

Name: _____

Date Started: _____ Date Completed: _____ Score: _____

Learning Activity Sheet
Energy Generation, Transmission, and Distribution

A. Read and answer each item carefully. Encircle the letter of the correct answer.

1. Which is used to increase the voltage across line conductors?

- A. step-down transformer
- B. fuse
- C. step-up transformer
- D. transmission substation

2. Which of the following statements is TRUE about transmission lines?

- A. have low voltage
- B. have increased current
- C. have high voltage
- D. should be thin

3. During transmission of electricity, what is done to minimize power loss?

- A. current along the lines is increased
- B. voltage across the lines is increased
- C. thin transmission cables are used
- D. current along the lines is maintained

4. Which of the following decreases the voltage across the line conductors?

- A. step-up transformer
- B. step-down transformer
- C. fuse
- D. transmission substation

5. Which of the following is a practical way of reducing your electric bill consumption?

- A. Connect appliances in series.
- B. Make use of limited appliances.
- C. Turn off the main switch during the day.
- D. Turn off the appliances when not in use.

6. Which of the following power plants does not use steam to drive the turbines to produce electricity?

- A. coal-fired
- B. geothermal
- C. hydropower
- D. nuclear

7. Which of the following refers to a long conductor that carries a huge amount of power at a very high voltage?
- transformer
 - transmission line
 - distribution pole
 - control panel
8. Which of the following refers to the final stage in the delivery of electric power from the substations consumers?
- generation
 - transmission
 - power station operation
 - distribution
9. Which of the following is NOT a good practice when handling electrical circuits or appliances?
- Never pull a plug out by its cord.
 - Always use insulated tools while working.
 - Never put fingers or other objects in an outlet.
 - Plug as many appliances as they can be plugged in one socket to save money.
10. Which of the following statements is TRUE about electrical power?
- Electric power is the product of electrical energy and time.
 - The unit used in measuring electrical power is kilowatt-hour.
 - The electrical power consumption can be measured by a voltmeter or kilowatt-hour meter.
 - Electric power is the product of current and the potential of charge to deliver energy.

B. Complete the table by identifying what is asked for in each row. The first one is done for you.

Power Plant	Source	Energy Transformation
Hydroelectric power	Water	potential → kinetic → mechanical electrical
1.	Coal	2.
3.	4.	nuclear → heat → mechanical electrical
Wind farm	5.	6.