

Renewable Energy Ag Mag - Vocabulary

Directions: Read the question and choose the best answer.

1

_____ means protecting, restoring, and managing natural resources so that they last as long as possible.

- A Recycling
- B Conservation
- C Generation
- D Reusing

2

_____ involves recovering materials that people usually throw away, such as glass, aluminum cans, and paper.

- A Preserving
- B Sustaining
- C Recycling
- D Conserving

3

_____ means materials that were or are living in our environment.

- A Ethanol
- B Biomass
- C Biodiesel
- D Alcohol

4

Biofuels include which of the following?

- A Ethanol
- B Biodiesel
- C Neither A or B
- D Both A and B

Renewable Energy Ag Mag - Vocabulary

Directions: Read the question and choose the best answer.

5

Energy can come from all of the following except _____.

- A Sun
- B Wind
- C Rock
- D Corn

6

Modern-day collection of wind energy is done with windmill-like structures called _____.

- A Wind turbines
- B Hydroelectric Cells
- C Fuel-oil
- D Engines

7

_____ is fuel known as "the green fuel" and is made from extracting sugar from corn kernels.

- A Biodiesel
- B Solar
- C Ethanol
- D Alcohol

8

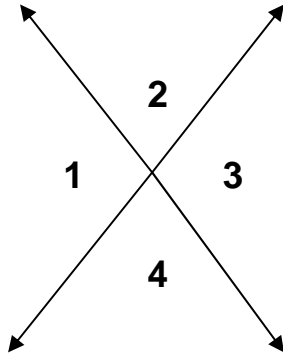
All of the following are examples of engine types that require different types of fuel except _____.

- A Diesel
- B Vegetable
- C Electric
- D Internal combustion

Renewable Energy Ag Mag - Math

Identifying Angles

Directions: Choose the best answer. Use the shape below for questions 1-4.



1

Angles 3 and 4 are _____.

A Adjacent
B Vertical

2

Angles 2 and 4 are _____.

A Adjacent
B Vertical

3

Angles 1 and 4 are _____.

A Supplementary
B Complementary
C Equal
D None of the above

4

Angles 2 and 4 are _____.

A Supplementary
B Complementary
C Equal
D None of the above

Renewable Energy Ag Mag - Math

Identifying Angles

Directions: Choose the best answer.

5

Adjacent angles are _____.

- A Supplementary
- B Complementary
- C Equal
- D None

6

Vertical angles are _____.

- A Supplementary
- B Complementary
- C Equal
- D None

7

Complementary means that the measure of two angles adds up to _____.

- A 45 degrees
- B 90 degrees
- C 180 degrees
- D 360 degrees

8

Supplementary means that the measure of two angles adds up to _____.

- A 45 degrees
- B 90 degrees
- C 180 degrees
- D 360 degrees

Renewable Energy Ag Mag - Reading Passage

Taken from *AgriScience Explorations* by Morgan, Chelewski, Lee and Wilson

Renewability is whether or not a natural resource can be renewed. The resource is restored or replenished after it is used. All natural resources are either renewable or nonrenewable.

A *renewable natural resource* is one replaced after it is used. More of the resource is made or used resources are made ready to use again. Renewing may take a long time. Usually, new resources are not made. The amount of the resource is constant. Renewing is a matter of restoring the resource for future use. Air, soil, water, and wildlife are renewable natural resources.

Most wildlife will renew itself. Some wildlife animals near extinction have been renewed. Water and air are different from wildlife. Over time, water and air are renewed by cleaning. The amount of water on the earth never changes. The form it is in an where it is found change. Used water is gradually cleaned and restored as part of the water cycle. We need to be careful to avoid damaging water. Soil replenishes itself over several years. New soil forms from rock and the decay of leaves and other materials. This is a slow process. Some people use compost bins at their homes to make soil from paper and food scraps.

A *nonrenewable natural resource* is not replaced after it is used. Once used, they are gone! Fortunately, some can be recycled after use. Minerals and fossil fuel are nonrenewable resources. Of course, some people say that fossil fuel is renewable but an extra long time is required. Further, some are not sure it is happening.

Many minerals have become scarce. Copper, gold, silver, and chromium are examples of scarce metals. Some are still being mined but require much effort to get.

Fortunately, some metals can be recycled. We must save materials made of metal after they have been used. These are reprocessed to get the metal. Iron, aluminum, chromium, copper, and lead are common examples.

Sustainable resource use means that natural resources are used so they last a long time. People use no more than they need. Efforts are made to go about life so natural resources are not depleted. People can take steps to sustain resources. Three important steps are renewing, reusing, and recycling.

Renewable Energy Ag Mag - Reading Passage

Directions: After reading the passage, read each question and choose the best answer.

1

Which of the following is not a renewable resource?

- A Air
- B Soil
- C Gold
- D Water

2

True or False:
The amount of water on earth never changes.

- A True
- B False

3

The process of replenishing soil from rock and the decay of leaves and other materials _____.

- A Takes one year.
- B Is a fast process
- C Takes 3 years
- D Is a slow process

4

Water is cleaned as a part of the water _____.

- A Cycle
- B Process
- C Resource
- D Restoration

Renewable Energy Ag Mag - Reading Passage

Directions: After reading the passage, read each question and choose the best answer.

5

One example of a nonrenewable resource is _____.

- A Trees
- B Water
- C Minerals
- D Air

6

A nonrenewable natural resource _____.

- A Over time, can be renewed and cleaned.
- B Cannot be replaced after it is used.
- C Can be restored by the proper cycle.
- D Cannot be damaged by humans.

7

One step that can be taken to sustain resources is to _____.

- A Recycle
- B Remove
- C Replace
- D Reprocess

8

_____ is whether or not a resource can be renewed.

- A Reducability
- B Reprocessability
- C Reusing
- D Renewability



Extended Response—RENEWABLE ENERGY

Based on the information in the Renewable Energy Ag Mag and your own experience, why is it important to use renewable energy resources like wind energy, solar power, and biofuels?