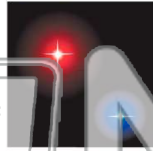




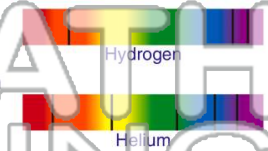
Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 As an astronomer observes the night sky, one star appears to be **red** and another **blue**. What does this mean?



- A The red star is hot and the blue star is cool.
- B The red star is cool and the blue star is hot.
- C They are at different distances from the earth causing different colors.
- D The earth's atmosphere "bends" the light so it looks red and blue.

2 The **composition** of stars is the list of elements that make up that star. The composition of a star is determined by studying the light the star gives off. Which of the following **instruments** helps scientists analyze the composition of stars?



- A a jolly balance
- B a barometer
- C a spectrograph
- D a telescope

3 Stars have been **classified** since the 1800s. Then, they were classified based on the elements determined to be in the stars based on spectrograph studies. **Today, stars are**

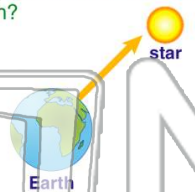
4 Ancient astronomers tried to categorize the brightness of stars by standing under the night sky and observing. Today we know that **brightness** depends in part on that star's **distance** from the



## PREVIEW

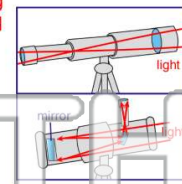
Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

7 500 **light years** away. How many **kilometers** is the star from the earth?



- A 150,000 km
- B 150,000,000 km
- C 1.5 billion km
- D over  $4.7 \times 10^{15}$  km

over **refracting telescopes**. The main **difference** is that **reflecting telescopes use lenses** and **refracting telescopes use mirrors** to gather and focus light.



True or false?

- A true
- B false

9 When using a reflecting or refracting telescopes, why is it **best** to place use the telescope on a **mountain top**?



- A this gets the telescope closer to the stars
- B a mountain top is away from lights and pollution
- C the air is thinner
- D both b and c

10 The earth's atmosphere blocks out certain types of rays. Which of the following types of telescopes can only work in orbit **outside** of the earth's **atmosphere**?

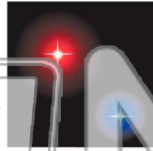


- A refracting telescope
- B reflecting telescope
- C x-ray telescope
- D radio telescope



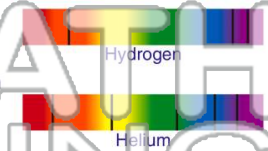
Name \_\_\_\_\_ Class \_\_\_\_\_ Date \_\_\_\_\_

1 As an astronomer observes the night sky, one star appears to be **red** and another **blue**. What does this mean?



- A The red star is hot and the blue star is cool.
- B The red star is cool and the blue star is hot.
- C They are at different distances from the earth causing different colors.
- D The earth's atmosphere "bends" the light so it looks red and blue.

2 The **composition** of stars is the list of elements that make up that star. The composition of a star is determined by studying the light the star gives off. Which of the following **instruments** helps scientists analyze the composition of stars?



- A a jolly balance
- B a barometer
- C a spectrograph
- D a telescope

3 Stars have been **classified** since the 1800s. Then, they were classified based on the elements determined to be in the stars based on spectrograph studies. **Today, stars are**

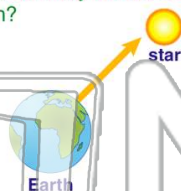
4 Ancient astronomers tried to categorize the brightness of stars by standing under the night sky and observing. Today we know that **brightness** depends in part on that star's **distance** from the



## PREVIEW

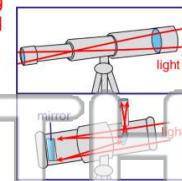
Please [Sign In](#) or [Sign Up](#) to download the printable version of this worksheet

7 500 **light years** away. How many **kilometers** is the star from the earth?



- A 150,000 km
- B 150,000,000 km
- C 1.5 billion km
- D over  $4.7 \times 10^{15}$  km

over **refracting telescopes**. The main **difference** is that **reflecting telescopes use lenses** and **refracting telescopes use mirrors** to gather and focus light.



True or false?

- A true
- B false

9 When using a reflecting or refracting telescopes, why is it **best** to place use the telescope on a **mountain top**?



- A this gets the telescope closer to the stars
- B a mountain top is away from lights and pollution
- C the air is thinner
- D both b and c

10 The earth's atmosphere blocks out certain types of rays. Which of the following types of telescopes can only work in orbit **outside** of the earth's **atmosphere**?



- A refracting telescope
- B reflecting telescope
- C x-ray telescope
- D radio telescope