

Biotechnology Ag Mag - Vocabulary - Root Words

Directions: Choose the correct definition for the prefix or root in each word.

1

In the word *biology*, *bio* means _____.

- A blue things
- B living things
- C dead things
- D green things

2

In the word *biology*, *ology* means _____.

- A process of
- B theory of
- C study of
- D explanation of

3

In the word *react*, *re* means _____.

- A before
- B after
- C during
- D again

4

In the word *insecticide*, *cide* means _____.

- A to kill
- B to harm
- C to hold
- D to flourish

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Directions: Choose the correct definition for the prefix or root in each word.

5

In the word *microorganisms*, the prefix word is _____.

- A organisms
- B micro
- C orga
- D isms

6

In the word *geneticist*, the root word is _____.

- A cist
- B gen
- C genetic
- D netic

7

In the word *improve*, the root word is _____.

- A imp
- B prove
- C rove
- D ove

8

In the word *passionate*, the root word is _____.

- A pass
- B ate
- C sion
- D passion

Biotechnology Ag Mag - Math - Ordering Decimals**Directions:** Choose the best answer.**1**

A chemist measures a spoonful of a chemical three times. Each measurement is different. Which group of measurements is in order from smallest to largest?

- A** 21.009, 21.09, 21.9, 22.001, 22.10
- B** 21.09, 21.009, 21.0, 22.10, 22.001
- C** 21.009, 21.09, 21.9, 22.10, 22.001
- D** 21.9, 21.09, 21.009, 22.10, 22.001

2

Which decimal below names the largest number?

- A** 2.15 mg
- B** 2.05 mg
- C** 2.50 mg
- D** 2.21 mg

3

What is the correct sign to complete the following equation:

$$324.26 \text{ g} \quad \square \quad 342.19 \text{ g}$$

- A** =
- B** <
- C** >
- D** None of the above

4

What decimal below names the smallest number?

- A** 1.90 m
- B** 1.21 m
- C** 1.09 m
- D** 1.18 m

Biotechnology Ag Mag - Math - Ordering Decimals**Directions:** Choose the best answer.**5**

How is 1.629 written in expanded notation?

- A** $1 + .6 + .2 + .09$
- B** $1 + .6 + .02 + .009$
- C** $1 + 6 + 2 + .9$
- D** $1 + 6 + .2 + .09$

6

What is the standard form of

$$16 + 5 + .4 + .07$$

- A** 16.5407
- B** 165.407
- C** 21.704
- D** 21.47

7

Which number is the correct way to build the following:

9 ones
5 tenths
6 tens
3 hundreds

- A** 36.95
- B** 369.5
- C** 9365
- D** 59.36

8

Which number is the correct way to build the following:

3 tens
5 thousandths
6 ones
9 tenths

- A** 36.905
- B** 369.5
- C** 9365
- D** 59.36

Biotechnology Ag Mag - Reading Passage

Science in Your Shopping Cart

By the U.S. Department of Agriculture

1 Abundant, affordable, vast variety — it's the American way when it comes to groceries.

2 Along with the low cost of food, there are new products every year, offering more convenience, longer shelf life, better nutrition, new flavors, and sometimes even a whole new idea that no one has brought to consumers before.

3 This abundance comes from agriculture — farmers and ranchers who produce a bounty of food and agricultural commodities from which industry creates a virtually endless list of products for consumers. Pharmaceuticals, cosmetics, insect controls, alternative fuels, and leather, not to mention a proverbial cornucopia of fruits, vegetables, nuts, grains, meats, and fish all come to stores near you by way of one of the greatest agriculture systems in the world.

4 Supporting the continuing success of U.S. Agriculture is the progress that agriculture research provides — much of it from the laboratories of the Agricultural Research Service, the U.S. Department of Agriculture's chief in-house research agency.

5 Without ARS research, wheat yields would not have doubled and milk productions per cow tripled in the past 50 years; you'd be paying much more for food than you do today, and your choices would be far more limited.

6 Besides the traditional farming and ranching products like food and clothing, ARS research has brought you many everyday items that you may not connect with agriculture, like permanent press cotton and DEET mosquito repellants.

7 Agricultural research, like all science, is a continuum, a spiral that builds on its past. A scientific discovery can end up creating a new product for you to use and enjoy, which is then superseded by an improved version, which scientists then go on to improve in another way. Research never stands still. That means the examples we've given here are a snapshot of how ARS and agriculture have contributed to making your life better.

8 So, the next time you forage down a grocery store aisle, give some thought to all the scientific accomplishment that has gone into those products you are putting in your shopping cart.

Biotechnology Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

1

What is the purpose of this article?

- A To inform
- B To persuade
- C To explain
- D All of the above

2

What is ARS's purpose?

- A To research air pollution
- B To research agriculture
- C To research money
- D To research automobiles

3

Which of the following is a fact about agriculture?

- A Agriculture is not important to everyone.
- B Agriculture produces an endless list of products for consumers.
- C Agriculture does not impact the world.
- D Agriculture prompts grocery stores to raise

4

What is the main idea of paragraph number 8?

- A Scientific discovery creates new products.
- B Research never stands still.
- C ARS and agriculture have contributed to making your life better.
- D Agricultural research is a continuum.

Biotechnology Ag Mag - Reading Passage

Directions: Read each question and choose the best answer.

5

Which of the following is a fact about ARS?

- A ARS does not help agriculture efforts.
- B ARS stands for Agriculture Regional System.
- C ARS research improves your food choices.
- D ARS only researches improvements for corn.

6

Which of the following is an opinion about ARS?

- A ARS is the U.S. Department of Agriculture's chief in-house research agency.
- B ARS research has brought you many everyday items.
- C ARS and agriculture have contributed to making your life better.
- D ARS is the best research agency in the U.S.

7

Abundant in the first paragraph means _____.

- A Sparse
- B Scarce
- C Few
- D Plentiful

8

Forage in the last paragraph does not mean _____.

- A Wait.
- B Wander
- C Seek
- D Search

Extended Response

Biotechnology benefits both producers and consumers. Explain how Biotechnology benefits the farmers and ranchers, the producers, as well as you, the consumer. Use your own knowledge and information from the Ag Mag to support your answer.