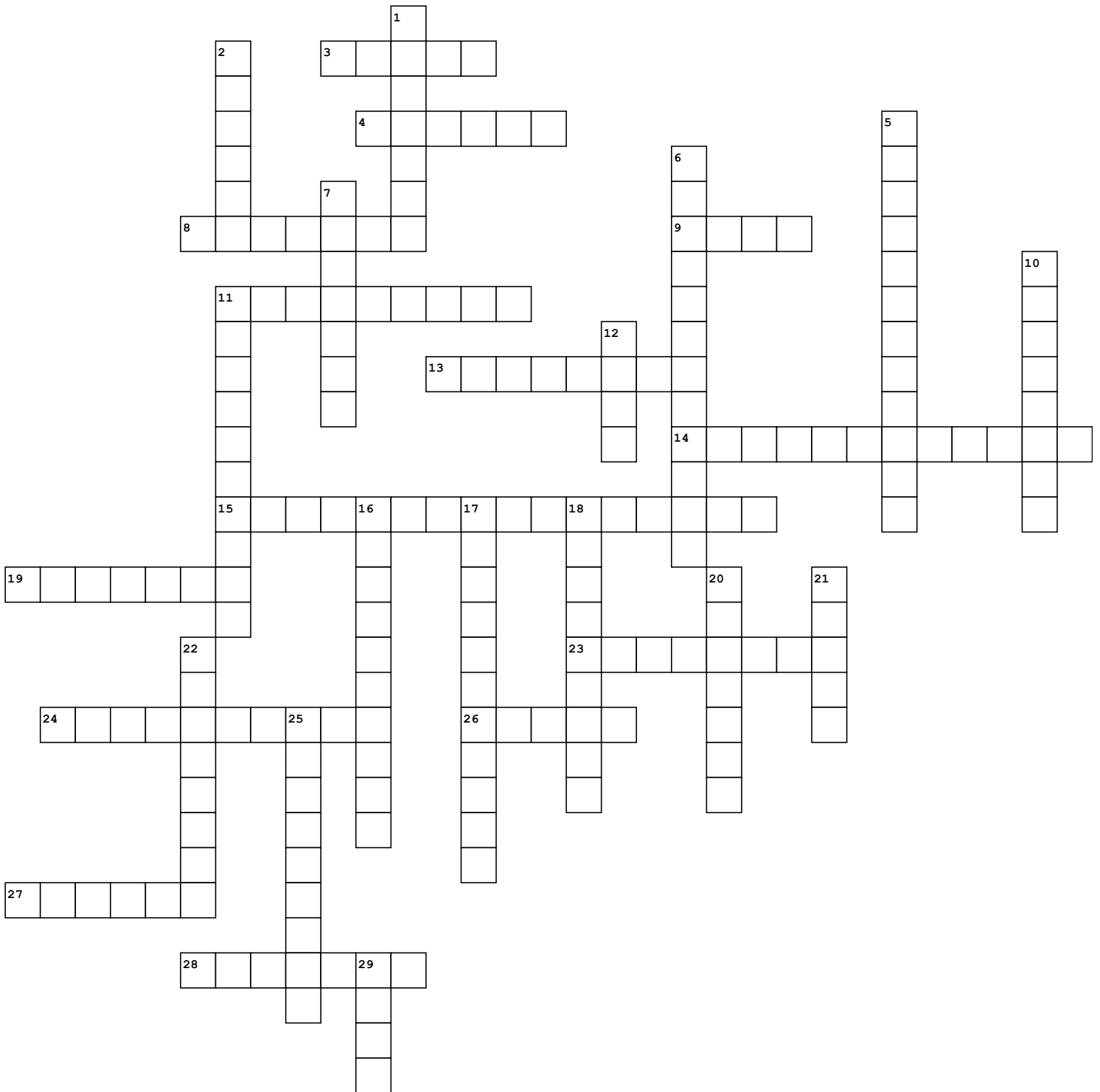


Fall APES Chapter 16



Across

3. This type of architecture is based on energy-efficient and money-saving designs or natural lighting and all that comes with it

Down

1. If this is done with scrap metals when their original use is done, it would take 75% less energy than it would to make a piece of metal from virgin ore

4. An energy-efficient, gasoline-electric car; can go up to 50 miles per gallon
8. This type of program proposed by Amory Lovins would have the buyers of fuel-inefficient vehicles would pay a high fee
9. The acronym for the government mandated standards for fuel efficiency in cars
11. These government payments help businesses survive and thrive
13. Doing this in houses and other buildings to keep them warm in the winter or cool in the summer can improve energy efficiency
14. Production of two useful forms of energy from the same fuel source; used in combined heat and power systems (CHP)
15. The measure of how much work we can get from each unit of energy we use
19. Made from plants such as sugarcane, corn, and switchgrass, and from agriculture, forestry, and municipal wastes. Involves converting plant starches into sugars
23. Electric cars may eventually being using these as they are at least twice as efficient as internal combustion engines, require little maintenance, and use hydrogen gas as fuel to produce electricity
24. Uses kinetic energy of flowing and falling water to produce electricity
26. A type of electrical grid currently being promoted that would save the U.S. economy \$100 billion each year
27. This type of energy-efficient car make up 45% of new passenger cars in Europe, have very low emissions, are quiet, and are about 30% more fuel efficient than traditional combustion engines
28. Consists of plants materials and animal wastes that we can burn directly as a solid fuel or convert into gaseous or liquid biofuels
2. This solar heating system captures energy from the sun by pumping a heat absorbing fluid through special collectors that are facing the sun
5. A car that runs primarily on electricity and can go between 100 to 1,000 miles per gallon
6. This type of light bulb, also known as a "heat bulb" wastes about 90-95% of the electricity it draws to produce the light
7. This solar heating system absorbs and stores heat from the sun directly within a well-insulated structure
10. This crisis is affecting 2.7 billion people in 77 countries due to harvesting wood faster than it can be replenished
11. These thin wafers of purified silicon allow them to produce electricity when sunlight strikes them
12. This type of energy path is based on increasing use of nonrenewable coal, oil, natural gas and nuclear energy
16. This type of energy is heat stored in soil, underground rocks, and fluids in the earth's mantle
17. This type of lighting uses one-fourth the energy as its predecessor and lasts ten times longer
18. This type of power plant, which is very common in Indiana, wastes about 66% of its energy and produces toxic ash as a byproduct
20. This type of power plant wastes about 75% of its energy and is also very dangerous as seen in past accidents; e.g. 3 Mile Island
21. These thermal systems use different methods to collect and concentrate solar energy in order to boil water and produce steam for generating electricity
22. Used commonly in trucks and buses, this is produced from vegetable oil extracted from various plants
25. Places where wind turbines are being erected in large numbers
29. This type of energy path is based on improving energy efficiency and increasing the use of various renewable energy resources