

Fertilizers are made from elements. Elements are substances. They are found on Earth. Elements can be in the air or in the ground. Elements help the Earth in different ways. The main elements in fertilizers are Nitrogen, Phosphorus and Potassium.

Nitrogen, Phosphorus, and Potassium keep plants healthy. Sometimes there is not enough of these elements in the ground for plants. Where there is not enough, the plants do not grow well. Adding fertilizer with these elements helps plants grow better.

Fertilizer is needed to grow healthy plants. It can be used in large fields, in a home garden, or even in a single indoor plant.

Farmers need to grow a lot of food to feed all the people in the world. Fertilizers help us grow more food on the land we have. If we want to be sure everyone has food, we must use fertilizers.

There are people who are experts in fertilizers. They advise the farmers on what fertilizers are best for their crops. These people help farmers grow the food that feeds our world.

Who Works with Fertilizers?

Besides farmers, it takes many people to help make and put fertilizers into use. Look at the career wheels. All these people work in the fertilizer industry.



Communications Specialist Social Media

> **Business Careers**

Business **Operations** Manager

Specialist

Digital Specialist

Sustainability Director

Agron

Food

Car

Patho

Agric

Plant Scientist

> Plant Breeder

What career interests you?

Circle a career you'd like to know more about!

Research it to discover WHY it migl	it be a fatale career for 100.
5 Things I Like About this Career:	5 Things I Need to Learn to
1	Be Successful in this Career:
2	1
3	2
4	3
5.	4
	5

Chef

Truck
Driver

Technology
Careers

Protein
Biochemist

Process
Operating
Technician

Fertilizer/
Formulation
Chemist

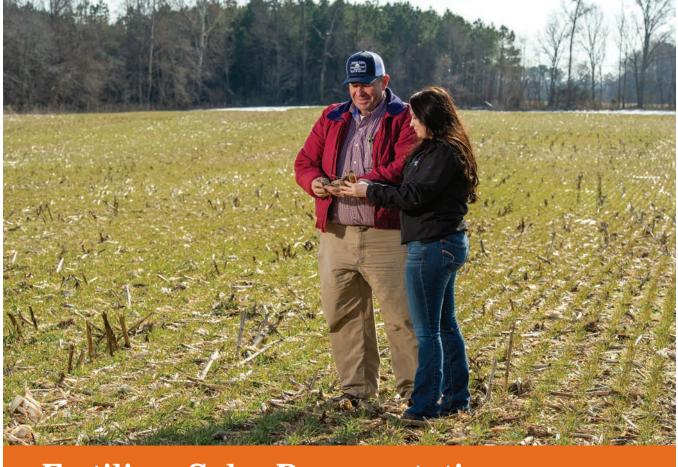
Engineer

Heavy
Equipment
Operator

Once you finish your lists, share them with the class!

On the Career Hunt





Fertilizer Sales Representative

Career Description: A fertilizer sales representative sells fertilizer to people in agriculture. The representative gets the fertilizer from a company that makes it. A fertilizer sales representative may work with farmers directly. They could also work with people who supply farmers with fertilizer. Sometimes they work with companies that supply farmers with fertilizer.

Career Responsibility: They may be assigned a certain part of their state where they can work. This is called a "territory." They must use lots of knowledge about fertilizers to build relationships with their clients. They will introduce new products to their clients. They will teach clients about all their fertilizers. It is important that they understand the fertilizer market, plan out how to market their fertilizer, and record important details about their clients.

Career Outlook: Excellent.

Career Salary: Around \$65,000.





Social Media Specialist

Career Description: Did you know that fertilizer is on social media? The person in charge of social media for a fertilizer company will make fun posts to educate people about the importance of fertilizer.

Career Responsibility: A social media specialist is responsible for creating a plan for when to post on social media. They also write what those posts say. They might respond to comments or message from people who are interested in their fertilizer. Social media specialists also monitor how their posts are doing using something called analytics.

Career Outlook: Great.

Career Salary: Between \$40,000 and \$50,000.





Agronomist

Career Description: Say it with me...AG-RON-O-MIST. They are responsible for teaching growers about how to grow a crop. You can find an agronomist on a farm. They often do research and enjoy being outside in the fields, exploring soil health. They could work for a fertilizer company, government, environmental organization and even colleges. They are everywhere!

Career Responsibility: Agronomists make suggestions to farmers about a crop and recommendations on how to care for the land, air and water around the crop. They might go out into a field and make different observations about soils, insects, or diseases. Who knew a field could be so interesting? They may also advise growers on how fix some of the problems they could observe. Agronomists must always stay up to date on the latest and greatest information about growing crops!

Career Outlook: Great.

Career Salary: Between \$44,000 and \$83,000.





Chef

Career Description: Have you ever thought of a chef as someone who works with fertilizers? They work with the food that fertilizer helped grow! Let's think about what they do. Chefs use what they know about food to create yummy dishes for people who eat their food.

Career Responsibility: They are masters of the foods that are used in these dishes. Fertilizers may have helped these foods grow. Chefs are responsible for making safe, delicious meals. Chefs may also oversee preparation of food by others. They must know how to monitor and use the equipment in the kitchen.

Career Outlook: Great.

Career Salary: Between \$40,000 and \$60,000.





Fertilizer/Formulation Chemist

Career Description: A fertilizer chemist is someone who develops new crop protection products. They could help meet farmers needs with existing products. A chemist most often works in an education or research facility.

Career Responsibility: The fertilizer chemist is responsible for many things in their jobs. They will do experiments like those you may have done in your classes to test out certain products. They will also take note of what the process looks like during these experiments and tell others about it. They might even create a whole new product based on the needs of farmers. All of this is done while the chemist takes careful notes that can be shared with their company and in the next steps of product development.

Career Outlook: Good.

Career Salary: Around \$86,000.





Career Description: Have you ever looked at a big construction machine and thought about farming? Farming is linked to almost everything. This includes running big machines. These people are called Heavy Equipment Operators. They load and unload different goods, including fertilizer.

Career Responsibility: The operator may load or unload trucks with certain products. They make orders with extreme accuracy. They must follow a strict set of standards on how to load, unload, and properly secure any trucks or equipment. They must keep their working environment clean and safe. This ensures they are making all orders accurately and neatly. They must be super detailed with their work!

Career Outlook: Great.

Career Salary: Around \$66,000.



WORD SEARCH

Find these career titles in the word search below!

FERTILIZER CHEMIST
HEAVY EQUIPMENT OPERATOR

FERTILIZER SALES REPRESENTATIVE

SOCIAL MEDIA SPECIALIST

AGRONOMIST

CHEF

U Z В N L \subset MΥ Н Υ K Ι 0 Z Z J G 0 Z Z G S × Z J Ε Ι R В Z I F E S D G 0 W E Y J C 5 R N K X T 5 W 0 E В E G J X Ν G H 5 0 R J Z W М В W K Υ В Z E Z \subset Q J т в Ι R Q N Υ D W G × C E G P A R X 5 L S 0 G Ε Q 0 Ι C Z J X G W 0 W Н В D C Ε Ι G J Н W Ε J N в N В Т F Ε R T I Ι Z E Ε Ι S J Z Т Q R C Н М C S D G H D D 5 В Ι 0 U X Т А G D I S I Т I Z E \subset S Т Q K J G G 0 Z I J C U K в W I Υ N E D T D H J Z Z Q A G T Z C × D В 5 C C Z X G X G R В Ε Ι 5 0 Ν D × М G 0 Z L Υ М S × Ι Q Υ Z Ε 0 Υ D К R 0 S T J H P Z R Ε Ι Ι Q Y Υ Υ W Z NBICHJYC LHSQWE ВΥ



What Do You Think?

Consider all the careers. Rank them in the order that you'd like to consider each, with 1 being your top pick.

Fertilizer Sales Representative Social Media Specialist **Agronomist** Chef **Fertilizer Chemist**

Heavy Equipment Operator

Once you pick your number one career, research your local area to find someone you could shadow for a day in this career!

Career Match each career title with the location description by Matchup writing the correct letter in each circle. **Fertilizer Chemist Heavy Equipment Operator** Fertilizer Sales Representative Social Media **Specialist Agronomist** Chef 6

Count It Up

Go back through this reader. Count how many times each word is used:

Help

Research

Create

- **A.** You'll find this role all over! They advise growers on how to fix some of the problems they could observe.
- B. You'll find these individuals working in labs, in education facilities, and in fields!
- **C.** From restaurants to schools and hospitals, you can find this career in a lot of places!
- **D.** These people build relationships with farmers and other business contacts.
- E. You'll find them on farms, at warehouses, and all over the country!
- **F.** This role is behind the screen! They manage pages through their phones and computers in an office.



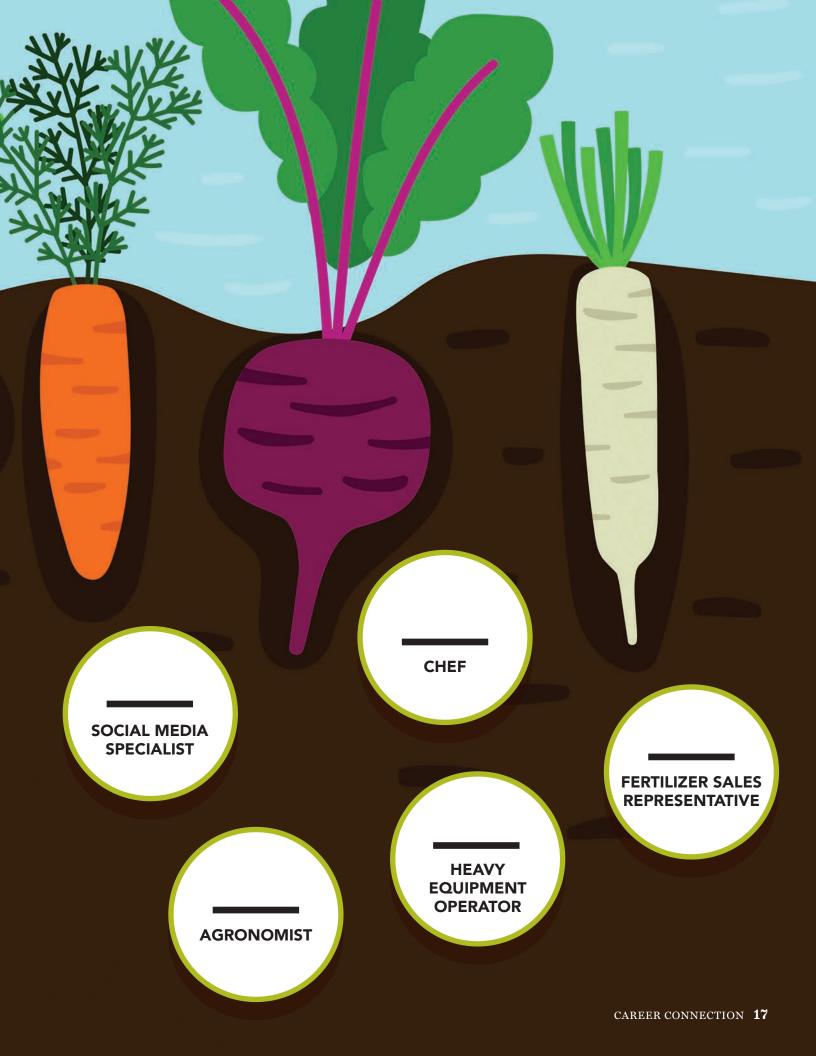
A CLASS ACT

Think about the careers we just discussed. There are many ways to get involved in the fertilizer industry. What career do you find the most interesting? Compare your results as a class and record them in the circles to the right. Take a few moments to talk about how your career relates to fertilizer and why you chose that career.

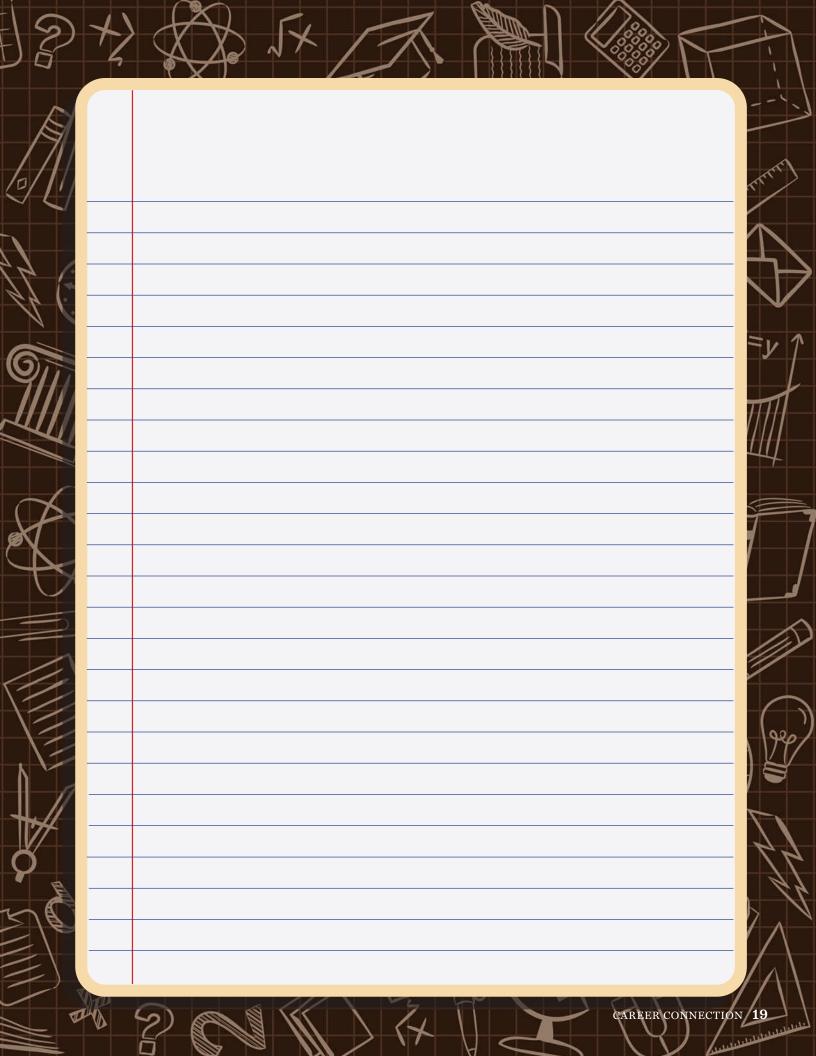
After you compare your results, answer these questions as a class:

- 1. Was there a common theme for the top pick? Why?
- 2. Is there a career you'd like to learn more about? Which one?
- 3. Does anyone know someone who has one of these careers? Who are they and where do they live?
- 4. Is there someone local you could shadow? Who are they?

FERTILIZER CHEMIST



Write About It! You have just explored different careers in the fertilizer industry. Now, it's time to think about which career interests you. Write an essay about the career you have chosen, explaining why it excites you and how it aligns with your interests and goals. Be creative and think about how your chosen career can positively impact the world. 18 CAREER CONNECTION







Nutrients For Life 4201 Wilson Boulevard, Suite 700 Arlington, Virginia 22203 Info@NutrientsForLife.org www.nutrientsforlife.org



Check out these fun family activities. Available in both English and Spanish, these activities range from family farm trips to tips for growing a garden.

