

Energy Bumper Stumpers

A QUICK LOOK AT ENERGY BUMPER STUMPERS

Bumper Stumpers is an activity to review and reinforce students' knowledge about energy.

GRADES: 3–8

PREPARATION: LOW

TIME: 20 MINUTES

GET READY

Before class, choose five to ten of the license plates listed on pages 35-36. The number of license plates you use will depend on the age level and experience of the students playing the game.

GET SET

Divide the students into five or more teams. Explain to the students how the game is played. Instruct each team to take out one sheet of paper for their answers. Next, write the license plates that you have chosen on the blackboard or on transparencies.

GO

- In the first round, give the students five to ten minutes to solve the **Bumper Stumpers** without the clues. Once the round is over, check the teams' answers. The teams receive ten points for each **Bumper Stumper** they guessed correctly.
- In round two, read the clues that correspond to the license plates on the board. The teams should now try to guess the **Bumper Stumpers** they missed in the first round. When round two is completed, check the teams' answers again. The teams receive five points for each **Bumper Stumper** they guessed with the clues. The team with the most points is the winner.

Energy Bumper Stumpers

1. **NRGWSTR**—This license plate would be ideal for a person who doesn't believe in conserving our resources. (Energy Waster)
2. **B8RAA**—This plate would be ideal for someone used to making split decisions. (Beta Rays)
3. **NDSTRE**—This plate would be appropriate for the leading consumer of electricity. (Industry)
4. **SRMIK**—This plate describes the protective covering that surrounds a uranium fuel pellet. (Ceramic)
5. **DSTL8N**—This plate refers to the process in which petroleum is separated into various components. (Distillation)
6. **ALKHAUL**—This plate describes another term for the product of fermentation of biomass. (Alcohol)
7. **SWNDOO**—This plate identifies the most favorable method of access for passive solar heating. (South Windows)
8. **CREWDOYL**—This plate suggests another name for a liquid fossil fuel. (Crude Oil)
9. **CHAIRNBL**—This plate names the site of a nuclear disaster. (Chernobyl)
10. **3MIISLND**—This plate names the site of a nuclear accident. (Three Mile Island)
11. **SLRNRG**—This plate describes a type of renewable energy. (Solar Energy)
12. **GNR8R**—This plate names a device containing a magnet and a coil of wire. (Generator)
13. **NSL8ORS**—This plate describes the type of materials that do not conduct electricity well. (Insulators)
14. **POWRLYN**—This plate identifies the method of transporting electricity across our nation. (Power Line)
15. **NCANDSNT**—This plate refers to one type of device that turns electrical energy into light energy. (Incandescent)
16. **FLAMNT**—This plate describes the device inside a light bulb that conducts the electricity. (Filament)
17. **YRAINEM**—This plate refers to the source of a nonrenewable energy that is not a fossil fuel. (Uranium)
18. **POLUTNT**—This plate identifies a hazard of burning fossil fuels. (Pollutant)
19. **DARYK**—This plate refers to the instrument used to recover petroleum. (Derrick)
20. **GRENHOWS**—This plate describes a building that effectively uses passive solar heating. (Green House)
21. **NEWKLEYE**—This plate identifies the place where nuclear fission takes place. (Nuclei)
22. **RAD8**—This plate describes heat energy transfer. (Radiate)
23. **SLYCON**—This plate identifies the materials used in turning solar energy into electrical energy. (Silicon)
24. **POWRTOWR**—This plate refers to a device used to collect solar energy. (Power Tower)
25. **RECRE8NL**—This plate names the vehicle that often is associated with propane. (Recreational)
26. **POWRPUL**—This plate names the cooperative of utilities linked together to share electricity efficiently. (Power Pool)

Energy Bumper Stumpers

27. **BBKUGRIL**—This plate names a device that many people use during the summer, some of which require propane to operate. (Barbecue Grill)
28. **DSYLFUL**—This plate identifies a product of petroleum distillation used by large trucks. (Diesel Fuel)
29. **SIZMIK**—This plate names the method most often used to locate types of fossil fuels. (Seismic)
30. **C-NMLS**—This plate names what scientists believe to be the source of several fossil fuels. (Sea Animals)
31. **SDIMNT**—This plate refers to the material that settled on top of ferns to form coal. (Sediment)
32. **FIRTLIZR**—This plate identifies a way to encourage plant growth for biomass fuels. (Fertilizer)
33. **YOTYLTEE**—This plate identifies the companies responsible for distributing electricity. (Utilities)
34. **RSRFOR**—This plate names the location of potential energy at a hydropower plant. (Reservoir)
35. **PNSTOK**—This plate signals the portion of a hydropower plant that brings the water to the turbine. (Penstock)
36. **FASYLFUL**—This plate identifies a term given to several of the nonrenewable energy sources. (Fossil Fuel)
37. **TITLPOWR**—This plate names a type of hydropower that is affected by the moon. (Tidal Power)
38. **WINTRBIN**—This plate refers to another name for a windmill. (Wind Turbine)
39. **UNETRAN**—This plate identifies the method of transportation most commonly used when moving coal. (Unit Train)
40. **LYMSTON**—This plate identifies a type of rock in which petroleum is often trapped. (Limestone)