

**Quiz 2 for Module 2: Energy Basics and Conservation and Efficiency in Ag
ANSWER KEY**

1. When did the “Green Revolution” occur in the U.S.?

The 1950s

2. What did the “Green Revolution” bring to U.S. agriculture?

Industrialized agriculture

3. What are two benefits of industrial agriculture?

Lower prices for products, profits from exports, reduced labor needs, longer shelf life, mass availability, higher yields on same acreage

4. What are two problems with industrial agriculture?

Intensive water use, habitat/environmental loss/damage, pest resistance, pollution, greenhouse gas emissions

5. Give two examples of what fuel is used for directly on the farm.

Building heating and cooling, water heating, irrigation engines, grain dryers, generators, tractors, trucks

6. Which of the following generation sources is the largest for producing electricity?

A. Oil

B. Nuclear

C. Coal

D. Natural gas

7. What is the definition of energy conservation?

Reducing or eliminating usage to save energy

8. Give two examples of energy conservation measures.

Building retrofits: day lighting, weather stripping/sealing, improved insulation, motion sensor light switch, low flow faucets. Equipment maintenance: replacing old filters, keeping equipment clean/lubricated

9. What is the definition of energy efficiency?

Reduce the amount of energy required to perform the same tasks through more efficient technologies and practices

10. Give two examples of energy efficiency measures.

Efficient lighting- LEDs, efficient equipment- VFDs, Energy-Star appliances

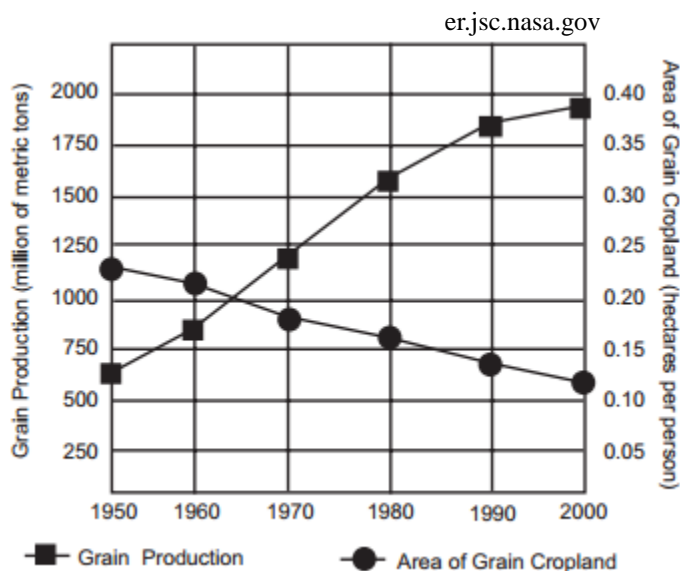
11. What is one reason why practicing energy conservation and efficiency is important?

Non-renewable energy sources are shrinking. Human population growth is causing demand for products to increase, therefore pressuring non-renewable sources. Fuel prices have been rising and will continue to increase.

12. What are two benefits to energy conservation and efficiency?

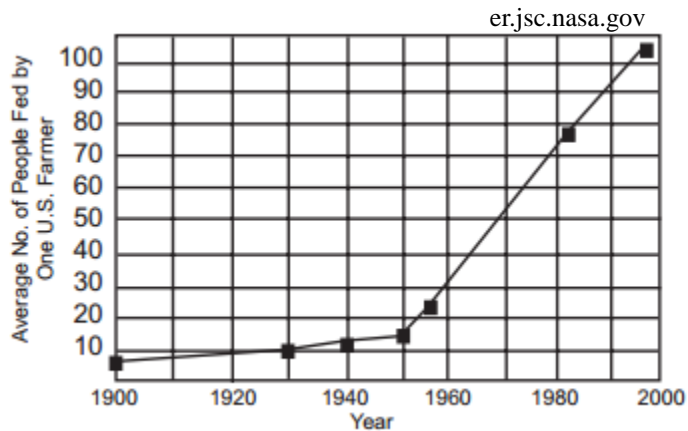
Reduced costs and increased profits (lower fuel and electricity bills). Improved processes and productivity. Less affected by energy prices. Protect natural resources important for farming.

13. Industrialized agriculture- describe what the chart below is telling you.



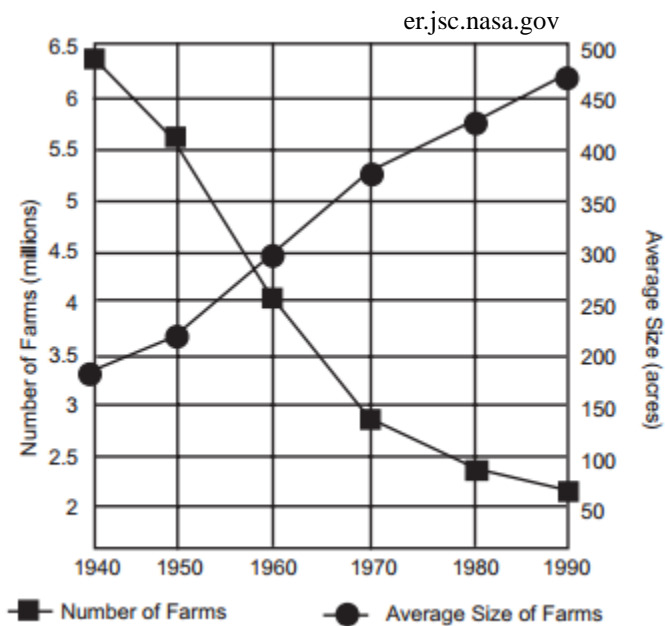
This chart shows the impacts of industrialized agriculture, specifically how IA has helped to increase crop yields on the same/lesser area of land.

14. Industrialized agriculture- describe what the chart below is telling you.



This chart shows the impacts of industrialized agriculture, specifically how IA has helped to increase crop yields which has enabled more people to be fed.

15. Industrialized agriculture- describe what the chart below is telling you.



This chart shows the impacts of industrialized agriculture, specifically how IA has increased the size of farms to larger scale operations and decreased the total amount of farms.

