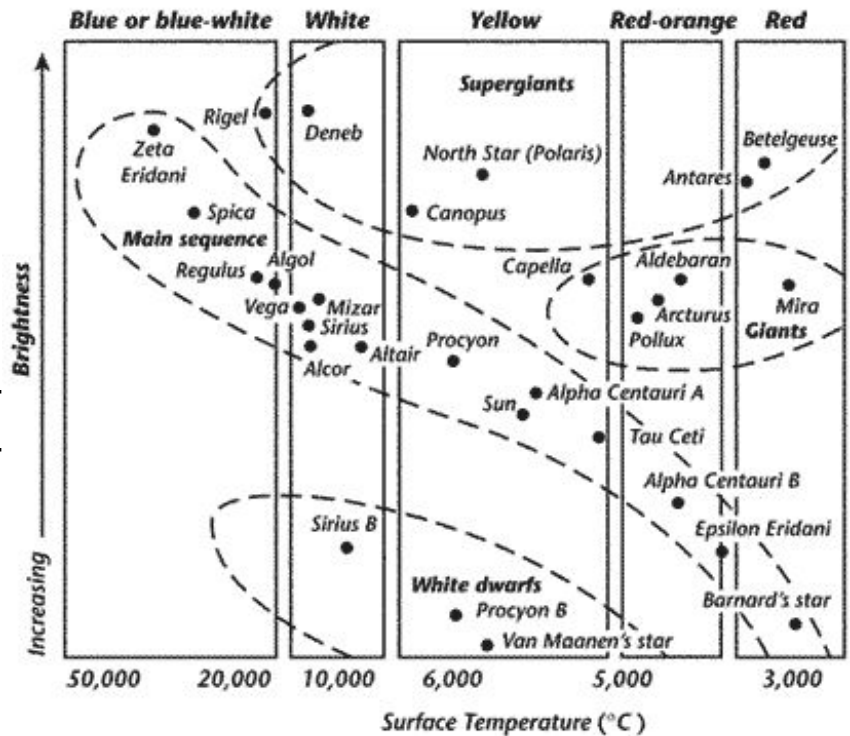
_____ and _____

15. Identify three ways in which stars can differ from each other.

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-
-

Use the diagram below to answer the following questions.

Hertzsprung-Russell Diagram



16. In what unit is the surface temperature of the stars measured?

17. Identify the labels for each of the axis.

Y - axis _____

X - axis _____

18. Use the following pairs to label the diagram on a star's brightness and temperature.

Hot & Bright Cool

& Dim

Cool & Bright

Hot & Dim

19. Which star is hottest, Sirius, Betelgeuse or Rigel? _____

20. Which star is dimmest, Betelgeuse, Vega, Centauri B? _____

21. Which star is cooler, Mira or the Sun? _____

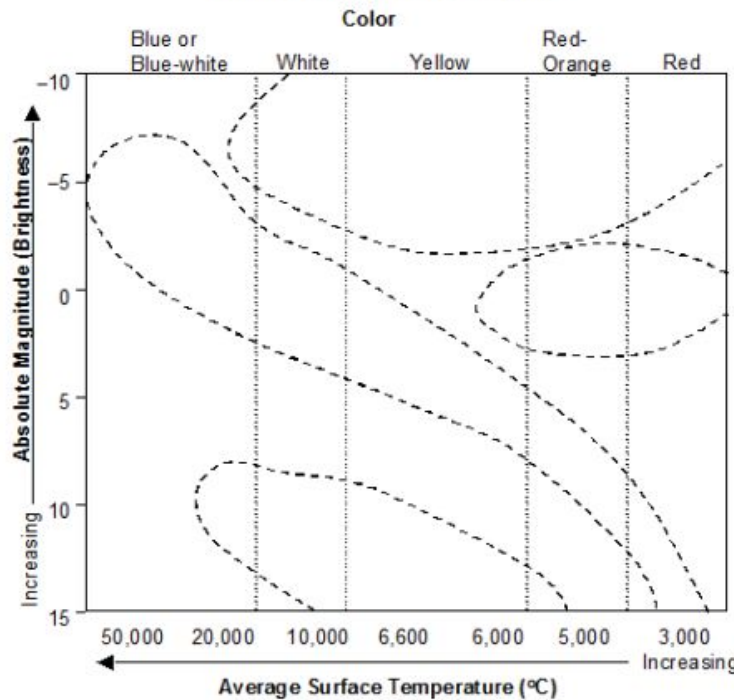
22. Which star is brighter, Spica or the Sun? _____

23. The _____ of a star will affect its brightness.

24. Another term used on HR diagrams to mean brightness is _____.

25. Plot these stars on the HR-Diagram and determine their color.

Letter	Temperature	Luminosity	Color
A	10,000°C	-2	
B	5,000°C	0	
C	6,000°C	-8	
D	9,500°C	10	
E	3,000°C	2	



26. At different times of the year, different stars are visible at night. Explain why.

27. Why does Polaris seem stationary (doesn't move) in the sky?

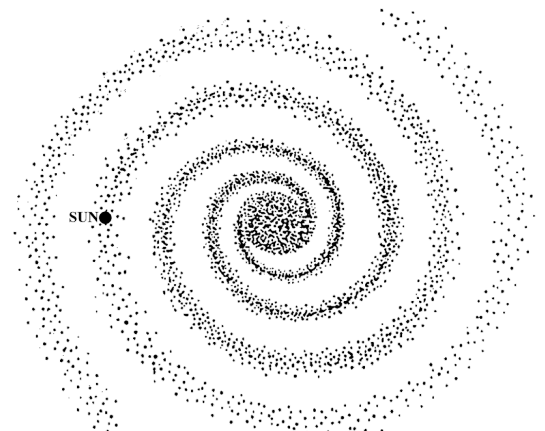
28. Polaris is also known by a more common name which is _____.

29. The _____ is the galaxy our solar system is part of in outer space.

30. Describe the shape of our galaxy?



SIDE VIEW



TOP VIEW

Can we see the shape from Earth?

Why or why not?