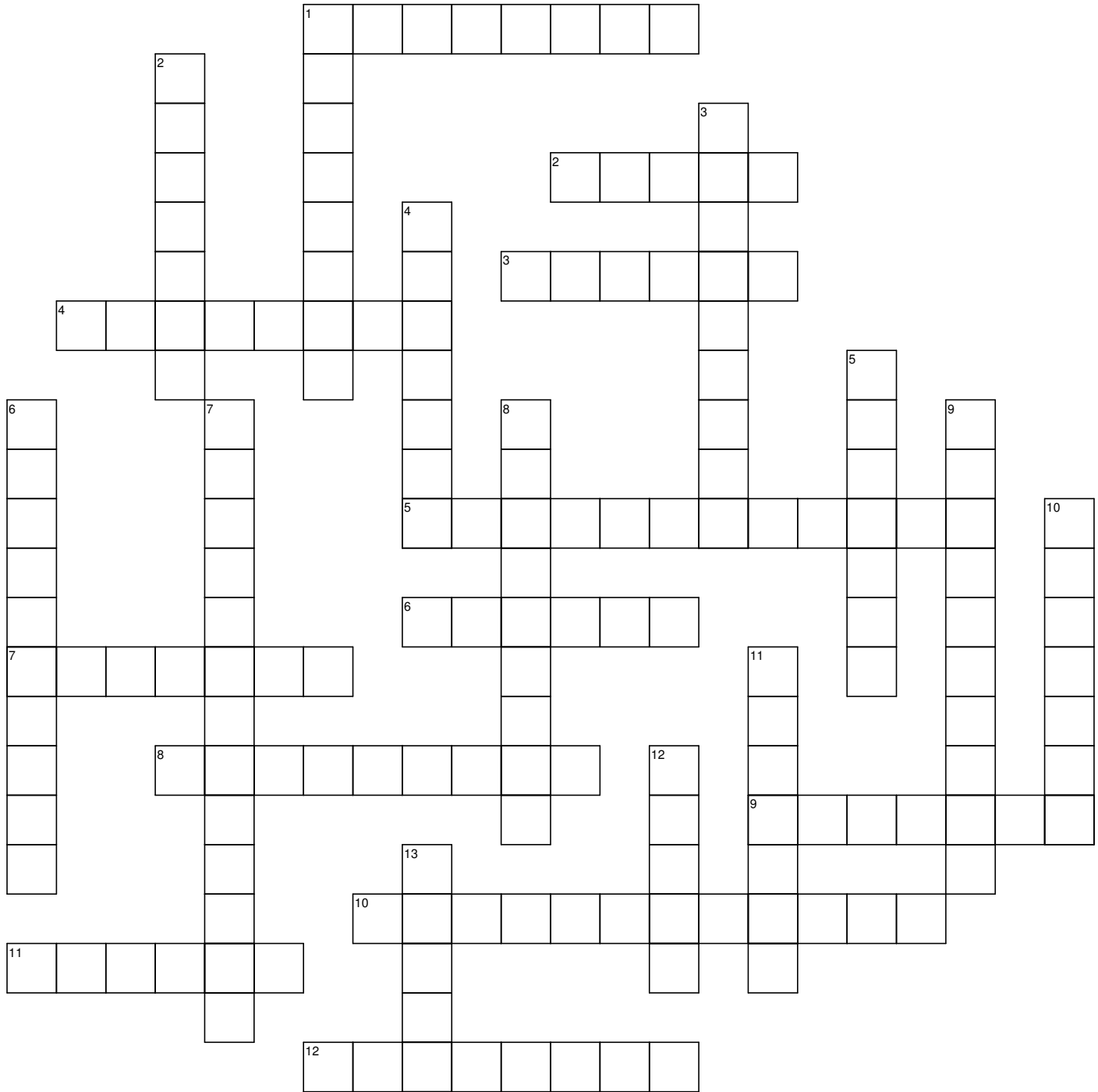


Crossword Puzzle - 5.1.1 Energy and Power

Name: _____ Class: _____ Date: _____

Fill in the crossword puzzle by using the clues.



Across

1. These nonrenewable resources are forms of _____ energy created from natural occurring elements.

2. _____ Systems must have: source of energy, process and load.
3. One type of energy flow diagrams are called _____ Diagrams.
4. The flow of energy within any system can be documented using energy flow _____.
5. Nuclear power is also considered a _____ energy resource.
6. Advancements in the processing and controlling of _____ resources have been an enabling factor in the development of technology.
7. _____ power is generated using uranium and produces around 11% of the world's energy needs.
8. The designed world is the product of a design process, which provides ways to turn _____ - materials, tools and machines, people, information, energy, capital, and time - into products and services
9. _____ energy (light): is electromagnetic energy that travels in transverse waves
10. _____ resources include fossil fuels such as coal, oil, and natural gas.
11. _____ fuels provide around 66% of the world's electrical power and meet 95% of the world's total energy demands.
12. For example, the _____ (chemical energy) in a car is converted to heat (thermal energy) and movement (mechanical energy).

Down

1. _____ energy: is energy stored in the bonds of atoms and molecules. Biomass, petroleum, natural gas, and coal are examples of stored chemical energy.
2. _____ energy: is energy stored in the nucleus of an atom the energy that holds the nucleus together.
3. _____ energy resources include water, solar and wind.
4. The heat required to produce steam, which turns the turbine is created using a process called _____, where atoms split and release energy in the form of heat.
5. Wind works similarly, the wind blows and turns the blades of the _____.
6. _____ energy: energy stored in the movement of objects
7. _____ power plants take advantage of the downward flow of water to turn the blades of a turbine.

8. First Law of Thermodynamics-Energy cannot be created or destroyed, it can be _____ from one form to another.
9. _____ energy: energy made available by the flow of electric charge through a conductor.
10. Solar power plants generate electricity by converting the _____ energy from sunlight to electrical using specific materials within the solar panel.
11. _____ energy: or heat, is the vibration and movement of the atoms and molecules within substances
12. Oil and Coal _____ plants produce harmful environmental emissions.
13. The major _____ of energy are: thermal, radiant (light,), electrical, mechanical, chemical, and nuclear.

Select your answers from the following words:

Sankey	forms	Nonrenewable	gasoline
Electrical	Thermal	Chemical	chemical
fission	Nuclear	Mechanical	energy
power	converted	Hydroelectric	Radiant
radiant	nonrenewable	turbine	diagrams
Nuclear	resources	Renewable	Power
Fossil			

Word Search - 5.1.1 Energy and Power

Name: _____ Class: _____ Date: _____

Try to find the hidden words.

J R A D I A N T S F Z A U J S G Q O S I
U L U R W E V C O N V E R T E D G R S X
K W R E N E W A B L E M N X P O W E R D
N O N R E N E W A B L E M E J G H S U H
F Y F N U C L E A R X S R J R U L O E X
M A J I U I O C H E M I C A L G R U T T
W Z C U S C Y F F O R M S R Q H Y R A R
D A F U K S L E L E C T R I C A L C G B
J F G R C F I E P P H N C K N W V E H G
D R O T A Y U O A J G Y W O L A L S W Q
A I X Z U D N O N R E N E W A B L E Z S
V G A S O L I N E J F H G H S U T N J E
W T F G L X C A W T M E C H A N I C A L
V H J O R E H F N L F J V S A A G D X B
G E B C S A E F G T Z Z M S B B R A T U
V R Y Y F S M T I L P H J A S I Y N A W
V M V C O T I S P D T O L N R A W Z W F
O A U M Y D C L M Y H J W K E F B H S L
F L E O Y S A T U R B I N E E B A H V G
H Y D R O E L E C T R I C Y R J T L U W

Select from the following words:

Power
chemical
Renewable
radiant
resources
converted
Sankey

Electrical
Nonrenewable
Mechanical
energy
Nuclear
fission

nonrenewable
Nuclear
Radiant
diagrams
gasoline
power

Thermal
turbine
Fossil
Hydroelectric
Chemical
forms

Fill in the Blank - 5.1.1 Energy and Power

Name: _____ Class: _____ Date: _____

Fill in the blanks in these sentences with the word that fits.

1. The designed world is the product of a design process, which provides ways to turn _____ - materials, tools and machines, people, information, energy, capital, and time - into products and services
2. Advancements in the processing and controlling of _____ resources have been an enabling factor in the development of technology.
3. First Law of Thermodynamics-Energy cannot be created or destroyed, it can be _____ from one form to another.
4. For example, the _____ (chemical energy) in a car is converted to heat (thermal energy) and movement (mechanical energy).
5. The major _____ of energy are: thermal, radiant (light,), electrical, mechanical, chemical, and nuclear.
6. _____ energy: or heat, is the vibration and movement of the atoms and molecules within substances
7. _____ energy (light): is electromagnetic energy that travels in transverse waves
8. _____ energy: energy made available by the flow of electric charge through a conductor.
9. _____ energy: energy stored in the movement of objects
10. _____ energy: is energy stored in the bonds of atoms and molecules. Biomass, petroleum, natural gas, and coal are examples of stored chemical energy.
11. _____ energy: is energy stored in the nucleus of an atom the energy that holds the nucleus together.
12. _____ resources include fossil fuels such as coal, oil, and natural gas.
13. These nonrenewable resources are forms of _____ energy created from natural occurring elements.
14. _____ fuels provide around 66% of the worlds electrical power and meet 95% of the worlds total energy demands.
15. Oil and Coal _____ plants produce harmful environmental emissions.

16. Nuclear power is also considered a _____ energy resource.
17. _____ power is generated using uranium and produces around 11% of the world's energy needs.
18. The heat required to produce steam, which turns the turbine is created using a process called _____, where atoms split and release energy in the form of heat.
19. _____ energy resources include water, solar and wind.
20. _____ power plants take advantage of the downward flow of water to turn the blades of a turbine.
21. Wind works similarly, the wind blows and turns the blades of the _____.
22. Solar power plants generate electricity by converting the _____ energy from sunlight to electrical using specific materials within the solar panel.
23. _____ Systems must have: source of energy, process and load.
24. The flow of energy within any system can be documented using energy flow _____.
25. One type of energy flow diagrams are called _____ Diagrams.

Select your answers from the following words:

Renewable	Nuclear	fission	forms
Fossil	Mechanical	turbine	Chemical
Nonrenewable	gasoline	Thermal	Nuclear
Sankey	Hydroelectric	energy	converted
nonrenewable	power	chemical	diagrams
resources	Power	Radiant	Electrical
radiant			

Mix and Match - 5.1.1 Energy and Power

Name: _____ Class: _____ Date: _____

Fill in the blank with the letter next to the word that best completes the sentence.

1. Advancements in the processing and controlling of _____ resources have been an enabling factor in the development of technology. a. Renewable
2. _____ energy: energy made available by the flow of electric charge through a conductor. b. Mechanical
3. These nonrenewable resources are forms of _____ energy created from natural occurring elements. c. converted
4. _____ Systems must have: source of energy, process and load. d. Hydroelectric
5. _____ energy: is energy stored in the bonds of atoms and molecules. Biomass, petroleum, natural gas, and coal are examples of stored chemical energy. e. Nuclear
6. _____ energy: or heat, is the vibration and movement of the atoms and molecules within substances f. nonrenewable
7. One type of energy flow diagrams are called _____ Diagrams. g. power
8. _____ fuels provide around 66% of the world's electrical power and meet 95% of the world's total energy demands. h. Thermal
9. The designed world is the product of a design process, which provides ways to turn _____ - materials, tools and machines, people, information, energy, capital, and time - into products and services i. Nuclear
10. Nuclear power is also considered a _____ energy resource. j. forms
11. The flow of energy within any system can be documented using energy flow _____. k. Electrical
12. _____ power plants take advantage of the downward flow of water to turn the blades of a turbine. l. Fossil
13. _____ energy resources include water, solar and wind. m. diagrams
14. The heat required to produce steam, which turns the turbine is created using a process called _____, where atoms split and release energy in the form of heat. n. chemical
15. _____ resources include fossil fuels such as coal, oil, and natural gas. o. resources

16. First Law of Thermodynamics-Energy cannot be created or destroyed, it can be _____ from one form to another. p. Nonrenewable
17. _____ energy (light): is electromagnetic energy that travels in transverse waves q. Power
18. _____ energy: is energy stored in the nucleus of an atom the energy that holds the nucleus together. r. radiant
19. Solar power plants generate electricity by converting the _____ energy from sunlight to electrical using specific materials within the solar panel. s. Radiant
20. For example, the _____ (chemical energy) in a car is converted to heat (thermal energy) and movement (mechanical energy). t. fission
21. _____ power is generated using uranium and produces around 11% of the worlds energy needs. u. turbine
22. _____ energy: energy stored in the movement of objects v. gasoline
23. Oil and Coal _____ plants produce harmful environmental emissions. w. Chemical
24. Wind works similarly, the wind blows and turns the blades of the _____ . x. energy
25. The major _____ of energy are: thermal, radiant (light,), electrical, mechanical, chemical, and nuclear. y. Sankey