

Name _____

“Power of the Sun” quiz

1. The solar energy that strikes the Earth’s surface for one hour is enough to provide all of the electricity needs of the Earth for _____.
2. Isaac Newton hypothesized that light was made up of particles that traveled in _____.
3. Christian Huygens hypothesized that light spreads by _____.
4. Thomas Young’s experiments gave evidence that the _____ theory seemed correct.
5. Albert Einstein provided evidence that light is made up of packets of energy called _____.
6. Who was right, Newton or Huygens? _____
7. The first “solar battery” was invented by which company? _____
8. Silicon was used by Bell scientists because it is _____ and because it acts as a _____.
9. Solid silicon does not work electronically unless _____ are introduced.
10. The two most commonly used impurities for silicon semiconductors are _____ and _____.
11. A P-N junction attracts “holes” to the _____ side and electrons to the _____ side.
12. Power photo cells were first demonstrated in what application? _____
13. NASA wanted solar cells for what application? _____
14. Sputnik died after a few weeks. Why? _____
15. Nearly every cell phone call passes through _____ equipment.
16. The first major industrial solar electric users were in the _____ industry.
17. Japan has gone to solar power so quickly because it has few _____ resources.
18. Solar power is driven globally what which two countries? _____ and _____.
19. The world’s largest solar PV installation is in which country? _____.
20. Powerlight’s integrated solar panels provide what three benefits to industries? _____, _____, and _____.
21. The main reason that solar electricity is not widely used in the U.S. is _____.
22. As solar PV costs are decreasing, prices of energy from fossil fuels are _____.
23. The world’s largest publicly owned solar array is in which U.S. city? _____.
24. In many parts of the developing world, solar PV is ideal for power production. Why is this?
_____.
25. Describe one method for transporting solar-cooled vaccines in rural parts of Africa. _____
_____.