

# Career Aware



Hi! I'm Caleb the career bug!

When I explore, I have antennae that make me aware of all kinds of things. Right now, I am exploring careers. Did you know there are THOUSANDS of careers in our world? I will help you develop your "career antennae" so you can learn about some of them.

We won't buzz wildly from one career to another. We'll look at a group of careers that have things in common. The groups are called Career Clusters<sup>®</sup>. Use the checklist below to keep track of the Career Clusters we have explored.

Ready? Let's go!

- |   |   |
|---|---|
| <input type="checkbox"/> Agriculture, Food & Natural Resources          | <input type="checkbox"/> Hospitality & Tourism                          |
| <input type="checkbox"/> Architecture & Construction                    | <input type="checkbox"/> Human Services                                 |
| <input type="checkbox"/> Arts, Audio/Visual Technology & Communications | <input type="checkbox"/> Information Technology                         |
| <input type="checkbox"/> Business Management & Administration           | <input type="checkbox"/> Law, Public Safety, Corrections & Security     |
| <input type="checkbox"/> Education & Training                           | <input type="checkbox"/> Manufacturing                                  |
| <input type="checkbox"/> Finance  | <input type="checkbox"/> Marketing                                      |
| <input type="checkbox"/> Government & Public Administration             | <input type="checkbox"/> Science, Technology, Engineering & Mathematics |
| <input type="checkbox"/> Health Science                                 | <input type="checkbox"/> Transportation, Distribution & Logistics       |

**Note to teachers and advisors:** Caleb helps students start growing their "career antennae" to pick up on the thousands of career options in the world. Hopefully students will be more aware of the many careers out there!

**Note to parents:** Research shows parents have the biggest influence on youth's career exploration and decision making. Need tips on helping your child with career exploration and eventual decision making? Contact the Labor Market Information Center at 1.800.592.1881 to find out about other free career resources available for students.



SOUTH DAKOTA  
DEPT. OF **LABOR**  
& **REGULATION**

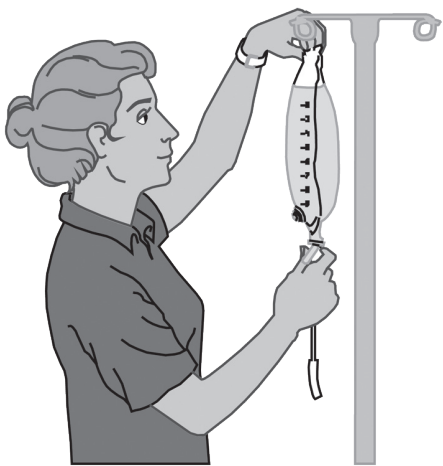


## Health Science

People in the Health Science cluster promote health and wellness. Some of them take care of people who are ill or hurt. Others do research and try to find treatments and cures. They like school, especially science classes.

# Health Science

Registered Nurses ■ Pharmacists ■ Physical Therapists ■ Physician Assistants  
Medical & Clinical Laboratory Technicians ■ Family & General Practitioners



## Registered Nurses

Registered nurses (RNs) care for sick and injured people. They talk with patients. They answer questions. They help people stay healthy. They help doctors with exams and treatments. They work in many health care places, including hospitals, clinics and nursing homes. Some work in schools or in people's homes. Registered nurses may have more training than some other nurses. They also may be in charge of other nurses. Sometimes they work in one area, like with children or in an emergency room.

**Registered nurses study many different subjects. This includes a lot of science classes. Match the school subject to its definition.**

Chemistry

How the human mind works.

Biology

How liquids, solids and gases work.

Anatomy

How all living things work.

Psychology

How the human body is built.



## Pharmacists

Pharmacists give out the medicines doctors have prescribed to patients. They give patients information on how to take the medicine. They also tell patients about side effects. They answer questions about all kinds of medicines. They must understand what ingredients make up medications.

**A patient has a prescription for a cold. He needs to take three pills a day for seven days. How many pills should the pharmacist give him?**

Did you know penicillin was one of the first antibiotics discovered?  
It is used to treat many bacterial infections.



## School Rules: (How much education do you need?)

Occupation	High School or GED	Some Post-secondary	Associate Degree	Bachelor's Degree	Advanced Degree
Registered Nurses			✓		
Pharmacists					✓
Physical Therapists					✓
Physician Assistants					✓
Medical & Clinical Laboratory Technicians			✓		
Family & General Practitioners					✓

## Physical Therapists

Sometimes when people are hurt in accidents or get sick, they need to learn how to move again. Physical therapists help patients move more, get stronger and decrease pain. Therapists teach patients how to handle injuries or illnesses with exercise. They teach patients how to use equipment like wheelchairs and crutches.



Use the hand you normally use to write your first name. Then, write your name again, but use your other hand. Draw something in the box using the “wrong” hand. How does it feel to write/draw with the hand you normally do not use?

Name: \_\_\_\_\_

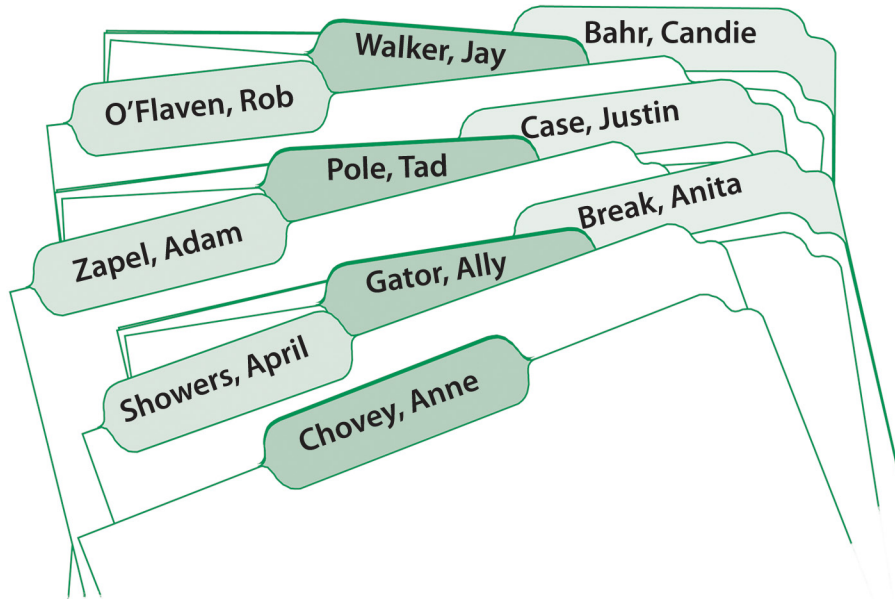
Name: \_\_\_\_\_  
(Write with “wrong” hand)



## Physician Assistants

Physician assistants help doctors with medical tasks. They record a patient's medical information, give exams, order lab tests, diagnose problems and prescribe medications. They sometimes take care of minor injuries. Doctors oversee their work.

Alphabetize these patient charts.



1. Bahr, Candie
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_
7. \_\_\_\_\_
8. \_\_\_\_\_
9. \_\_\_\_\_
10. \_\_\_\_\_

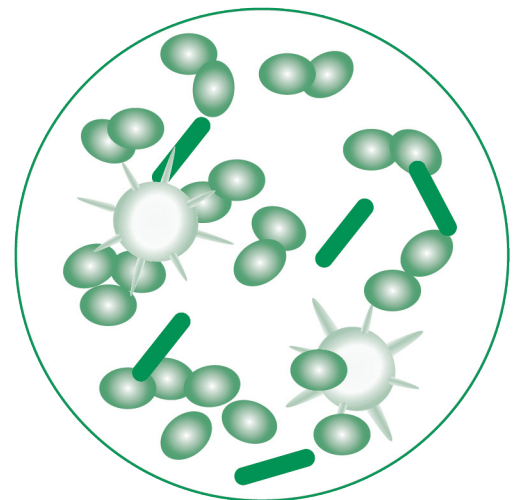
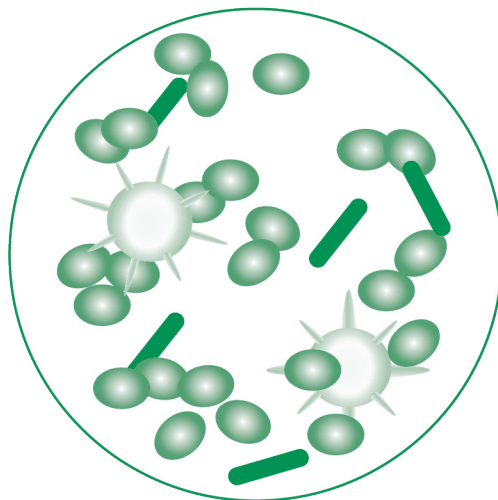
## Medical & Clinical Laboratory Technicians

They run medical lab tests. They look at blood and tissue samples, bodily fluids and cells. Many of these tests help find, diagnose and treat illnesses. They may also run and look at drug tests for athletes or workers. They enter results in patients' files.



The lab tech is looking at two cell slides. Circle the differences in the slide on the right.

Hint:  
There are five differences.



# Family & General Practitioners

Family and general practitioners are medical doctors who provide general care to patients. They know about a lot of health issues. They want to check and see that the patient's body is working like it should. They diagnose, treat and help prevent diseases and injuries. They also prescribe medicine. They spend many years going to school.



Unscramble the clue words below. Copy the letters in the numbered boxes to other boxes with the same number.

L A E H T H Y		E M X A	
S E T S T		G H I E W T	
E S U N R		F E R E V	

What did the doctor give the sick bird?

					—				
1	2	3	4	5		6	7	8	9

## How Much Does it Pay?

More than \$ 25.00						
\$ 20.00-\$ 25.00						
\$ 15.00-\$ 20.00						
\$ 10.00-\$ 15.00						
Less than \$ 10.00						
Average Hourly Wage in South Dakota (2014)	Registered Nurses	Pharmacists	Physical Therapists	Physician Assistants	Medical & Clinical Laboratory Technicians	Family & General Practitioners

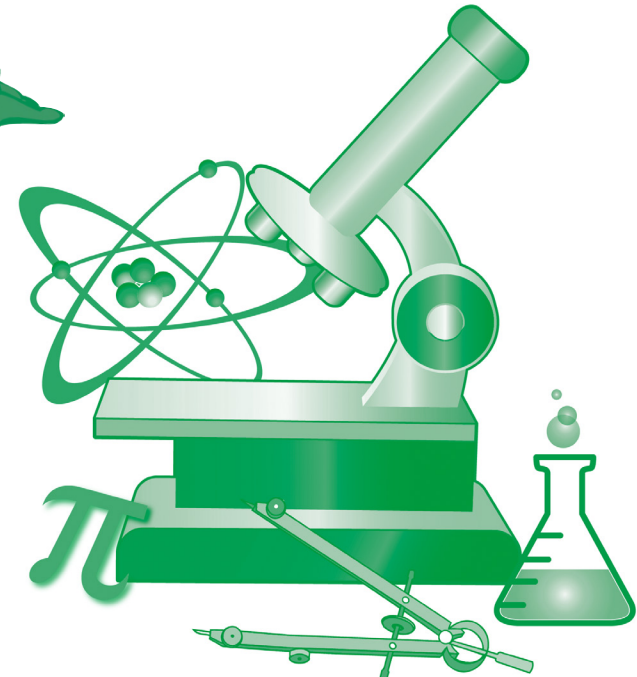
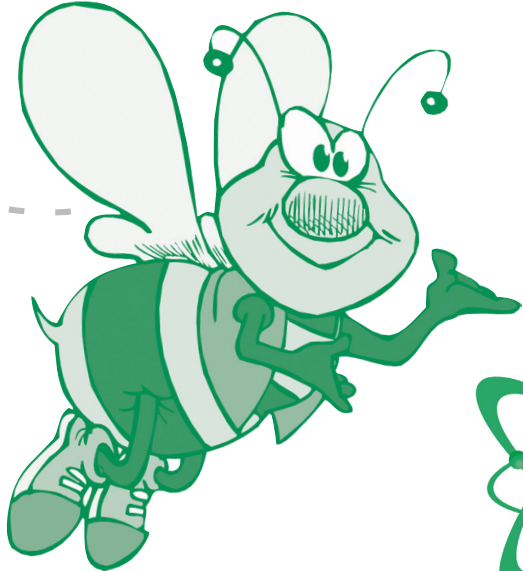
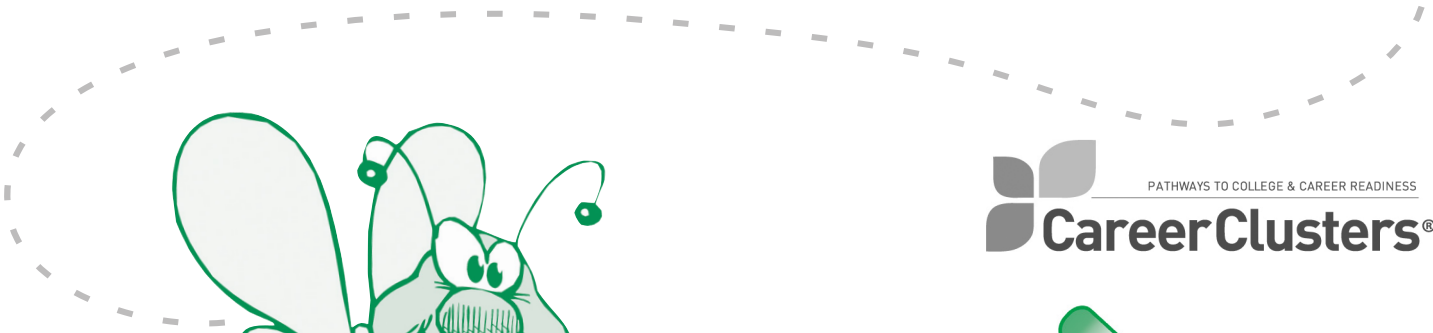
Can you think of any other careers in this cluster?

This is just one of many career groups I want to explore with you!  
Keep your "career antennae" up as we look at other clusters!



[www.sdjobs.org/lmic](http://www.sdjobs.org/lmic)

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# Science, Technology, Engineering & Mathematics

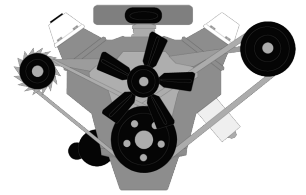
People in the Science, Technology, Engineering & Mathematics cluster work in areas such as research, testing and development. They like to solve problems. They are curious. They ask questions and search for answers.

# Science, Technology, Engineering & Mathematics

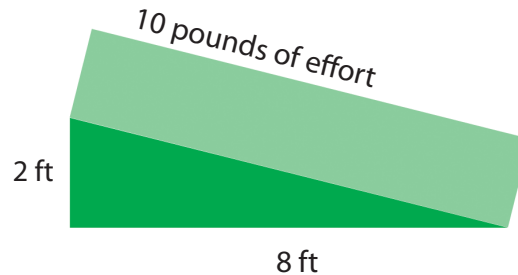
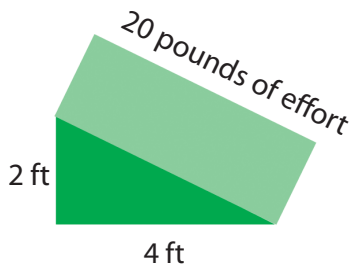
Mechanical Engineers ■ Industrial Engineers ■ Biological Technicians ■ Chemists  
■ Environmental Scientists & Specialists, Including Health

## Mechanical Engineers

Mechanical engineers design, build and test mechanical products. They want to know how things work. Mechanical engineering deals with anything that moves. They design and test mechanical products. This includes cars, rockets, engines and robots. They know about things like motion, energy and force. They like solving problems.



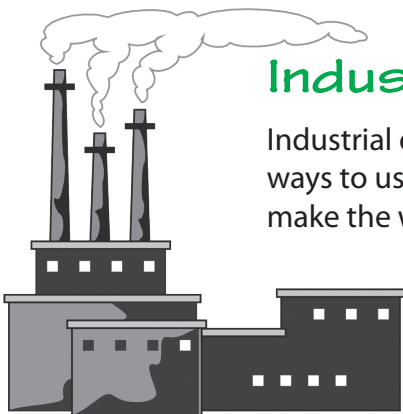
Machines make it easier for people to do work. Some machines have only one or two parts. They are called simple machines. An inclined plane is a simple machine. It has slanted surface that connects a lower level to a higher level. Ramps, steps and slides are inclined planes. It's easier to move things up a ramp than to lift something straight up. Look at the ramps below and answer the questions.



### True or false?

The first ramp is steeper than the second one \_\_\_\_\_

The second ramp will make it easier to push a rock to the top, but you have to go farther \_\_\_\_\_



## Industrial Engineers

Industrial engineers find ways to make companies run smoothly. They figure out better ways to use workers, machines and information. They help employers save money. They make the workplace better for workers. Some might make sure a hotel chain offers the same things in each of its hotels. They might decide if a job should be done by a person or a machine.

**Industrial engineers use problem solving skills a lot. Use your problem solving skills to answer the problem below:**

There are 24 students going on a field trip to the zoo. They will be put into small groups. Each group is led by an adult. An adult can only have 4 kids in his or her group. How many adults need to go on the field trip?



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Occupation	High School or GED	Some Post-secondary	Associate Degree	Bachelor's Degree	Advanced Degree
Mechanical Engineers				✓	
Industrial Engineers				✓	
Biological Technicians				✓	
Chemists				✓	
Environmental Scientists and Specialists, Incl. Health				✓	

## Biological Technicians

Biological technicians help scientists who study living things. They collect samples and materials. They do experiments and tests. Some work on medical research to find cures for diseases. Others work with companies and help make drugs that treat illnesses. Some test water, blood, food, drugs and plants.

**Biological technicians gather data. They use the data to answer questions. Write down the hair colors of your classmates. Answer the questions about your data.**



Hair Color	Tally of Students	Totals
Brown		
Blonde		
Red		
Black		
Other		

Which hair color do most students have? \_\_\_\_\_

Which hair color do the fewest students have? \_\_\_\_\_

# Chemists

Chemists study matter. Matter is what scientists call everything you can touch, see, feel or smell. Chemists work with chemicals. They figure out ways chemicals can help people. Chemists have created things like medicines, paint and makeup.

Chemists work with elements. Elements are the building blocks of all matter. There are more than 100 elements in the universe. Each element is part of the periodic table. Elements on the period table are represented by letters. Below are some rows of the periodic table. Use the table to figure out the names of the elements.



H Hydrogen						He Helium	
Li Lithium	Be Beryllium	B Boron	C Carbon	N Nitrogen	O Oxygen	F Fluorine	Ne Neon
Na Sodium	Mg Magnesium	Al Aluminum	Si Silicon	P Phosphorus	S Sulfur	Cl Chlorine	Ar Argon

O \_\_\_\_\_ H \_\_\_\_\_ Ne \_\_\_\_\_

C \_\_\_\_\_ Cl \_\_\_\_\_ Na \_\_\_\_\_



**Bonus Activity:** Find a complete periodic table and use the symbols to form words. The symbols must be used as they appear on the periodic table. You may use the symbols more than once in a word, but you cannot mix up the letters. See the example below.

**Example:** C+Ar = Car


























## Environmental Scientists & Specialists, Including Health

Environmental scientists and specialists work to protect Earth. They figure out how people can make things in ways that do not hurt the environment, animals or people. They work on solutions to environmental problems like pollution and acid rain. They test the air, water and soil to make sure they are safe.

List four things you can do to help the planet.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

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