

Career Ag Mag - Vocabulary

Word Meanings - Prefixes

Directions: Choose a prefix from the Prefix Word Bank and a root word from the Root Word Bank to create a word to fit the definition.

"NOT" PREFIXES	
a-	in-
dis-	ir-
ig-	mis-
il-	pre-
im-	un-

ROOT WORD BANK	
agree	noble
balance	popular
exact	responsible
interpret	typical
literate	service

1. _____ means "not dependable."
2. _____ means "not to share the same opinion."
3. _____ means "not well liked."
4. _____ means "not precise."
5. _____ means "not the same on both sides."

"TOGETHER" PREFIXES
co-
con-
cor-
sym-
syn-

ROOT WORD BANK
descend
exist
metric
respond
thesis

1. _____ means "to answer one another by writing."
2. _____ means "the combining of different things or ideas."
3. _____ means "to be alive together."
4. _____ means "balanced on both sides."
5. _____ means "to descend to the level of one considered inferior."

Career Ag Mag - Math

Surface Area and Volume of Cubes and Prisms

Directions: Choose the best answer.

1

The formula for the volume of a rectangular prism is _____.

- A s^2
- B $\frac{1}{2} b \times w$
- C $l \times w \times h$
- D $\frac{1}{2} b \times l$

2

The formula for the surface area of a cube, rectangular prism, or triangular prism is _.

- A $\frac{1}{2} b \times h$
- B the sum of the areas of the faces
- C $2 b \times h$
- D $l \times w \times h$

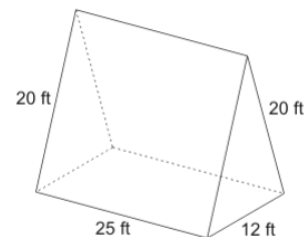
3

The formula for the volume of a triangular prism is _____.

- A $\frac{1}{2} b \times l \times h$
- B $l \times w \times h$
- C r^3
- D $2 w \times l$

4

The following shape is an example of a _____.



- A cube
- B rectangular prism
- C triangular prism
- D none of the above

Career Ag Mag - Math

Surface Area and Volume of Cubes and Prisms

Directions: Choose the best answer.

5

Find the volume of a rectangular prism with a height of 5 feet, a length of 6 feet, and a width of 3 feet.

- A 14 ft³
- B 90 ft³
- C 450 ft³
- D 125 ft³

6

If the volume of a rectangular prism is 126 cm³ and the length is 3 centimeters and the width is 6 centimeters, what is the height?

- A 4 cm
- B 5 cm
- C 6 cm
- D 7 cm

7

Find the volume of a triangular prism with a height of 5 inches, a base of 3 inches, and a length of 8 inches.

- A 60 in³
- B 120 in³
- C 40 in³
- D 15 in³

8

Find the surface area of a rectangular prism with a length of 7 inches, a height of 3 inches, and a width of 9 inches.

- A 189 in²
- B 94.5 in²
- C 222 in²
- D 378 in²

Career Ag Mag - Reading Passage

Career Opportunities Abound in Agricultural Fields

by American Farm Bureau Foundation for Agriculture

Agriculture generates some 22 million jobs in the United States, and most are located off of farms. In fact, fewer than 2 million Americans are actively engaged in farming. Today's farmers are efficient enough to produce 16 percent of the world's food supply, freeing the rest of us to pursue other occupations and career paths.

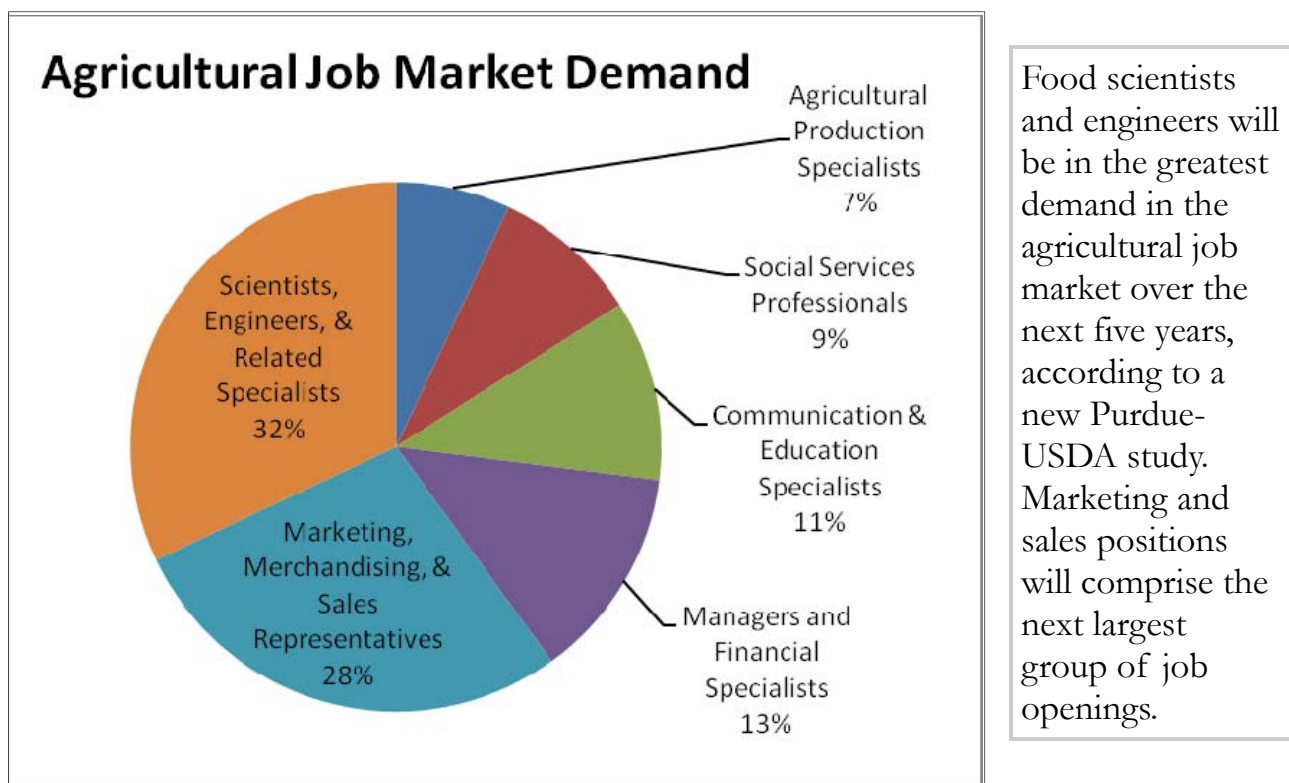
Agriculture is science-based, high-tech and offers an array of career possibilities—from animal and plant researchers, food scientists, commodity brokers, nutritionists, agricultural journalists, bankers, market analysts, sales professionals, food processors, forest managers, wildlife specialists. . . and the list goes on.

Thirty-two percent of the job openings will be for positions in science, engineering and related specialties. Jobs in marketing, merchandising and sales will comprise another 28 percent of the employment postings.

Among the professions expected to be in greatest demand are food scientists and engineers, landscape horticulturists, plant geneticists, and outdoor recreation specialists.

Weaker employment opportunities will exist for those who provide services to farmers and ranchers. Hiring will also be down in agricultural and forest production, veterinary medicine general practices, and for some government agencies.

Graduates who add value to raw materials produced by farmers and market those products both here and abroad will see expanding employment opportunities.



Career Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

1

According to this article, what percent of job openings will be related to science, engineering and related specialties?

- A 9 %
- B 32 %
- C 13 %
- D 28 %

2

Which of the following is an agriculture based career?

- A Nutritionist
- B Forest Managers
- C Market Analyst
- D All of the above

3

American farmers are efficient enough to produce _____ percent of the world's food supply.

- A 22
- B 7
- C 16
- D 11

4

Most agricultural jobs are located _____.

- A On the farm.
- B Off the farm.
- C In the lab.
- D None of the above.

Career Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

5

Which jobs will be in the greatest demand in the agricultural job market over the next five years?

- A Engineers and food scientists
- B Bankers and market analysts
- C Food processors and nutritionists
- D Commodity brokers and sales professionals

6

Social Service Professionals and Managers and Financial Specialists account for what percent of job openings?

- A 9 %
- B 13 %
- C 22 %
- D 32 %

7

Of the following, which position will be in the greatest demand?

- A Forest Production
- B Plant Geneticists
- C Veterinary Medicine General Practices
- D Government Agencies



Extended Response—CAREERS

Agriculture is the nations largest industry, covering over 250 career areas. Discuss how a career in agriculture means more than farming. What other possible jobs fall under the umbrella of agriculture?