

Illinois Agriculture by the Numbers

Grade Level 4-8

Lesson Overview

Students will learn about a variety of information regarding Illinois agriculture through charts and graphs.

Student Objectives

1. Read charts and graphs to answer questions.

Materials

- ✓ Copies of *Farm & Food Facts 2020* (one per pair of students, minimum), can be found at: https://www.ilfb.org/media/7147/2020-faff_v4.pdf
- ✓ Illinois Agriculture by the Numbers Worksheet
- ✓ Illinois Agriculture by the Numbers Answer Key

Vocabulary

- **acre** – a measure of land area equivalent to 43,560 square feet; about the size of a football field without the end zones.
- **bushel** – a unit of volume measure used as dry measure of grains and produce, equivalent to 8 gallons of a liquid. A bushel of corn weighs 56 pounds.
- **consumer** – an individual who purchases and uses goods or services
- **ethanol** – made by converting the carbohydrate portion of biomass into sugar, which is then converted into ethanol in a fermentation. Ethanol is the most widely used biofuel today.
- **export** – any good or commodity, transported from one country to another country, typically for use in trade
- **income** – money earned from goods or services
- **receipts** – the amount or quantity received

Background Information

This lesson includes a variety of information specific to Illinois agriculture, and the United States, overall. By interpreting data on charts and graphs to answer to questions, students will have a better understanding of the importance of agriculture in our state and nation.

Procedure

1. Working in pairs, students will find the answers to Student Worksheet – Illinois Agriculture by the Numbers in the *Farm & Food Facts 2020*. *Teachers may want to instruct students to note on what pages they found their answers for the next step.*
2. Once all pairs of students have completed the worksheet, match them with another pair of students to compare answers (and debate if necessary) and where they found each answer.

Standards

Illinois Mathematics Standard

CC.7.RP.2b Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.

Illinois English Language Arts Standard

ELA. RL. 2. Determine a theme or central idea of a text and analyze its development over the course of the text; provide an objective summary of the text.

The **M**ultidisciplinary **A**gricultural Integrated Curriculum (mAGic) was created in 2004 under the leadership of the Illinois State Board of Education (ISBE) and the Facilitating Coordination in Agricultural Education Project (FCAE). Funding was made available through the FCAE grant budget from the agricultural education line item of the ISBE budget. This revision, as printed, was developed in January 2021.



These mAGic lessons are designed to bring agriculture to life in your classroom. They address the Illinois Learning Standards in math, science, English language arts and social studies.

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Illinois Agriculture by the Numbers

All answers must have a label (\$, %, acre, bushel, etc.)

Please remember to note on which page number the answer was found.

1. What percentage of Illinois farms are owned by individuals or families?
2. What was the number of farms in Illinois in the most recent year? Has the number increased or decreased?
3. Which county led Illinois in corn production? How many bushels were produced?
4. Which county had the most beef cattle? How many head?
5. How many acres of Christmas trees were planted?
6. Which county in Illinois was 5th in honey sales in the most recent year? How many pounds?
7. What were the total receipts for Illinois farm income for the most recent year?
8. How much money was spent in Illinois on farm machinery most recently?
9. How much money was made in Illinois from exporting wheat?
10. What percentage of Illinois was forest land?

11. What was the number of farms in the county your school is located in?
12. What is the projected employment in 2024 for agricultural production?
13. What was the number of acres most recently enrolled in CRP in the county your school is located in?
14. What rank was Illinois in the United States for ethanol production capacity?
15. What as Illinois most recently ranked in total wind capacity in the United States?
16. How many people does one farmer feed?
17. How much is the farm share of every food dollar?
18. What were the top 5 countries for United States agriculture exports?
19. Where did consumers spend the least amount of money in supermarkets?
20. How many bushels of corn were used for seed in the most recent year?

Illinois Agriculture by the Numbers ANSWER KEY

1. What percentage of Illinois farms are owned by individuals or families?

84.5% **pg. 7**

2. What was the number of farms in Illinois in the most recent year? Has the number increased or decreased?

71,400 farms; decreased **pg. 9**

3. Which county led Illinois in corn production? How many bushels were produced?

McLean County; 71,542,000 bushels **pg. 13**

4. Which county had the most beef cattle? How many head?

Jo Daviess County; 21,500 head **pg. 14**

5. How many acres of Christmas trees were planted?

3,748 acres **pg. 15**

6. Which county in Illinois was 5th in honey sales in the most recent year? How many pounds?

McHenry County; 14,583 pounds **pg. 16**

7. What were the total receipts for Illinois farm income for the most recent year?

\$16,727,234 **pg. 17**

8. How much money was spent in Illinois on farm machinery most recently?

\$1,118,000 **pg. 19**

9. How much money was made in Illinois from exporting wheat?

\$105,900 **pg. 21**

10. What percentage of Illinois was forest land?

13.2% **pg. 24**

11. What was the number of farms in the county your school is located in?

Answers will vary **pgs. 25 & 26**

12. What is the projected employment in 2024 for agricultural production?

70,148 jobs **pg. 29**

13. What was the number of acres most recently enrolled in CRP in the county your school is located in?

Answers will vary **pgs. 31 & 32**

14. What rank was Illinois in the United States for ethanol production capacity?

3rd **pg. 33**

15. What was Illinois most recently ranked in total wind capacity in the United States?

3rd **pg. 34**

16. How many people does one farmer feed?

166 people **pg. 37**

17. How much is the farm share of every food dollar?

14.6¢ **pg. 38**

18. What were the top 5 countries for United States agriculture exports?

Canada, Mexico, Japan, China, South Korea **pg. 40**

19. Where did consumers spend the least amount of money in supermarkets?

In-store bakery **pg. 41**

20. How many bushels of corn were used for seed in the most recent year?

30,000,000 bushels **pg. 42**