

# ST[EMpower]

## CAREER EXPLORATIONS

SPECIAL ISSUE: VOLUME 9, ISSUE 10, 2020



### THIS MONTH

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### POWER WORDS

- **afflict**: (of an illness) cause pain or suffering to; affect or trouble
- **biomechanics**: study of the mechanical laws relating to movement or of living organisms
- **extant**: still in existence
- **extinct**: having no living members
- **infected**: **afflicted** with a disease-causing organism
- **satisfaction**: fulfillment of one's wishes, expectations, or needs, or the pleasure derived from this

### JOB SATISFACTION

Each ST[EMpower] newsletter carries a Career Connection. During this time when our nation is facing a crisis, you may not be attending school to help slow the spread of Covid-19.

First of all, do not be frightened. Even if you catch this new virus, you will be fine. You need to protect any family member who has a health problem, like diabetes, or is older, like your grandma and grandpa. If you are **infected**, you may not even know you are sick. You still can spread the virus.

“Sheltering in place” is different than summer break. You need to keep distance from your friends to make sure you don’t get infected with this virus and spread it. You can still have fun, learn lots, and contribute to your community during this time. The special ST[EMpower] issues are one way.

I love my job—paleontologist / educator. My personality (Introverted, Sensing, Thinking,



Judging) is well suited for this work. My main interests are:

- animals—I study xenarthrans (**extant** armadillos, tree sloths, anteaters, and **extinct** ground sloths, glyptodonts, pampatheres)
- science—I conduct scientific research on **biomechanics**
- math—I collect and analyze my **biomechanical** data
- travel—my specimens are located in museums throughout the United States and South America

My sincere wish is you develop a career that gives you joy and satisfaction. It could be in a STEM field, or anything else...as long as it is something you love!



SCIENCE, TECHNOLOGY,  
ENGINEERING, AND MATH  
COLORADO STATE UNIVERSITY  
EXTENSION

COLORADO STATE UNIVERSITY EXTENSION  
4-H PROGRAMS ARE AVAILABLE TO ALL WITHOUT DISCRIMINATION

Keep a **journal** with all your career information. Over the years, add to it as your interests expand, and you develop a greater view of the world. You will be amazed that some interests remain a life-long passion, while others are fleeting. All this will help you find a fulfilling career.

Your career **journal** can be anything that works for you. You can stuff a box with all your clippings, notes, and research. You can design and bind your own homemade **journal**. You



One of the ST[EMpower] issues several years ago was on bookbinding. You can make your own **journals** and decorate them as you see fit (<https://tra.extension.colostate.edu/stem-k12/stem-resources/43.Bookbinding>). There is even information how to make a “**junk journal**” (way too cool! - image below).

Plan to make a series of career **journals**. All this information is important, because it is about you, your interests, and your personality. Plan on labeling each **journal** with a date range or volume number.

Be creative as you keep your **journal**. If you feel like writing a poem about your journey of self-discover, keep it in your **journal**. Sketch ideas, doodle, add clippings from magazines, the internet, or pictures you have taken. Add them if they are interesting to you.

## POWER WORDS

- **journal**: noun—a daily record of news and events of a personal nature; a diary  
verb—write in a **journal** or diary



can purchase an inexpensive composition book. If you are computer savvy, design your career **journal** electronically. There certainly is no one way to do this.

## MATERIALS

- notebook, **journal**, composition book, or make your own **journal** (see page 3—10)
- tape
- art supplies

## What Is a Junk Journal?

A **Junk Journal** is a handmade book made up of recycled items such as papers from magazines, brochures, patterned paper, music sheets, envelopes, packaging, brown paper bags, maps, greeting cards, post cards, doilies, to name a few. The book covers can be made from cereal boxes, old book covers or any hard card boards.

## Why Make a Junk Journal?

- Recycling! You can create a work of art with junk/recycled paper and be frugal and environmentally conscious while pursuing a fun hobby.
- Every **Junk Journal** is a unique work of art and made to your style and needs.
- A **Junk Journal** is filled with visual and tactile interest, that include splashes of color, texture, and pockets to create an inviting place to **journal** or draw.
- The casual feel of a **Junk Journal** is very welcoming. The imperfections are part of the creativity and individuality of the maker and the **journal**.

## Examples of Junk Journals

(page 3):

- **Junk Journal** covers can be made from old books, cereal boxes, cake boxes, corrugated cardboard boxes, wood, or anything else that you can imagine.
- The pages are made from envelopes, recycled paper, old maps, art paper, graph paper, magazines, newspaper, old catalogues, or anything else that you can imagine.
- Decorations are lace, twine,

thread, fabric, charms, stickers, feathers, seashells, or anything else you can imagine!

## Ideas:

- After you have taken your interest survey, design your **junk journal** along your top interests. For example, if your top interests are music and dance, art, and travel, add those elements to your **journal**.
- You can use all recycled materials. You don't need to purchase anything for your **journal**. Make paper beads, find images online, use envelopes to hold smaller pieces of paper, or use fabric scraps to decorate your **journal**.

## POWER WORDS

- **junk journal:** handmade book made up of recycled items such as papers from magazines, brochures, patterned paper, music sheets, envelopes, packaging, brown paper bags, maps, greeting cards, post cards, doilies, to name a few; the book covers can be made from cereal boxes, old book covers or any hard card boards



## MATERIALS

- sewing needles
- heavy duty thread
- needle nose pliers
- tweezers
- scissors
- white glue (Mod Podge)
- glue sticks
- file folders
- piece of Styrofoam
- paper, old maps, envelopes, wrapping paper, sheet music, scrap fabric, lace, etc.
- paper clips
- art supplies
- ruler
- pencil



## Folder File Junk Journal

directions from Lolly Palooza's YouTube (<https://www.youtube.com/watch?v=XKPAEELmXcM>) for a simple folder **Junk Journal** (*image 1*). These directions were very clear for a first **Junk Journal** creation. Another excellent first **Junk Journal** is <https://www.youtube.com/watch?v=iNpOffXCb58> by Johanna Clough, using a cracker box for the cover (*image 2*). It follows the same basic steps.

### STEP ONE—Folder Cover

- Measure and cut the folders to the correct size. Our **signatures** are 8½" x 5½" (half the size of a sheet of paper). The cover needs to be slightly larger. We want to cut the folder to 12½" x 9" (includes the 1" **spine**). Do not include the folder's tab in the measurement.
- To make the **spine**, measure from the left side 5¾" and draw a line and **score** (*image 3*). Measure 6¾" and draw a line and **score**. Do not measure from the tab.
- Select the paper you would like to use to cover the **Junk Journal**. You need to cover both the outside and the inside of the **journal**. There are two styles:
  - **Journal** with small border showing the folder edges (*image 4*) - front and back cover 8¾" x 5¼". The **spine** cover is 8¾" x ¾".
  - If you want to cover the entire **journal**, cut off the folder's tab. Cut the paper 14½" x 11" to give you 1" extra to fold over



## POWER WORDS

Bookbinding terms:

- **folio**: a folded single sheet of paper that will make 4 pages in the journal
- **signature**: a group of nested folios of 5-8 individual pieces of paper that will make 20-32 pages in the journal
- **score**: a ridge indented into the paper to form a fold line using a blunt metal edge (scissors blade) to compress the paper fibers to create a hinge-like area
- **spine**: bound edge of a book where the pages are sewn, glued, or otherwise fastened together; usually thin and flexible, allowing the book to be easily opened

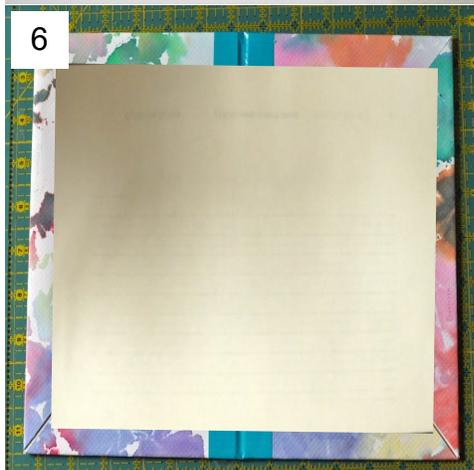
## FASCINATING FACT

There are over 129 million books in existence.

- According to Google, 129,864,880 million books had been published as of 2010. That number is obviously a lot higher now.

the edges of the cover (*image 5*). You will also need an **end sheet** (a piece of paper glued to the inside cover of the book to hide the folded seams of the cover). The end sheet is usually plain (*image 6*).

- Use a light coat of mod podge on the folder and place the cover, press down, and use the pencil to remove any air bubbles. Dry for 20 minutes. Turn over the folder and repeat for the inside of the cover. Dry for 20 minutes.
- Turn the cover to the outside, and apply a thin coat of Mod Podge over the entire cover (*image 7*). Allow to dry completely (at least 20 minutes). After the Mod Podge has dried, turn over and apply a thin coat of mod podge to the entire inside cover and dry completely.
- Your cover is complete.



## POWER WORDS

- **end sheet:** a piece of stiff paper attached to the inside of a book's front and back covers and to the spine of the book block; the purpose is for appearance, to conceal the edges of the paper, cloth, or leather the covers the outside of attached to the cover core, and conceal the thread and glue on the spine edge of the book block. Heavier weight end sheets also contribute to the strength of the binding and extend the life of the book



## STEP TWO—Folios

- We will use 5 **folios** to make a signature, and 3 **signatures** for our **Junk Journal**. We need 15 pieces of paper for the 60 page journal.
- The paper can be as unique as you are (*image 8*). There

## FASCINATING FACT

The most expensive book ever purchased was sold for \$30.8 million.

- It was *Codex Leicester* by Leonardo Da Vinci, and it was purchased by Bill Gates, according to *Business Insider*. Don't worry though, he probably made the money back within the hour

are lots of ways of altering the paper to make it special.

- There are a variety of paper you can use in each signature. They include:
  - \* Water color paper (need to trim to 8½ x 11")
  - \* Art paper (need to trim to 8½ x 11")
  - \* White paper
  - \* Graph paper
  - \* Brown paper bag
  - \* Wrapping paper (need to trim to 8½ x 11")
- Modify the paper before adding them to the **signature** (*image 8* on page 6, *image 9*). At this point, you are not attaching anything to the pages, only modifying the paper. Examples:
  - \* Coffee stain and dry the paper
  - \* Use the water colors on the paper (remember that it will be folded in half)
  - \* Gently tear the edges to give a soft edge to the paper
  - \* Design a collage from old magazines, and cover the paper with the Mod Podge (remember that it will be folded in half)
  - \* Scallop the edges.
  - \* If you want something to be part of the stitched binding (i.e. lace or pocket)
- If any of your pages are crinkled, use a pencil to smooth the paper (*image 11*).
- Once you have finished designing your 15 pages, fold each in half, one at a



time. Be sure to get a really clean, crisp fold edge on each page by using the side of a pencil.

- When your **folios** have all been folded, nest 5 **folios** to make a **signature**. Do that with all your **folios**. You will have three **signatures**. Check with the cover that you like the thickness.

### STEP THREE — Preparing for Stitching:

- Your **folios** should be completely decorated. Any edging (like lace), scalloping or stamping should be done

### IDEAS FOR YOUR JUNK JOURNAL

- Embellishments for **Junk Journal**: [https://www.youtube.com/watch?v=3MYo\\_kbC8-o](https://www.youtube.com/watch?v=3MYo_kbC8-o)
- Beginner Embellishments for **Junk Journals** <https://www.youtube.com/watch?v=-sLMvJ0kQOA>
- Paper clip embellishments for **Junk Journals**: <https://www.youtube.com/watch?v=UNFmLjyvHzQ>

### FASCINATING FACT

There's a word for loving the smell of old books.

- You know you love the smell of old books. They have the aroma of dust and a whole lot of history. Well now you can call it something. "Bibliosmia" is the word you've probably been searching for your whole life.

before binding. The items you glue on the page are done later, unless you want them to be stitched into the spine.

- The Styrofoam is for hole punching.
- Make a template to poke holes into the cover and each **signature**. The template is made from a piece of folder that is as tall as the book (9"), but it doesn't have to be as wide (*image 11*). Fold the template in half lengthwise, unfold; Fold the template widthwise, unfold. The point where the fold lines intersect is one of the stations (a station is the term for the location of the hole on the template). Poke a hole at the intersection with the needle (*image 12*).
- Measure  $2\frac{1}{4}$ " in both directions from the center hole, and poke a hole at that spot. You will have 3 stations:  $2\frac{1}{4}$ ",  $4\frac{1}{2}$ " and  $6\frac{3}{4}$ " along the 9" fold (*image 12*).
- Place a mark on the template to indicate the top of the book. Each time you use the template, check that the template top is at your book top. Your holes will be consistent.
- Order and line up your folio pages. If you are using any pages that are smaller, be sure that that the page is aligned and centered for sewing. Secure with a binder clip.
- Line up the template and press into the **signature**, place on the Styrofoam (*image 13*), and puncture



with the needle at your three sewing holes. Repeat for each signature.

- On the inside of the cover, measure the center of your spine ( $\frac{1}{2}$ "), and draw a line

## FASCINATING FACT

Author's names didn't used to be printed on the covers of their books.

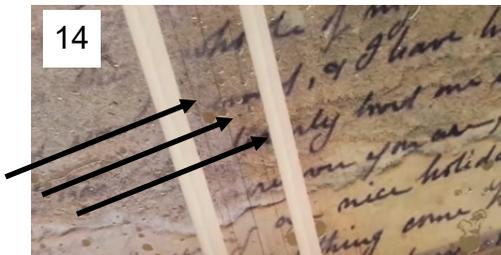
- The covers of the first printed books were considered artworks. They were covered in drawings, leather and even gold — so there wasn't a place for the author's name.

## FASCINATING FACT

The longest sentence ever printed is 823 words.

- We have a feeling it's probably a run-on, but it's a legit sentence that exists in Victor Hugo's *Les Miserables*, according to Barnes and Noble.

from the top to the bottom of the cover. Repeat at  $\frac{1}{4}$ " and  $\frac{3}{4}$ " (see arrows; *image 14*). Line up your template along those lines, and mark the three sewing holes with a pencil (*image 15*).



### FASCINATING FACT

The first book ever written using a typewriter was *The Adventures of Tom Sawyer*.

- Mark Twain must have had a lot of ink and a lot of patience.

President Theodore Roosevelt read one book per day.

- Now that's dedication to reading.

The three most read books in the world are...

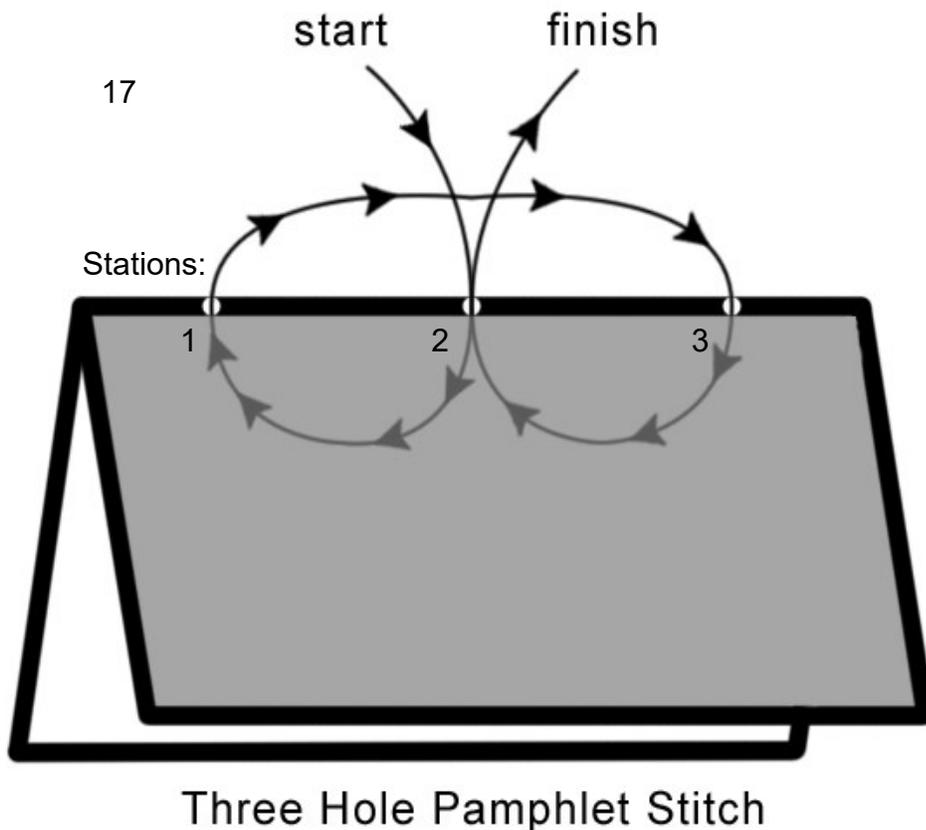
- *The Holy Bible*,
- *Quotations from Chairman Mao Tse-Tung*, and
- *Harry Potter*.

- Place the open cover on the Styrofoam, and poke the three holes per line with the needle, for a total of nine holes. Each **signature** will be stitched to one of the lines, and the three holes on the line will match the three holes on the **signature**. (*image 16*).



### STEP FOUR — Stitching Your Journal:

- To stitch your **Junk Journal**, you need to use one of the needles and thread. You can use waxed book binding thread, book binding twine, embroidery thread or heavy duty sewing thread. You will need enough thread to stitch all three **signatures**. You can tie or thread charms, buttons, or beads as you sew the binding.
- Image 17 on the right show the pattern to stick your **Junk Journal** binding.
- Start with the **signature** that will be in the middle of your journal. Push the needle through the outside to the inside cover and all the pages of that **signature** at station 2 (the center hole).
- Push the needle from the inside of the **signature** to the outside cover at station 1. Pull tight.
- Push the needle from the outside of the cover to the inside of the **signature** at



station 3. Pull tight.

- Push the needle from the inside of the signature to the outside cover at station 2. Pull tight. Tie the string.
- Repeat these directions for each of the other two **signatures**.
- You have three sets of strings for each signature coming from the center holes. You can tie charms and beads, tie it in a bow, or hide the knot.
- The journal pictured (*image 18*) on the right is stitched like our journal as a three hole pamphlet, however it has five **signatures**.

## STEP FIVE — Completing Your Journal:

- Leave room for writing, sketches, letters, and photos, for your career **Junk Journal**. For example, the Interest survey analysis produces 12 small cards of your interests. You can keep them tucked into an envelope in your **Junk Journal**.
- You can add envelopes and pockets to a page, and use those to tuck images, index cards, recipe cards, tags, or other items (*images 19*).
- You can make unique paperclip art to add to your **Junk Journal**. The paperclips can be attached to an envelope, pocket, or the page (*image 20*).
- You can add ribbon, charms, beads, and other decorations to your **Junk Journal** (*image 21*).
- You can make some bookmarks (*image 22*)!



## IDEAS FOR YOUR JUNK JOURNAL

- Make word beads to dangle from your **junk journal**  
<https://www.youtube.com/watch?v=WD9IF16VbEg>
- Recycled beads:  
<https://www.youtube.com/watch?v=z0VO6ZCkwsW>
- Paper beads:  
<https://www.youtube.com/watch?v=tU9RvX7p9ZA>



22



For our first step in exploring careers, you need to determine what are your interests and talents. Check each response if it is something that you would really like to do, or you do regularly. There is no wrong answer unless you do not answer honestly! Be picky!



1. Rescue a cat stuck in a tree.
2. Visit the pet store every time you go to the mall.
3. Paint a mural on the cafeteria wall.
4. Run for a 4-H county council officer position.
5. Send e-mail to a "4-H pen pal" in a different state.
6. Survey your 4-H club



7. members to find out what they do after school.
7. Try out for the school play.
8. Dissect a frog and identify the different organs.
9. Play baseball, soccer, basketball, football, or \_\_\_\_\_ (fill in your favorite sport).
10. Talk on the phone to just about anyone who will talk back.
11. Try foods from all over the world: Thailand, Poland, Japan, etc., and do the Passport to Foreign Cookery project.
12. Write poems about things

- that are happening in your life.
13. Create a really scary haunted house to take your friends through on Halloween.
14. Raise a 4-H lamb for breeding or market and enter in the county fair.
15. Bake a cake and decorate it for your best friend's birthday in the cake decorating project.
16. Sell enough advertisements for the school yearbook to win a trip to Walt Disney World.
17. Simulate an imaginary flight through space on your computer screen.
18. Build model airplanes,



## FASCINATING FACT

Icelandic people read more than anyone.

- Perhaps it has to do with the weather, or maybe they're just taught to really love books. Either way, Iceland for the win!

## Alice in

*Wonderland* is based on a real 10-year-old girl.

- Her name was Alice Liddell, and her family was close friends with author Lewis Carroll. While on a boating trip, she asked him to tell her a story — and that's how *Alice* was born.

boats, doll houses, or anything from scratch or a kit. Model rocket or woodworking heritage arts

19. Teach your friends a new dance routine.
20. Watch the stars come out at night and see how many constellations you can find.

## MATERIALS

- computer with printer
- print page 11-14
- print page 16
- pencil or pen
- career journal
- tape
- art supplies



21. Watch baseball, soccer, basketball, football, or \_\_\_\_\_ (fill in your favorite sport) on TV.
22. Give a speech in front of your 4-H council.
23. Go to Washington D.C. on the Citizenship Washington Focus with your state 4-H teen leaders.



24. Read everything in sight, including the back of the cereal box.
25. Figure out "who dunnit" in a mystery story.
26. Take in stray or hurt animals.
27. Make a display board about your 4-H project.



28. Think up new ways to make lunch line move faster and explain it to the cafeteria staff.



29. Make your own movie in the 4-H filmmaking project.
30. Invest your allowance in the stock market and keep track of how it does.
31. Go to the ballet or opera every time you get the chance.
32. Do experiments with a chemistry set.
33. Keep score at your sister's little league team game.
34. Use lots of funny voices when reading stories to children.



## FASCINATING FACT

Illiteracy is still a huge problem throughout the world.

- One in five adults around the world can't read or write, with the highest rates in South and West Asia and sub-Saharan Africa.

35. Ride on airplanes, trains, boats, anything that moves.
36. Interview the new exchange student for an article in the monthly 4-H County Newsletter.
37. Build your own treehouse.
38. Help clean up a waste site in your neighborhood.

## FASCINATING FACTS

- People who don't take office politics seriously are more successful and efficient at work.
- Early hunter-gatherers had more leisure time than those who live and work in a modern capitalist or agrarian society.
- The Industrial Revolution allowed people to work longer and year-round. Labor was no longer tied to the season or natural lighting.



- 39. Visit an art museum and pick out your favorite painting.
- 40. Play Monopoly in an all-night championship challenge.
- 41. Make a chart on the computer to show how much soda students buy from the school vending machine each week.



- 42. Keep track of how much your team earns to buy new uniforms.
- 43. Plan an instrument in the school band or orchestra.
- 44. Take things apart and put them back together in the Small Engines project.
- 45. Write stories about sports for the school newspaper.
- 46. Listen to other people talk about their problems.



- 47. Imagine yourself in exotic places.
- 48. Hang around bookstores and libraries.
- 49. Play harmless practical jokes on April Fool's Day.
- 50. Join one of the 4-H clubs in your county.
- 51. Take photographs at the school talent show.
- 52. Make money by setting up your own business—paper route, lemonade stand, etc.
- 53. Create an imaginary city using a computer.
- 54. Do 3-D puzzles.
- 55. Keep track of the top 10 songs of the week.
- 56. Read about famous inventors and their inventions.
- 57. Make play-by-play announcements at the school football game.
- 58. Answer the phones during a telethon to raise money for orphans.
- 59. Be an exchange student in another country with the 4-H International Programs.



## FASCINATING FACTS

- Nearly 80% of American workers are dissatisfied with their jobs.
- Over a lifetime, the average person spends about 90,000 hours at work.
- For every 1,470 resumes received, an employer will hire just one person.
- Multitasking at work can drop a person's IQ by ten points, which is equivalent to losing a night of sleep and twice the effect of smoking marijuana.

- 60. Write down all your secret thoughts and favorite sayings in a **journal**.
- 61. Jump out of an airplane (with a parachute, of course!).
- 62. Plant and grow a garden in your backyard (or windowsill) in the gardening project.

## FASCINATING FACTS

- The word "work" is from the Proto-Indo-European word *\*werg*, meaning "to do."<sup>[22]</sup>
- The word "employ" is from the Latin *implicare*, meaning to "enfold, involve, associate."<sup>[7]</sup>
- The word "boss" is from the Dutch *baas*, meaning "a master."



- 63. Use a video camera to make your own movies.
- 64. Get your friends together to help clean up your town after a storm.
- 65. Spend your summer at a computer camp learning lots



- of new computer programs.
- 66. Build bridges, skyscrapers, and other structures (like robots) out of LEGOs.
- 67. Plan a concert in the park for little kids.
- 68. Collect different kinds of rocks.



- 69. Help plan a sports tournament.
- 70. Be DJ for the school dance.
- 71. Learn how to fly a plane or sail a boat.
- 72. Write funny captions for pictures in the school yearbook.

- 73. Scuba dive to search for buried treasure.
- 74. Recognize and name several different breeds of cats, dogs, and other animals.



- 75. Sketch pictures of your friends.
- 76. Pick out neat stuff to sell at the school store.
- 77. Answer your classmates' questions about how to use the computer.
- 78. Draw a map showing how to get to your house from school.
- 79. Make up new words to your favorite songs.
- 80. Take a hike and name the different kinds of trees, birds, or flowers.

## FASCINATING FACTS

- 41 percent of job seekers search for jobs while in bed, 30 percent while at work, and 18 percent from a restroom.
- Average time spent by recruiters looking at a resume: 5 to 7 seconds.
- According to a recent survey, hiring managers report that the quality they value least in a candidate is intelligence, the most is reliability.
- 76 percent of resumes are discarded for having an unprofessional email address.

- 81. Referee intramural basketball games.
- 82. Join the school debate team.
- 83. Make a poster with postcards from all the places you went on your summer vacation.
- 84. Write down stories that your grandparents tell you about when they were young.

## FASCINATING FACTS

- Average length of an interview? Forty minutes. Average time it takes for a hiring manager to know if they will hire that candidate? Ninety seconds.
  - Millennials make up 45 percent of the workforce now, making them the highest represented generation.
- 79 percent of job candidates are likely to use social media in their job search.

There were 84 questions, and each question can be grouped into 1 of 12 categories:

- Adventure
- Animals and Nature
- Art
- Business
- Computers
- Math
- Music and Dance
- Science
- Sports
- Talking
- Travel
- Writing

On the next page, you will find the score sheet. To calculate your interests:

- Find all of the numbers that you selected on the survey and locate the matching number in the boxes on page 7. Put a check by that number.
- Count the number of checks in each box and put that number on the line in the box.
- Cut out the 12 cards.
- Order the cards from the highest total to the lowest total. If two boxes have the same number, they will be assigned the same rank. For example, if both Math and Travel have 7 checks, they will both be ranked as number 1. Continue until all 12 boxes are ranked.
  - What are your top areas of interest?
- Tape your Interest Cards in your career notebook or **journal**. Discuss these interests with your parents, 4-H leader, and close friends (on the phone during this time). Brainstorm ideas for a project that incorporate at

least the three top areas of interest. For example, if your top interests are art, business, and talking, you could design a line of electric t-shirts with the 4-H clover and market them to your 4-H club.

**Adventure**

1  
 13  
 25  
 37  
 49  
 61  
 73

Total \_\_\_\_\_  
 Rank \_\_\_\_\_

**Animals and Nature**

2  
 14  
 26  
 38  
 50  
 62  
 74

Total 7  
 Rank 1

**Business**

4  
 16  
 28  
 40  
 52  
 64  
 76

Total 2  
 Rank 11

34  
 46  
 58  
 70  
 82

45  
 55  
 67  
 79

Total \_\_\_\_\_  
 Rank 11

**Math**

77

Total \_\_\_\_\_  
 Rank \_\_\_\_\_

**Music and Dance**

Total \_\_\_\_\_  
 Rank \_\_\_\_\_

**Art**

3  
 15  
 27  
 39  
 51  
 63  
 75

Total 3  
 Rank 9

**Computers**

5  
 7  
 9  
 1  
 3  
 5

**Sports**

9  
 21  
 33  
 45  
 57  
 69  
 81

Total 3  
 Rank 9

**Science**

8  
 20  
 32  
 44  
 56  
 68  
 80

Total 7  
 Rank 1



<p style="text-align: center;"><b>Adventure</b></p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 13</p> <p><input type="checkbox"/> 25</p> <p><input type="checkbox"/> 37</p> <p><input type="checkbox"/> 49</p> <p><input type="checkbox"/> 61</p> <p><input type="checkbox"/> 73</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Animals and Nature</b></p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 14</p> <p><input type="checkbox"/> 26</p> <p><input type="checkbox"/> 38</p> <p><input type="checkbox"/> 50</p> <p><input type="checkbox"/> 62</p> <p><input type="checkbox"/> 74</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Art</b></p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 15</p> <p><input type="checkbox"/> 27</p> <p><input type="checkbox"/> 39</p> <p><input type="checkbox"/> 51</p> <p><input type="checkbox"/> 63</p> <p><input type="checkbox"/> 75</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Business</b></p> <p><input type="checkbox"/> 4</p> <p><input type="checkbox"/> 16</p> <p><input type="checkbox"/> 28</p> <p><input type="checkbox"/> 40</p> <p><input type="checkbox"/> 52</p> <p><input type="checkbox"/> 64</p> <p><input type="checkbox"/> 76</p> <p>Total _____</p> <p>Rank _____</p>
<p style="text-align: center;"><b>Computers</b></p> <p><input type="checkbox"/> 5</p> <p><input type="checkbox"/> 17</p> <p><input type="checkbox"/> 29</p> <p><input type="checkbox"/> 41</p> <p><input type="checkbox"/> 53</p> <p><input type="checkbox"/> 65</p> <p><input type="checkbox"/> 77</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Math</b></p> <p><input type="checkbox"/> 6</p> <p><input type="checkbox"/> 18</p> <p><input type="checkbox"/> 30</p> <p><input type="checkbox"/> 42</p> <p><input type="checkbox"/> 54</p> <p><input type="checkbox"/> 66</p> <p><input type="checkbox"/> 78</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Music and Dance</b></p> <p><input type="checkbox"/> 7</p> <p><input type="checkbox"/> 19</p> <p><input type="checkbox"/> 31</p> <p><input type="checkbox"/> 43</p> <p><input type="checkbox"/> 55</p> <p><input type="checkbox"/> 67</p> <p><input type="checkbox"/> 79</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Science</b></p> <p><input type="checkbox"/> 8</p> <p><input type="checkbox"/> 20</p> <p><input type="checkbox"/> 32</p> <p><input type="checkbox"/> 44</p> <p><input type="checkbox"/> 56</p> <p><input type="checkbox"/> 68</p> <p><input type="checkbox"/> 80</p> <p>Total _____</p> <p>Rank _____</p>
<p style="text-align: center;"><b>Sports</b></p> <p><input type="checkbox"/> 9</p> <p><input type="checkbox"/> 21</p> <p><input type="checkbox"/> 33</p> <p><input type="checkbox"/> 45</p> <p><input type="checkbox"/> 57</p> <p><input type="checkbox"/> 69</p> <p><input type="checkbox"/> 81</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Talking</b></p> <p><input type="checkbox"/> 10</p> <p><input type="checkbox"/> 22</p> <p><input type="checkbox"/> 34</p> <p><input type="checkbox"/> 46</p> <p><input type="checkbox"/> 58</p> <p><input type="checkbox"/> 70</p> <p><input type="checkbox"/> 82</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Travel</b></p> <p><input type="checkbox"/> 11</p> <p><input type="checkbox"/> 23</p> <p><input type="checkbox"/> 35</p> <p><input type="checkbox"/> 47</p> <p><input type="checkbox"/> 59</p> <p><input type="checkbox"/> 71</p> <p><input type="checkbox"/> 83</p> <p>Total _____</p> <p>Rank _____</p>	<p style="text-align: center;"><b>Writing</b></p> <p><input type="checkbox"/> 12</p> <p><input type="checkbox"/> 24</p> <p><input type="checkbox"/> 36</p> <p><input type="checkbox"/> 48</p> <p><input type="checkbox"/> 60</p> <p><input type="checkbox"/> 72</p> <p><input type="checkbox"/> 84</p> <p>Total _____</p> <p>Rank _____</p>

Personality tests provide insight in how you **perceive** the world, and how those **perceptions** influence your decisions. One of the first and most famous tests is Myer-Briggs, that evaluates responses on a scale of 4 different criteria:

- “E” **Extroversion**—“I” **Introversion**
- “S” **Sensing**—“N” **Intuition**
- “T” **Thinking**—“F” **Feeling**
- “J” **Judgement**—“P” **Perception**

The tests then provides a 4 letter code with 16 different combinations:

ESTJ	ENTJ	ISTJ	INTJ
ESTP	ENTP	ISTP	INTP
ESFJ	ENFJ	ISFJ	INFJ
ESFP	ENFP	ISFP	INFP

The types are not either/or, but rather a sliding scale. You can change with your mood. Each “type” has different strengths and weaknesses. It doesn’t mean that you are just that trait, but it means you rely on it more than the opposite trait.

Extroverting	Introverting	Sensing	Intuiting	Thinking	Feeling	Judging	Perceiving
Initiating	Receiving	Concrete	Abstract	Logical	Empathetic	Systematic	Casual
Expressive	Contained	Realistic	Imaginative	Reasonable	Compassionate	Planful	Open-ended
Gregarious	Intimate	Practical	Conceptual	Questioning	Accommodating	Early Starting	Prompted
Active	Reflective	Experiential	Theoretical	Critical	Accepting	Scheduled	Spontaneous
Enthusiastic	Quiet	Traditional	Original	Tough	Tender	Methodical	Emergent

Most personality tests use similar criteria as the Myers Briggs test, like the one you can take. It is free and online.

**Directions:**

- The websites in the green box are free personality tests. They are similar to the

- Myer Briggs test. Take as many as you can to compare results.
- Answer as honestly as you can, even when the answer is embarrassing. No one will see the test except for you. The more honestly you answer, the more accurate the results.
- Answer each question. Try not to use the center button, the neutral answer. Even slightly liking or disliking will give you better results.
- When you have completed the test, it will give you an answer of your traits.
- Try taking the tests once a day for several days. You may be surprised that your answers will change with different results.
- Over several days, you will see similar traits emerge. Capture those results and keep them in your career **journal**.
- Check out one more website after you are done in the green box above. This site

**POWER WORDS**

- extroversion: directing one's interest outward or to things outside the self.
- introversion: concerned with one's own thoughts and feelings
- perceive: become aware or conscious of (something); come to realize or understand
- perception: a way of regarding, understanding, or interpreting something; a mental impression

Connect your personality to different STEM careers:

- <https://careerinstem.com/personality/>

connects different STEM careers with your personality.

**WEBSITES**

- <https://www.16personalities.com/free-personality-test>
- <https://profile.keirseey.com/#/b2c/assessment/start>
- [https://www.personalitypathways.com/type\\_inventory.html](https://www.personalitypathways.com/type_inventory.html)
- <http://www.9types.com/rheti/>
- <https://www.kidzworld.com/quiz/203>

The 12 broad interest categories are:

- Adventure
- Animals and Nature
- Art
- Business
- Computers
- Math
- Music and Dance
- Science
- Sports
- Talking
- Travel
- Writing

Look at your ranking. What are your top 3 or 4 categories? For example, my top 4 are Animals and Nature, Math, Science, and Travel. I love my job, and it incorporates all four of those interests.

You are going to start exploring what careers combine your interests so that you can work towards your rewarding career! Awesome!

Pick at least one of the following and explore the ideas further.

- What are your very favorite books, movies, and TV shows? Why? What are the common threads? Write them down. Look at your top interest categories, and how do they relate to each other?



- Write a story about yourself set in 2030. What are you doing? How are you doing it? Be as wildly creative as you like in your story.



- Design something using recycled materials. This project can be anything from designing artwork to a robot that plays with your cat. How did this project relate to your top interests?



- Keep a journal to track your activities over the course of the month. Set it up with the amount of time at each task (including your chores). At the end of the month, add up the time it takes for each (i.e.



## CAUTION

During the epidemic, if any of these projects include presenting them to others, come up with alternative solutions:

- Can you present them virtually online?
- Can you present via phone?
- Can you plan the program and present it after the coronavirus infection subsides?

## MATERIALS

- career journal
- art supplies
- computer with internet access or smart phone

143 hours for school). Even with the tasks we have to do, some are enjoyable. Note the activities that you enjoyed doing during the “have to” time. Next look at your free time. How did you spend it? What was the most enjoyable to you? Do you see a pattern emerge?



- You can work with 3 other friends on this idea. Plan a themed day for younger 4-H members. For example, present the 4-H day, with 1 activity from each of the Head, Hand, Heart, and Health themes. Each one of you presents your activity to younger members. What did you like best about this?



- Take the 4-H online workshop “4-H Filmmaking Studio and Workshop”. Write a script and film an infomercial (using only family members, please) about how to wash your hands and clean surfaces to keep safe during the epidemic. Edit your film and finalize your



- masterpiece using a free film editing program like Movie Maker. Email or call your 4-H agent in your county to post it online. You can find the filmmaking workshop online at <https://4-h.org/parents/curriculum/filmmaking/>
- It is spring! Start a vegetable garden. If you have a backyard, make a small plot. If you don't have a yard, you can start a flowerpot vegetable garden. What do you need to do to grow your vegetables?



- Volunteer to cook one meal each day for your family. Plan your menu, make sure that you have the groceries you need, and create your culinary masterpiece! My Plate has great ideas (website in in green box left)!

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**My Plate**

- <https://www.choosemyplate.gov/myplatekitchen>

OR...Design your own project!

**MyPlate Kids' Place**

Choose **MyPlate.gov**

**MATERIALS**

- 75 percent of employers expect a thank-you note following an interview.
- Typical length of a job search: 16.9 weeks
- Biggest trend in finding candidates for professional positions? Reaching out to employed people who might be “passive job-seekers” — happy where they are, but if an opportunity came their way that seemed interesting, they might pursue it.

Are you surprised at what project you selected? Did you pick something that falls into your top ranked interests, or did you pick something that was outside those interests?

- This month, reflect in your career journal:
  - What you did
  - How you did it
  - What was successful
  - What you would change
  - Did you have fun?
- Spend some time really analyzing your project.
  - What aspects of your project were the easiest for you to do? List those.
  - What skills do you have that made that part of the project easy to do?
  - Which interest was dominant in your project? For example, if you made art out of recycled material, and science is one of your top interests, did that influence what you made? Did you focus your art project on scientific aspects (e.g. selecting colors that you change with the light, or including motors and gears to make your art move)?
- Writing sparks different parts of the brain than typing does. If you utilize both writing and typing, you will be able to discover more about yourself. Write 25 single words or short phrases that you feel or think about your project. Type a short paragraph about your project. Print your paragraph and add it to your career journal.
- In your journal, keep things

that you find interesting. For example, you see a beautiful sunrise, and you want to capture the feeling, take a picture and write a haiku in your journal. Print the picture and tape it next to your haiku.

Chickadees flutter  
Dancing on snowy branches  
Busy little birds

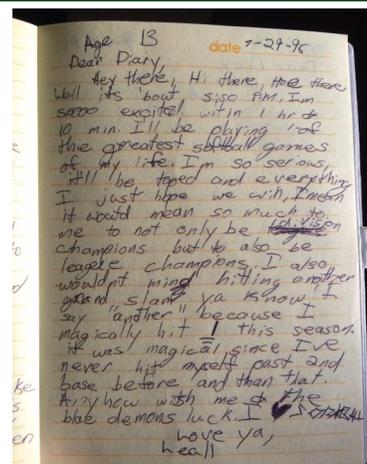


- If you see something on the internet that is fascinating or peaks your interests, print it and tape it in your journal.
- Write your thoughts about yourself at the end of the day or first thing in the morning. Try different questions, like: Why is my favorite color red? When is my favorite time of the day?
- Don't examine the journal just yet. Right now, your are just gathering those things that please you, spark your interest, or fascinate you. Have fun!

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### FASCINATING FACTS:

Following your passion doesn't necessarily lead to job satisfaction

- Rather than being motivated by your passions, a study found that people who believed they only had to find the thing they were interested in ended up less satisfied and were more likely to lose interest in jobs quickly. Instead, look for several interests, and be open to many different jobs that can fulfill them.

How did your project go? Did you enjoy it? What aspects were the easiest? What were the hardest? Write down your thoughts and add them to your journal.

Now is the time you compile all your information about you. Spend some time looking at everything you have done (the interest test, the personality test, the project and evaluating how it went, and your career journal) exploring your interests, skills, and talents. What are the common themes you find running through everything you have done? What came to you easily? What parts were most fun?

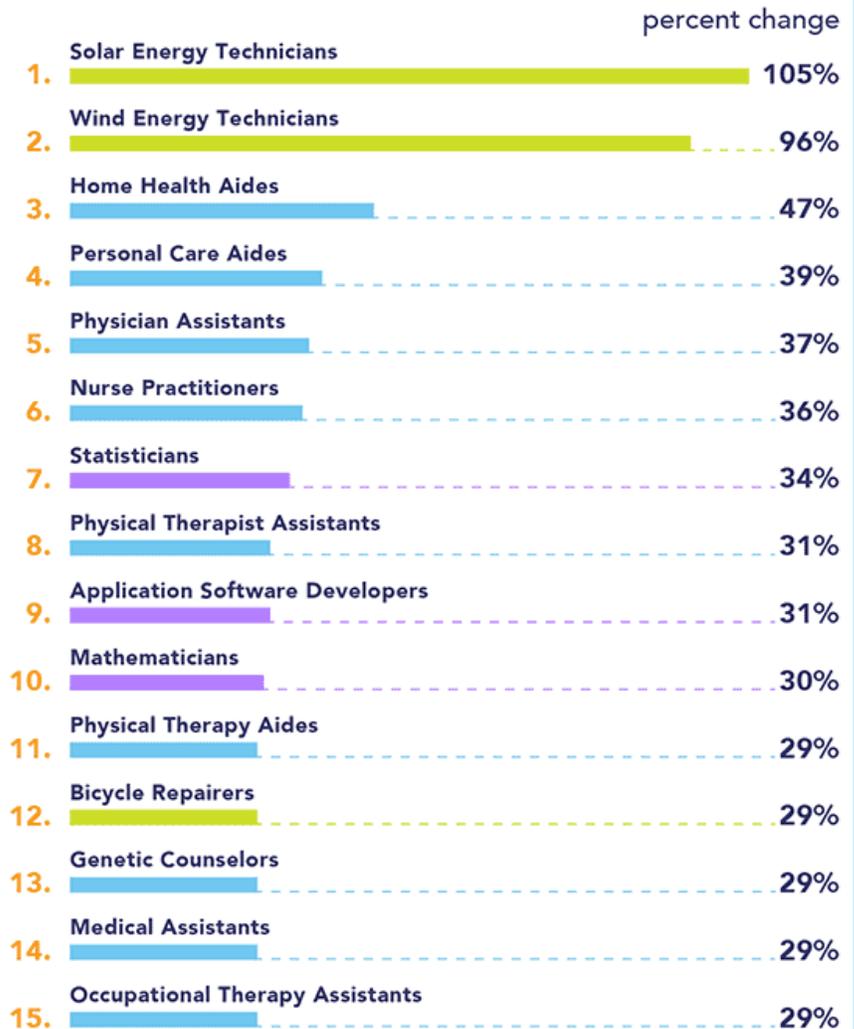
Unfortunately, every job has something that is hard for us. What we look for is to minimize those hard tasks and **maximize the parts that were easy and fun** so most of our time is spent at what we love.

Spend a little time examining your career interest journal. You may be surprised what you pulled out and put in it. That was how I first connected that I love science. Almost everything in my journal was on curiosity, puzzles, animals and teaching.

Now comes the fun part. What jobs are out there that match your interests, your skills, your talents?

NOTE: With the epidemic, how can you explore these ideas virtually? Your library may be closed. Do they have online resources? They may have a skeleton crew, and you can call and ask for the reference desk,

# 15 Fastest-Growing Occupations From 2016 to 2026



Source: U.S. Bureau of Labor Statistics, Employment Projections, 2016–2026.

## MATERIALS

- career journal
- computer with internet
- printer
- art supplies

and work with the libraries at distance. Can you call your teachers to discuss ideas. Spend time researching online. There are ways to keep healthy while exploring careers.



- The public library and the librarians are phenomenal resources. Tell the reference librarian what you are doing, and you are now exploring careers that match your interest. They want to help you! They will find ways for you to match your interests to careers, and provide resources (books, journals, etc.) for you to explore those careers.
- Talk to your teachers. Go to the teachers who teach in the subject areas that are closest to your interests as well as teachers with whom you have a strong connection.
- In your interest journal, list every job you can find that incorporates your interests, talents, and skills.
- Check out the following websites:
  - Virginia Career VIEW (Vital Information for Education and Work) is that state's Career Information Delivery System for all students in grades K-8. They have put

together a great website that is excellent, with an



interest survey, games, and contests

- \* The website will direct you to explore in three areas, Grades K-5, Grades 6-8, or Grades 9-12. Click, and there is a great selection of activities and surveys to explore.

<https://vacareerview.org/>  
<https://vacareerview.org/68/check-it/who-r-u/>



- The second website, Careers in STEM, was developed by a classroom teacher frustrated that there was so little information about STEM

### FASCINATING FACTS from the HuffPost

- Artist: Art competitions used to be part of the Olympics. From 1912 to 1948, 151 Olympic medals were awarded for sports-themed artwork.
- Bartender: Abraham Lincoln was a licensed bartender and owned his own tavern. The place was called Berry and Lincoln.
- Delivery Person: A pizza delivery person played a key role in inventing the bullet proof vest. Richard Davis was held up at gun point during a pizza delivery in 1969, and he came up with this idea.

### FASCINATING FACTS from the HuffPost

- Mechanic: Queen Elizabeth was a mechanic in WWII. She was an 18 year old princess at the time of her training.
- Musician: the earliest known musical instrument was a flute made from bird bone and mammoth ivory. These flutes were found in caves in Germany, and are around 43,000 years old.

careers on-line. There are plenty of free resources for you to explore, including videos of people taking about their jobs to viewing lists of careers by interest. Check it out!

<https://careerinstem.com/>



US Bureau of Labor also has a "kid-friendly" website on careers. One of the really nice features is each career is linked to the Occupational Outlook Handbook. with links to:

- What They Do
- Work Environment
- How to Become One
- Pay
- Job Outlook
- State and Area Data
- Similar Occupations
- More Information

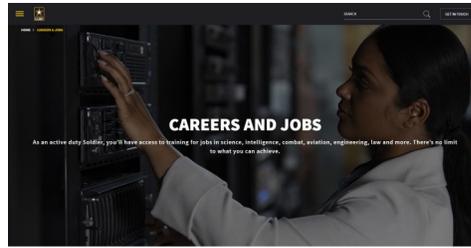
US Military (Army, Navy, Marine Corp, Airforce, and Coast Guard) have great career websites. If you are considering a military career, start here:

- Air Force: <https://www.airforce.com/careers/browse-careers/>

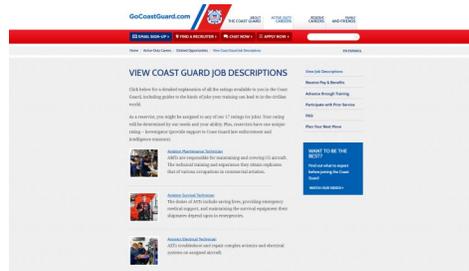


THERE ARE TWO WAYS TO FIND CAREERS

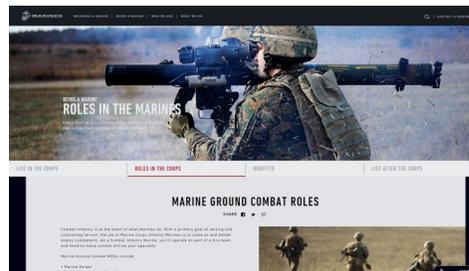
- Army: <https://www.goarmy.com/careers-and-jobs.html>



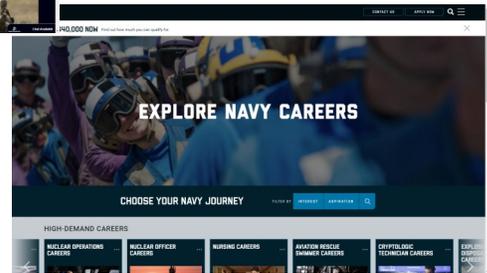
- Coast Guard: <https://www.gocoastguard.com/active-duty-careers/enlisted-opportunities/view-job-descriptions>



- Marines: <https://www.marines.com/being-a-marine/roles-in-the-corps.html>



- Navy: <https://www.navy.com/careers>
- These websites have great information, and interesting ways of presenting it.



**FORECAST OF THE TOP TEN CAREERS**

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organizational Development Specialists
10. Information Technology Services

**FASCINATING FACTS from the HuffPost**

- Nurse: Scrubs (medical wear) are typically green or blue. These colors mask stains better than white, and also serve as opposites to the colors of the human body. For example, green is a less harsh comparison to blood than white.



Your career will be amazing, engaging, and perfect for you, if you spend the time working towards it.

What is even better, even the journey towards your career can be fun!

You now have a list of careers that you would find satisfying and fulfilling. How can you “test drive” a career? Find people who work in these careers, and ask them.

For example, if your top interests, skills, and talents are computers, travel, and art, talk to computer programmers who develop apps or games. If your top interests are Music and Dance, Writing, and Business, talk to the local symphony director (not the conductor, but the management of the symphony) or a music store owner.

Sometimes it is hard to reach out to a stranger and strike up a conversation. You have two advantages. You are associated with 4-H (a member or in a program run by 4-H). Your leader can help you practice. The other advantage is **EVERYONE LOVES TO SHARE WHAT THEY LOVE!**

Call the person, briefly tell them that you are exploring careers, and you are interested in what they do. You would like to make

an appointment with them for an interest interview.

Arrive at least 15 minutes early, dressed nicely. Bring a pad and paper (tablet, your interest journal, or something else to take notes). Have your questions ready and written down.

Here are 40 questions in six categories developed by the University at Buffalo School of Management. Select two or three questions from each group. Use them as a guide, to rewrite them for the specific career you are exploring. Write them down, and at your information interview, read them. The person you are interviewing will be impressed that you are prepared.

Make them relevant. For example, instead of asking (question 25): “What qualifications do you seek in a new hire?”, look up HR on their company to read what their job qualifications are. Instead ask a question directly relevant to the position or company, like: “Most jobs I’d be interested in listed communication, teamwork and decision-making skills as necessities. Can you tell me how those skills are used in this profession?”

### VIRTUAL INTERVIEW TIPS

- Get your technology in order: Download and test your video-conferencing app the day before your scheduled virtual appointment. If you do not have the software, check out this site: <https://www.voipreview.org/free-web-conferencing>
- Prepare the room: If possible, position your computer and webcam so that there is a blank wall behind you. If that isn’t possible, can you plain sheet? Ask for everyone in your household to help. Can someone watch the pets? Turn off the TV and radio and silence the cell phones.

### VIRTUAL INTERVIEW TIPS

- Dress for success: Dress for a virtual interview the same way you would for a face-to-face interview. Dress like you are meeting with a judge to talk about your county fair project.
- Body language: Sit straight and face the camera. Do not fidget or slouch. For this interview, watch the speaker’s image. If this were a job interview, look directly at the camera.

What Work is Like:

1. Could you describe one of



- your typical workdays?
2. What skills are required in your position on a day-to-day basis?
3. What parts of your job do you find most challenging?
4. What do you find most enjoyable?
5. Are there any negatives to your job?
6. How many hours do you work in a typical week?
7. Which seasons of the year are toughest in your job?
8. How would you describe the corporate culture?

State of the Industry:

9. Is this field growing enough so that there's room for someone like me?
10. Are too many or too few people entering this profession?
11. What developments on the horizon could affect future opportunities?
12. This industry has changed dramatically in the past five years. What have you seen from inside your company? Where do you think the changes will happen in the next five years?
13. How frequently do layoffs occur? How does it affect employees' morale?
14. Why do people leave this field or company?
15. Who are the most important people in the industry today?

16. Which companies have the best track-record for promoting women and minorities?
17. Are there opportunities for self-employment in your field? Where?

Money and Advancement:

18. What would be a reasonable salary range to expect if I entered this field? What is the long-term potential?
19. What is the advancement potential in the field? What is a typical path?
20. How did you get your job?
21. If you could start all over again, would you change your career path in any way? Why?
22. How long does it take for managers to rise to the top?
23. What is the background of most senior-level executives?

Skills and Experience:

24. What educational preparation would you recommend for someone who wants to advance in this field?
25. What qualifications do you seek in a new hire?
26. How do most people enter this profession?
27. Which of my skills are strong compared to other job hunters in this field?

**VIRTUAL INTERVIEW TIPS**

- Practice: Ask a family member or friend to give you honest feedback when you practice your questions with them. Do they have any suggestions? Set up your program, and pretend that your friend is your professional you will be interviewing.
- Do Research: Find out more about the position your professional holds, or more about his/her company. Your questions can be modified to capture more personal information about the position, and you will get a better understand of his/her job.

**VIRTUAL INTERVIEW TIPS**

- Be Yourself: You don't need to act like anyone but yourself.
- Breathe Easy: Remember, people love to talk about themselves. They will enjoy the interview as much as you! You may be speaking with a friend's parent or a stranger, but you could make a new friend to your future career!

28. What do you think of the experience I've had so far? For what types of positions would it qualify me?
29. Can you recommend any courses I should take before proceeding further with my job search?
30. What companies or industries do you think I should target?

Fitting In:

31. Do you think my objective is clearly stated, realistic and achievable?
32. Considering my background, how well do you think I would fit in this company and/or profession?
33. How does your company compare with others we've discussed?
34. Would the work involve any lifestyle changes, such as frequent travel or late-night business entertaining?
35. Considering all the people you've met in your field, what personal attributes are essential for success?
36. Taking into account my skills, education and experience, what other career paths would you suggest I explore before making a final decision?

More Information:

37. Where can I write to get up-to-date information on salaries, employers and industry issues?
38. What professional journals and organizations should I be aware of?
39. Is there anything else you think I need to know?
40. Who else would you recommend I speak with?

When I call, may I use your name?

Take notes on their replies. You will eventually find something that really grabs you. Ask if you can job shadow that person. Once you have developed a relationship with that person, and the job is still of great interest, ask if they have an intern position (paid or unpaid). Now that is a test drive!

**FINALLY!**

- You now have a series of career ideas. What education do you need for those careers?
- In your career journal, use one page for each career idea, and on that page, fill in information as you find it. For example, what education do you need? What skills are required?
- How much on-the-job training is required?
- What skills are required to perform your job?
- Does the work match several of your interests and is conducive for your personality?
- Is this something you would like to do?

**SIX QUALITIES OF SATISFYING CAREERS**

- Work that is engaging: work that is engaging draws you in, holds your attention, and gives a sense of flow
- Work that benefits other people: helping others is key ingredient to life satisfaction
- Work you are good at: being skilled at your job makes you feel more valued
- Flexibility how and where you work
- Lacking major negatives like:
  - long commute
  - long hours
  - no recognition for a job well done
  - placed in danger
- chance for meaningful collaborations



**WHAT MAKES A JOB SATISFYING?**

- Limited Stress—achievable challenges
- Caring for Others
- Positive Relationships
- Company Culture
- Opportunities for Advancement
- Company Reputation
- Good at What You Do
- Money

## AUTHORS

- Dr. Barbara J. Shaw, Colorado State University Extension Western Region Youth Development 4-H STEM K/12 Specialist
- Tom Lindsay, retired Portland State University instructor (geology and paleontology); HS science teacher (AP and IB Chemistry, Physics, Biology, and Calculus)

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## CITATIONS

### Information:

- Reeves, Diane Lindsey and Clasen, Lindsey (2007) Career Ideas for kids who like Science 2nd Edition. Checkmark Books, New York NY; Pp7-26.
- [https://www.yahoo.com/news/11-random-facts-books-weirdly-192533509.html?guce\\_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce\\_referrer\\_sig=AQAAAD2LqW82xlwno7TE8-kok\\_2UEKVM-5IOZmRCFUyTHb-PnOSId7jJfKwQhtP\\_Lzhpxy4EUUeU\\_U\\_mKlkjePs4YPo\\_bm2ge2VR5-QYVgfWUwsVTXBqZhR8M0fHibC6yZCAaWAOJL-LY7xTYXV\\_KNC0CAO643SFw936qtMFNkW2a3](https://www.yahoo.com/news/11-random-facts-books-weirdly-192533509.html?guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAAD2LqW82xlwno7TE8-kok_2UEKVM-5IOZmRCFUyTHb-PnOSId7jJfKwQhtP_Lzhpxy4EUUeU_U_mKlkjePs4YPo_bm2ge2VR5-QYVgfWUwsVTXBqZhR8M0fHibC6yZCAaWAOJL-LY7xTYXV_KNC0CAO643SFw936qtMFNkW2a3)
- Facts: [https://www.huffpost.com/entry/jobs-historic-facts\\_n\\_5571656](https://www.huffpost.com/entry/jobs-historic-facts_n_5571656); <https://www.jmoreliving.com/2018/05/23/fun-facts-about-job-seeking/>; <https://www.factretriever.com/usa-jobs-facts>

### Images:

- Journals: <http://www.contentmenthealth.com/diy-junk-journal/>; <https://thegraphicsfairy.com/travel-diary-junk-journal/>; <https://www.brit.co/doodling-apps/>; <https://www.amazon.com/Staples-Composition-Notebook-Assorted-Colors/dp/B00WKZM2CW>; <http://robindudleyhowes.blogspot.com/2018/03/the-french-bohemian-travelers-junk.html>; <https://i.ytimg.com/vi/wEXZADIFMBM/maxresdefault.jpg>; <https://i.pinimg.com/736x/1d/e4/73/1de47361314cefb6a174d18ec84b19b3.jpg>; <http://www.gamescraftscoloring.com/crafts/diy-junk-journal-ideas-upcycled.htm>; <https://www.youtube.com/watch?v=XKPAEELmXcM>; <https://www.youtube.com/watch?v=mXBS4rGci38>;
- Careers: <https://twitter.com/nasa/status/944298234310287360>; <https://www.uvisor.com/55-great-careers-working-animals/>; <https://www.contemporary-african-art.com/images/mbongeni.jpg>; <https://www.pulsecollege.com/wp-content/uploads/game-designer-versus-game-developer-pulse-college-dublin-1024x536.png>; <https://www.livescience.com/29017-which-jobs-actually-use-math.html>; [http://www.china.org.cn/international/news/2008-08/06/content\\_16144043.htm](http://www.china.org.cn/international/news/2008-08/06/content_16144043.htm); <https://money.usnews.com/careers/best-jobs/epidemiologist>; <https://www.environmentalscience.org/career/marine-biologist>; <https://www.careergirls.org/career/chemist/>;
- Projects: <https://patch.com/illinois/niles/checkout-digital-music-movies-books-and-more-your-library-card>; <https://www.space.com/41697-hp-mars-colony-challenge.html>; <https://weburbanist.com/wp-content/uploads/2009/03/mosquito.jpg>; <https://www.creativebug.com/classseries/single/creative-journaling-3-21-17>; <https://i.pinimg.com/originals/dd/56/d5/dd56d51b32b405eb3cf5915da3b3a5cd.jpg>; <https://tra.extension.colostate.edu/4-h/>; <https://www.choosemyplate.gov/browse-by-audience/view-all-audiences/children/kids>; <https://www.audubon.org/field-guide/bird/black-capped-chickadee>; <https://www.leahcampbellwrites.com/wp-content/uploads/2015/07/July-29-1996.jpg>;
- Career Ideas: <https://creativelibraryconcepts.com/wp-content/uploads/2017/06/basic-library-shelf-1024x683.jpg>; <https://i.pinimg.com/originals/18/70/bc/1870bc5df28b1b4fb674afbffc82cf5b.png>; <https://www.facultyfocus.com/articles/teaching-and-learning/from-curriculum-to-career-connecting-curriculum-outcomes-to-future-careers/>; <https://superscholar.org/10-careers-you-can-still-have-20-years-from-now/>;