

Teacher Page: Case Study- Is Biodiesel the Answer? (p. 333)

Unit: Unit 7

Grade Level Indicator:

Description:

Time: 25 minutes

Materials: Book page 333

Procedure:

Warm-up:

Instructional Strategies:

Assessment: Grade question, student participation

Variations: Do questions orally with teacher led instruction,

Interdisciplinary Connection:

Sample Data/ Answers: The answer key follows the student page.

Name _____ Date _____ Period _____

Case Study- Is Biodiesel the Answer? (p. 333)

1. How is diesel biofuel produced? _____

2. Who produces 95% of the world's biodiesel? _____

3. What two crops is the U.S. using for biodiesel production? _____

4. What does Brazil, Malaysia, and Indonesia use to produce biodiesel? _____

5. What is the net energy for palm oil compared to rapeseeds? Soybeans? _____

Critical Thinking: What are 3 advantages and disadvantages of using biodiesel? _____

Key

1. Vegetable oil is extracted from soybeans, rapeseeds, sunflowers, oil palms, jatropha, shrubs, and coffee grounds.
2. European Union countries (primarily Germany, France, and Italy)
3. Soybeans and canola
4. Palm Oil
5. 5 times when compared to rapeseeds and 8 to 9 times when compared to soybeans

Critical Thinking: Answers will vary