

POWER PLANT QUIZ

NAME

WHAT HAPPENS AT A COAL PLANT?

Circle the letter of the correct answer to each question.

1. Xcel Energy uses coal that is:
 - a. low sulphur because it burns cleaner
 - b. low carbon because it burns hotter
 - c. low moisture because it weighs less
2. A coal mill is where:
 - a. coal is dried out
 - b. coal is crushed to a powder
 - c. coal is mixed with steam
3. The boiler is so big because:
 - a. it's cheaper to do things in big batches
 - b. it has to make a lot of steam to turn the turbine
 - c. otherwise it would explode from the pressure
4. The boiler burns coal to make:
 - a. steam
 - b. hot oil
 - c. highly pressurized air
5. The inside of a generator contains:
 - a. very hot steam
 - b. wrapped coils of wire
 - c. huge blades
6. Voltage describes:
 - a. how brightly a light bulb shines
 - b. how fast electricity travels
 - c. how much pressure or force the electricity is under
7. Xcel Energy power plants may use water from:
 - a. rivers and lakes
 - b. municipal sewage systems
 - c. all of the above
8. After the steam turns the turbine:
 - a. it helps to heat the power plant
 - b. it is condensed and recycled
 - c. it evaporates from the cooling towers
9. A power plant scrubber is used to clean:
 - a. air
 - b. water
 - c. coal
10. A precipitator works something like this to clean ash from air:
 - a. a vacuum cleaner
 - b. a sprayer
 - c. a magnet
11. The power stack:
 - a. releases air back into the atmosphere
 - b. takes in air used to blow the coal powder
 - c. releases high pressure steam into the atmosphere
12. Which type of power plant works most like a coal plant?
 - a. hydro
 - b. biomass (garbage or refuse)
 - c. wind farm