



ARELLANO UNIVERSITY  
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PACUCOA ACCREDITED: Level II  
S.Y. 2021-2022

Name: \_\_\_\_\_ Score \_\_\_\_\_

Grade and Section: \_\_\_\_\_ Teacher: Mrs. Ruselda H. Dela Cruz

Date: \_\_\_\_\_

## GRADE 9 SCIENCE

### I. CONTENT:

#### **Lesson No. 23 & 24**

#### **“ Characteristics of Stars & Constellations “**

### II. OBJECTIVE

1. Show which constellations may be observed at different times of the year using models.

### III. ASSESSMENT

Activity 24: Multiple Choice. Write the letter of the choice that best answers/ completes each item on the space provided for before each number. (15 pts.)

- \_\_\_\_\_ 1. \_\_\_\_\_ is a massive ball of plasma that emits light throughout the universe.  
A. Planet  
B. Star  
C. Asteroid  
D. none is the correct answer
- \_\_\_\_\_ 2. The \_\_\_\_\_ is the only star in our solar system.  
A. Rigel  
B. WR102  
C. Sun  
D. UY Scuti
- \_\_\_\_\_ 3. It refers to the luminosity and magnitude of the star.  
A. brightness  
B. color  
C. mass  
D. size
- \_\_\_\_\_ 4. It is the perceived brightness, factoring in size and distance.  
A. absolute magnitude  
B. apparent magnitude  
C. luminosity  
D. none of the above
- \_\_\_\_\_ 5. Cooler stars tend to be \_\_\_\_\_ in color.  
A. red  
B. white  
C. blue  
D. yellow
- \_\_\_\_\_ 6. Hotter star have a \_\_\_\_\_ appearance.  
A. red  
B. blue  
C. white  
D. yellow
- \_\_\_\_\_ 7. It is the hottest star known, sporting a temperature more than 35x hotter than the sun  
A. Rigel  
B. WR 102  
C. UY Scuti  
D. RMC 136a1
- \_\_\_\_\_ 8. Astronomer measures star's temperature on the \_\_\_\_\_.  
A. Kelvin scale  
B. Mole  
C. Celsius  
D. Fahrenheit
- \_\_\_\_\_ 9. One solar mass is equal to the size of \_\_\_\_\_.  
A. sun  
B. earth  
C. star  
D. moon
- \_\_\_\_\_ 10. Our sun's surface temperature is about 5,500 K.  
A. true  
B. false  
C. maybe  
D. None of the ff. is the correct answer

- \_\_\_\_\_ 11. It is the coldest known brown dwarf stars.
- WISE JO85510.83-071442.5
  - Rigel
  - UY Scuti
  - WR 102
- \_\_\_\_\_ 12. Stars in the mid ranges are white or yellow in color, such our sun with surface temperature of\_\_\_\_\_.
- 5000 K – 10000 K
  - 10500 K – 15000 K
  - 2000 K – 4000 K
  - 35000 K – 50000 K
- \_\_\_\_\_ 13. It is a natural science that studies celestial objects and phenomena.
- Astronomy
  - Geology
  - Astrology
  - Astrobiology
- \_\_\_\_\_ 14. The coolest, reddest stars are approximately 2,500 K.
- True
  - False
  - Maybe
  - Incorrect
- \_\_\_\_\_ 15. A star that measure 1 solar radii would be the same size with our own sun, the star Rigel measures 78 solar radii which is much larger than our sun. This means that:
- Rigel is 78x bigger that our sun
  - Any stars can be twice or thrice bigger that the sun
  - Sun is a dwarf star
  - Size of any star is indefinite

#### IV. REFERENCE

- Abecilla, Nesjohn L. et al.2014.Practical Science 9, Diwa Learning System Inc., pp.286-289, pp. 296-300
- Other Learning Resources  
<https://www.lpi.usra.edu/education/skytellers/constellations/>  
<https://www.youtube.com/watch?v=fkEXvZM5RrU>

#### V. GENERALIZATION:

Observing constellations require directional skills, this is easy if you know the directions. The first thing you should do is to look for Polaris or the North Star.

The **Circumpolar constellation** can be observed all year long : **Cassiopeia, Cepheus, Draco, Ursa Major and Ursa Minor** while in the **winter**, look for **Canis Major, Cetus Eridanus, Gemini, Orion, Perseus** and **Taurus**. In the **spring**, keep an eye out for **Bootes, Cancer, Crater, Hydra, Leo** and **Virgo**.

#### VI. INSTITUTIONAL CORE VALUES: Stewardship.