

Name:

Class:

Date:

Lesson 7.2: Biofuels

Lesson Review

Carefully study the lesson and then answer the following questions.

1. What is the definition of a biofuel? (7.2.1)

Answer:

Match each biofuel to its definition.

A. Ethanol

B. Biodiesel

C. Methanol

2. Fuel derived from vegetable oils and animal fats (7.2.1)

Answer:

3. Natural by-product of the fermentation of sugars derived from plants (7.2.1)

Answer:

4. Fuel derived from natural gas, coal, plant vegetation, or agricultural crop biomass (7.2.1)

Answer:

5. What are three agricultural feedstocks used to make biofuels? (7.2.1)

Answer:

6. About _____ gallons of ethanol are produced by 60 lb of corn. (7.2.1)

A. 1.5

B. 2

C. 2.5

D. 3.5

Answer:

7. Typical automobiles in the United States can operate on fuel with _____ ethanol. (7.2.1)

A. 10%

B. 25%

C. 50%

D. 75%

Answer:

8. Briefly explain the difference between dry mill and wet mill processes of producing ethanol. (7.2.1)

Answer:

9. One ton of corn stover will produce _____ gallons of ethanol. (7.2.1)

A. 60

B. 80

C. 100

D. 120

Answer:

10. *True or False?* Biodiesel is not suitable for use in traditional diesel engines. (7.2.1)

Answer:

11. *True or False?* Glycerin is considered a valuable by-product and is used in soaps. (7.2.1)

Answer:

12. *True or False?* While many crops are important sources of biodiesel, natural fibers like algae are not used. (7.2.1)

Answer:

13. *True or False?* Methanol is a biofuel that exists as a gas. (7.2.1)

Answer:

14. *True or False?* Vehicles in Brazil run on fuel blends as high as 25% ethanol. (7.2.1)

Answer:

15. *True or False?* Producing biofuels has no impact on the traditional livestock industry. (7.2.2)

Answer:

16. The biofuel with the most controversy surrounding its use is _____. (7.2.2)

- A. ethanol
- B. biodiesel
- C. methanol
- D. All biofuels carry equal amounts of controversy.

Answer:

17. Compared to petroleum diesel, using biodiesel reduces emissions by _____. (7.2.3)

- A. 60%
- B. 72%
- C. 86%
- D. 94%

Answer:

18. *True or False?* The use of biofuel blends is expected to decrease in the upcoming years. (7.2.4)

Answer:

Critical Thinking

1. Do you think biofuels will ever completely replace the use of fossil fuels? Explain your answer. (7.2.4)

Answer: