

Name: _____

Fueling the World, One By-Product at a Time

Aligned to the following standards:

FFA.PL-A; FFA.PL-C; FFA.PL-F; FFA.PG-I; FFA.CS-N;
FFA.CS-P; AG2; AG5; CS.02; CS.05; CCSS.ELA.RI.9-10.3;
CCSS.ELA.RI.9-10.4; CCSS.ELA.W.9-10.2;
CCSS.ELA.RST.9.10.4; CCSS.ELA.WHST.9.10.4; CRP.02;
CRP.04; CRP.05; CRP.08

Part 1

Directions:

Read the article "Fueling the World, One By-Product at a Time" and complete the following activities. The article can be found at <https://www.ffa.org/the-feed/fueling-the-world-one-by-product-at-a-time/>.



In your own words, why is biodiesel so important to the world?



How does biodiesel directly impact you?



How many gallons of biodiesel were produced in 2021?

- a. 100 gallons
- b. 3 million gallons
- c. 1 billion gallons
- d. 3 billion gallons
- e. 4 billion gallons



Which of the following is not a benefit of biodiesel, according to the article?

- a. Fewer sick days
- b. Reduced cancer risk
- c. Fewer asthmatic symptoms
- d. Lower rate of premature deaths
- e. Fewer joint issues



The use of biodiesel reduces greenhouse gases by what percentage?

- a. 75 %
- b. 85%
- c. 95 pounds
- d. 85 particles



What are the three major sources of fats and oils for biodiesel use?

- (1)
- (2)
- (3)



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Part 2

Directions:

Using the chart below, compare and contrast biodiesel and renewable diesel in the production, use, etc. Include a minimum of five points in each column.

- CHS: Renewable Diesel vs. Biodiesel, <https://www.cooperativeownership.com/around-the-table/renewable-diesel-vs-biodiesel/>

Biodiesel	Similarities	Renewable Diesel
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.

- Would it be easy to introduce renewable diesel into our current systems? Why/why not?

Part 3

Directions:

Using [AgExplorer](#), identify three careers that would directly involve biodiesel and biodiesel production.

- _____: How does this career fit?
- _____: How does this career fit?
- _____: How does this career fit?

- Construct a 3-5 sentence statement that you could share with someone unfamiliar with biodiesel and renewable diesel. Be sure to consider everything you have learned about production and use.