Worksheet: Temperature (*Use sentences.) name: _____

1. *Examine the diagrams on page 470. (The Sun is actually much larger than Earth.) Why does our part of the world get more direct rays during the summer than we get during the winter?

2. According to the diagrams, how many hours of daylight do we get on the Winter Solstice in December?

3. According to the diagrams, how many hours of daylight do we get on the Summer Solstice in June?

4. According to the diagrams, how many hours of daylight do we get on the equinoxes in September and March?

5. *Use your text to find out what the term “annual temperature range” means. Define it here IN YOUR OWN WORDS. Do not use the word “mean” in your definition.

6. *Read the section titled “Controls of Temperature”, which starts on page 479. Why are the temperature variations greater over land than they are over water (or near water)?

7. *Why do the Sun’s rays penetrate deeper into water than they do into land?

8. Look at Fig. 16.27 page 480. Which city has a greater annual temperature range? *Explain why.

9. *Look at the table on the bottom of page 481, and think about what it is showing. Why does 45 degrees north have a bigger difference between summer and winter temperatures than 45 degrees south (on average)?

10. *Locations at higher elevations such as Butte and Denver have colder average temperatures than locations at lower elevations such as Billings. Explain why.

11. *Carefully read the section titled, “Geographic Position” and look at figure 16.29 on page 482. In what two ways are the locations of Eureka, CA and New York City similar?

12. *Explain why the annual temperature range in NYC is 34 degrees F greater than Eureka’s. Do not use the words “windward” or “leeward”.

13. *Look at figure 16.30 on page 482. Why does Spokane’s temperature vary more than Seattle’s from summer to winter?

14. *Look at figure 16.31 on p. 482. Explain why clouds caused the daytime temperatures to be cooler AND the nighttime temperatures to be warmer.

15. Look at the maps on page 483. In January, are the hottest places on land or over water?

16. In January, are the coldest places on land or over water?

17. On the July map, are the hottest places on land or over water?

18. On the July map, are the coldest places on land or over water?

19. *What do your answers to 15-18 prove about the heating and cooling of land and water?

20. Look at the larger map on page 479. What are the lines called?

21. *What does every place on one of the lines have in common with every other place on the same line?