Exploring Careers

The World of Work and You

U.S. Department of Labor
Bureau of Labor Statistics
1979

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Exploring Careers is available either as a single volume of 15 chapters or as separate chapters, as follows:

The World of Work and You
Industrial Production Occupations
Office Occupations
Service Occupations
Education Occupations
Sales Occupations
Construction Occupations
Transportation Occupations
Scientific and Technical Occupations
Mechanics and Repairers
Health Occupations
Social Scientists
Social Service Occupations
Performing Arts, Design, and Communications Occupations
Agriculture, Forestry, and Fishery Occupations

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The World of Work and You

U.S. Department of Labor
Ray Marshall, Secretary

Bureau of Labor Statistics
Janet L. Norwood, Commissioner
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Preface

Exploring Careers is a career education resource for youngsters of junior high school age. It provides the kind of information about the world of work that young people need to prepare for a well-informed career choice. At the same time, it offers readers a way of learning more about themselves. The publication aims to build career awareness by means of occupational narratives, evaluative questions, activities, and career games presented in 14 occupational clusters. *Exploring Careers* emphasizes what people do on the job and how they feel about it and stresses the importance of "knowing yourself" when considering a career. It is designed for use in middle school/junior high classrooms, career resource centers, and youth programs run by community, religious, and business organizations.

This is 1 of 15 chapters. A list of all the chapter titles appears inside the front cover.

Exploring Careers was prepared in the Bureau's Division of Occupational Outlook under the supervision of Russell B. Flanders and Neal H. Rosenthal. Max L. Carey provided general direction. Anne Kahl supervised the planning and preparation of the publication. Members of the Division's staff who contributed sections were Lisa S. Dillich, David B. Herst, H. Philip Howard, Chester Curtis Levine, Thomas Nardone, Debra E. Rothstein, and Kathy Wilson. Gloria D. Blue, Brenda Marshall, and Beverly A. Williams assisted.

The Bureau gratefully acknowledges the cooperation of all the workers who agreed to be interviewed and photographed, the teachers and students who field tested a sample chapter, and all who shared their ideas with BLS. Many people in the counseling community offered encouragement and support. Special thanks for her generous assistance go to Cathy Cockrill, Career Education Curriculum Specialist, Fairfax County Public Schools, Fairfax, Virginia.

Although they are based on interviews with actual workers, the occupational narratives are largely fictitious.

Contents

Exploring Careers

The World of Work and You

The world of work may seem far away right now.

Exploring Careers

Have you ever dreamed of being an actor or actress? An airplane pilot? A deep-sea diver? Daydreaming about careers is fun, and most of us do it. But when it's time to choose a career, you need information. The more information you have to start out with, the better your decision will be. This book tells you some of the things you need to know about the world of work and suggests ways of learning more.

It's not time yet for you to choose a job. But it's not too early to start preparing for the decisions you'll be making a few years from now. How should you go about choosing the direction that is "right" for you? The key is *you*: Your interests, abilities, and goals. You're more likely to make a satisfying career decision if you can come up with a pretty good match between the things you are and want and like to do—and the things a job requires.

Exploring careers therefore means exploring yourself. It means looking inward, identifying your talents, taking stock of your strengths and weaknesses. It means asking questions: What am I really like? What am I good at? What do I want to do with my life? If this seems hard, remember that your family, friends, teachers, and counselors can help you learn more about yourself.

Exploring careers means finding out as much as you can about different types of work in order to see what suits you best. Try to find out which fields match your needs and abilities. Taking the time to explore the world of work doesn't guarantee a satisfying job, but it helps.

Exploring careers means exploring yourself.

Exploring careers also means examining lifestyles and values, for in a sense, your career is everything you do with your life. Career exploration means discovering all of the activities that are possible, meaningful, and satisfying for you.

Quite possibly you'll work for most of your adult life. But you'll spend time with family and friends, take courses from time to time, travel, putter around the house, and spend time on civic, religious, and community activities. Your life will be the sum total of all your interests and activities.

As you explore careers, try to discover how a particular job would fit the lifestyle you prefer. How much of your time, energy, and emotion would a particular job demand? How much do you want to save for yourself?

You'll find that this book is mostly about jobs. It tells what people do on the job, how they feel about their work, what sort of training they have had, what they plan for the future, and how their jobs affect their lives. Throughout the book, there are questions to answer and things to do that will bring you closer to the world of work. Our purpose is to help you identify the personal traits and aptitudes that different jobs require and to encourage you to match these with what you know about yourself. That's what career exploration is all about.

Why so much emphasis on jobs? Well, your job is likely to be one of the most important of your life's activities. Jobs of one kind or another, and the training you need to do them well, will probably take a lot of your time. So much time, in fact, that the rest of your life's routine may be organized around your job—much as your routine these days is organized around school.

The amount of time that you're likely to spend working is reason enough to give some careful thought to your career. A person who works full time for 35 years, averaging 40 hours a week for 50 weeks a year, will spend 70,000 hours of his or her life at work! Compare this with the approximately 17,000 hours you will have spent in school when you graduate from high school.

Why People Work

People work for all kinds of reasons. In the next few pages, we're going to take a look at some of them. We've included some activities to help you develop a feeling for your own reasons for working. That's something you'll need to be clear about when the time comes to choose a career.

Most people work, first and foremost, to make money. They work to be able to buy necessities like food, clothing, and a place to live. They work, too, for the money to buy leisure and convenience goods like cars, stereo

equipment, movie tickets, and camping gear. The list of things we like to spend money on is very long indeed. People also work to save for major expenditures—education, travel, medical bills—and for the time when they will not be earning as much as they are now. Being able to pay for all your expenses yourself gives you economic security. You may already sense the kind of independence that having some money of your own can give you.

How important is it to you to make a lot of money? Are you willing to put in long hours at a job to do so? Or is it more important to you to have time for yourself, for family, for your favorite leisure activities? Think about these things. They will be important in determining the jobs that will suit you best.

For many people, work is a means of earning a living and nothing more. There's nothing wrong with that, certainly. But there *are* other satisfactions that come from working. Let's examine some of the more important ones.

The company of other people might seem like an odd thing to expect from a job. But stop to think about all that school means to you. School involves more than the learning you do in a classroom. School is where you make friends and meet new people who may introduce you to new ideas and new ways of doing things.

Well, work is a lot like that. The people you spend your workday with will be important in your life. You will learn from them and socialize with them on the job and, often, after work as well. Some of them may become

Using your hands can be a source of pride and satisfaction.

close friends. Others may try your patience and test your ability to get along with people you don't like.

Contact with other people is one of the things you'll want to think about when you start exploring careers. How important is it to you to do things with others? Do you like group projects or do you prefer to do things by yourself? Are you at ease with other people? Are you a leader? Do you enjoy helping others? You'll find questions like these in the Exploring sections that appear in the following chapters. These questions are meant to help you see how well your own strong points match the qualities you'd need for certain kinds of jobs.

Satisfaction from seeing the results of your efforts is another reason for working. Can you guess what a carpenter has in common with a jeweler, a machinist, and a chef? All of them make or create something you can see, or touch, or taste. For many people, using their hands and working with things is a source of pride and satisfaction. As you examine your own interests and abilities, try to determine just how important that is to you. There are many opportunities in the world of work for people who are good with their hands and like working with things.

Some people choose jobs that give them a chance to do something useful for society. Many people have a strong desire to put their talents and efforts into something that promotes the common good. Police officers, teachers, public health officials, and wildlife conservation officers are just a few of the people who work for society as a whole.

Other people look for ways to express their creative abilities. Creating something that is uniquely their own may be more important to them than the conventional idea of success. Some of these people find a niche in the sometimes glamorous and often insecure worlds of the theater, dance, music, art, fashion, writing, or publishing.

Some people look for jobs that permit them to be physically active all day long. Others look for ways to work outdoors. Steel workers, construction workers, loggers, dockworkers, miners, and foundry workers all have jobs that call for endurance and stamina. These workers may have to lift heavy objects, work at dizzying heights, spend hour after hour in cramped positions, or constantly move around as they do their jobs. They take pride in the physical demands of their work.

Self-esteem is an important reason for working. What does that mean, exactly? Well, let's go back to school for a comparison. You know the feeling you get when the team you're on beats a rival. The recognition and acclaim give you a lift. It makes you proud of winning and glad you worked so hard. It's much the same thing on the job. If you are good at what you do, and other people appreciate and respect your work, chances are that the job you have will make you feel good about yourself. That's because your job, and the way you handle it, is tied up with your view of yourself as a person. Believing that your job is worthwhile and knowing that you do it well can make you feel terrific.

Suppose you can't imagine a job being that important to you. Well, you wouldn't be alone! Many people look

Many jobs require teamwork.

elsewhere for the feeling that their lives are worthwhile. They look to their families and friends, to hobbies and leisure activities, to involvement in civic affairs. Your job can count a lot—or just a little—in your own view of yourself.

Finding Out More About Yourself

The career you choose is likely to affect many aspects of your life. It may influence the type of home you live in, the clothes you wear, the interests and hobbies you pursue, even the political beliefs you hold.

But it works both ways. Your personal values influence your career decision. When you choose a career, you're directly or indirectly making decisions about the types of people you'd like to associate with, the amount of leisure time you want, and the importance of money in your life. These decisions depend on the personal values you already hold.

The work values exercise that follows will help you clarify your feelings about work.[1]

Examining your reasons for wanting to work is a first step in finding out what you're looking for in a career. The following list takes some of the subjects we've been talking about and divides them into 33 "satisfactions" people get from their jobs.

First read the entire list. As you do, look carefully at the definitions of each "satisfaction." How important are these things to *you*? Then go over the list again. This time, rate each item on the list, using the scale below.

1 = Not important at all
2 = Not very important
3 = Reasonably important
4 = Very important

Table 1. Work Values Exercise

1. _____ *Help society:* Contribute to the betterment of the world I live in.

2. _____ *Help others:* Help other people directly, either individually or in small groups.

3. _____ *Public contact:* Have a lot of day-to-day contact with people.

4. _____ *Work with others:* Have close working relationships with a group; work as a team toward common goals.

5. _____ *Affiliation:* Be recognized as a member of an organization whose type of work or status is important to me.

6. _____ *Friendship:* Develop close personal relationships with the people I work with.

7. _____ *Competition:* Pit my abilities against others. There are clear outcomes.

8. _____ *Make decisions:* Have the power to set policy and determine a course of action.

9. _____ *Work under pressure:* Work in a situation where deadlines and high quality work are required by my supervisor.

10. _____ *Power and authority:* Control other people's work activities.

11. _____ *Influence people:* Be in a position to change other people's attitudes and opinions.

12. _____ *Work alone:* Do things by myself, without much contact with others.

13. _____ *Knowledge:* Seek knowledge, truth, and understanding.

14. _____ *Intellectual status:* Be regarded by others as a person of intellectual achievement or an expert.

15. _____ *Artistic creativity:* Do creative work in any of several art forms.

16. _____ *Creativity (general):* Create new ideas, programs, organizational structures, or anything else that has not been developed by others.

17. _____ *Aesthetics:* Have a job that involves sensitivity to beauty.

[1] This exercise was developed by Howard E. Figler, Director of Counseling at Dickinson College, Carlisle, Pennsylvania. It appears on pp. 77–79 of *PATH: A Career Workbook for Liberal Arts Students* (Cranston, R.I., The Carroll Press, 1975.)

18. _____ *Supervision:* Have a job in which I guide other people in their work.

19. _____ *Change and variety:* Have job duties that often change or are done in different settings.

20. _____ *Precision work:* Do work that allows little tolerance for error.

21. _____ *Stability:* Have job duties that are largely predictable and not likely to change over a long period of time.

22. _____ *Security:* Be assured of keeping my job and a reasonable financial reward.

23. _____ *Fast pace:* Work quickly; keep up with a fast pace.

24. _____ *Recognition:* Be recognized for the quality of my work in some visible or public way.

25. _____ *Excitement:* Do work that is very exciting or that often is exciting.

26. _____ *Adventure:* Do work that requires me to take risks.

27. _____ *Profit, gain:* Expect to earn large amounts of money or other material possessions.

28. _____ *Independence:* Decide for myself what kind of work I'll do and how I'll go about it; not have to do what others tell me to.

29. _____ *Moral fulfillment:* Feel that my work is contributing to a set of moral standards that I feel are very important.

30. _____ *Location:* Find a place to live (town, geographic area) that matches my lifestyle and allows me to do the things I enjoy most.

31. _____ *Community:* Live in a town or city where I can get involved in community affairs.

32. _____ *Physical challenge:* Have a job whose physical demands are challenging and rewarding.

33. _____ *Time freedom:* Handle my job according to my own time schedule; no specific working hours required.

Now that you have rated each of these work values, look over your list. Select those that mean the most to you and list them on a separate piece of paper. If you can think of any other things that are very important to you, add them to the list.

What do these work values tell you about yourself? Take a closer look at them. If you consider each one as a piece of a puzzle, and then start trying to fit them together, the picture of an individual may begin to emerge—a picture of you. You can learn a lot about yourself by thinking about your values—those things in life that matter most to you. After all, it's all the things you think, feel, and believe that shape your personality and make you the unique and special person you are.

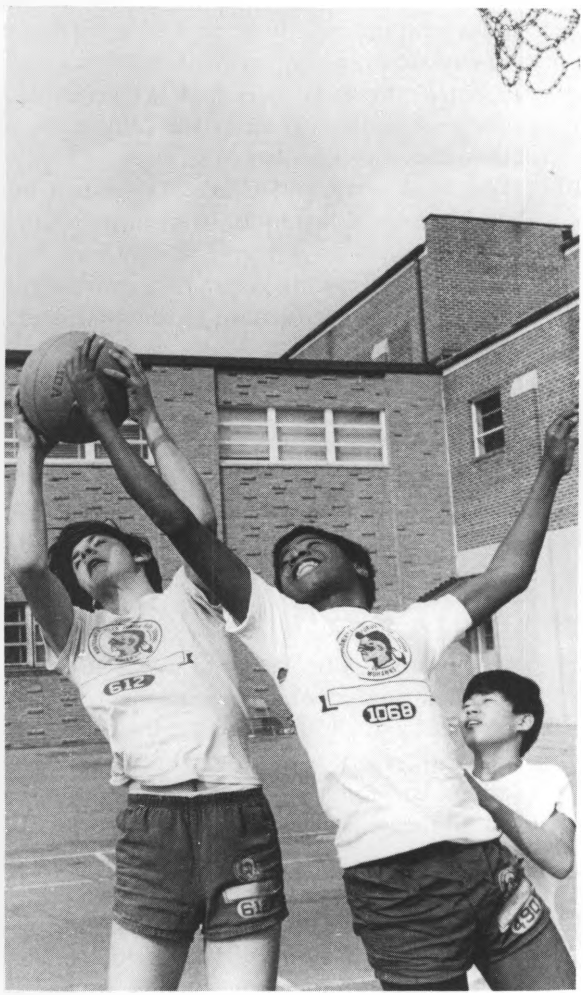
Suppose, for example, that you have chosen the work

The way you spend free time may give you a clue about yourself.

values of time freedom, creativity, and independence. Put the pieces together and what do you see? Perhaps you see a person who loses all track of time while working on a project. Someone who likes to make or create something from the very beginning to the end and wants to do that in his or her own way—not someone else's.

Take some time to think through *your* selections. You may want to share your results with your friends, teachers, or parents. Include them in this process, and you'll learn even more about yourself.

Let's continue to explore. In the preceding exercise, you had an opportunity to explore yourself. In the next activity, we're giving you an opportunity to explore the world of work by examining the characteristics of several hundred different jobs. This activity will help you understand that, depending on the job, the things you do at work vary a great deal. Jobs are no more alike than people are. It's important, therefore, to learn about the world of work as well as to learn about yourself.



The self-confidence gained from sports can help your career.

Personal Characteristics and Jobs

You may be aware that the ability to motivate people is one of your strong points. Perhaps you're a class officer. Maybe you're one of the people who's usually chosen to be in charge of a group project. Or perhaps you're the one who is able to get everyone else on a committee to do his or her fair share of the work. With these abilities, chances are that you'd be good at a job that involves persuading, instructing, leading, or directing. Such jobs include:

- Advertising worker
- Bank officer
- Lawyer
- Insurance agent
- Automobile sales worker
- Health services administrator
- Home economist
- Teacher
- College career planning and placement counselor.

You may be handy with tools. Perhaps you enjoy gardening. Maybe you recently built a bookcase or designed a cabinet for your stereo equipment. Perhaps you are working on a needlepoint project right now. With this sort of talent, there are many occupations to explore. You might want to take a closer look at jobs like these that involve working with tools:

- Machinist
- Carpenter
- Brake operator
- Surveyor
- Business machine repairer
- Jeweler
- Drafter
- Dental laboratory technician.

Do any of these jobs interest you? You'll find these and many more in the table that appears on the following pages.[2] Look for occupations with a check in column 15 to identify those that require persuading, negotiating, and teaching skills. Column 2 identifies occupations that involve the use of tools.

[2] This is a modified version of the table originally published in "Matching Personal and Job Characteristics," by Kathy Wilson, pp. 2-13 of the Fall 1978 *Occupational Outlook Quarterly*.

Table 2 lists 19 job characteristics and matches them with nearly 300 occupations from the *Occupational Outlook Handbook*. Of course, the table is just a starting point. By matching *your* traits with those often associated with specific occupations, you can weed out jobs that don't suit you at all. You may come up with a long list of "possibles". Those are the occupations to learn more about.

A Word About This Book

The arrangement of occupations in table 2 is a key to the organization of the rest of this book. In *Exploring Careers*, the world of work has been divided into 14 groups, or clusters, of occupations. Each is covered in a separate chapter.

The major headings on the table—Industrial Production Occupations, for example—correspond to chapter titles. Each chapter features several stories plus activities keyed to the story. Thus, the chapter on Industrial Production Occupations contains stories about a bench assembler, a machinist, and a compositor. Look more closely at the table and you'll see that each of these occupations is marked with a check. There are 41 occupations altogether that are marked with a check. These are "featured" in *Exploring Careers* and there is a story and activity section for each. Every occupation in the table is written up briefly in the Job Facts at the end of each chapter.

Before you move ahead, take a few moments to look over the descriptions of the 19 job characteristics. What is meant, for example, by "competition on the job?" Does that mean it's hard to get this kind of job? Not at all. The explanation appears under item 16 below.

Job Characteristics

1. *Problem-solving ability*—the ability to identify a problem and then to decide what should be done to correct it. Auto mechanics, who spend much of their time fixing cars, need problem-solving ability.
2. *Uses tools, machinery*—takes a talent for working with your hands. Often, knowing how machines work is necessary, too. Tool-and-die makers, who use machine tools and precision measuring instruments to produce other tools and metal forms, need skill in this area.
3. *Instructs others*—the quality of helping others learn how to do or understand something. Receptionists and hotel clerks help others in this way.
4. *Repetitious*—work in which the same thing is done over and over again. An assembler who works on a production line does repetitious work.
5. *Hazardous*—involves the use of dangerous equipment or materials or work in dangerous surroundings. Elevator constructors, who work at great heights, have hazardous jobs.
6. *Outdoors*—refers to occupations in which a major portion of time is spent outdoors, frequently without regard to weather conditions. Roofers, who apply roofing materials to the tops of buildings, work outdoors.
7. *Physical stamina required*—able to lift heavy weights, walk long distances, stand for long periods, or stoop frequently. Bricklayers, police officers, and chefs all need physical stamina.
8. *Generally confined*—workers have to stay in one place most of the time. Truckdrivers who sit behind the wheel for many hours and statistical clerks who do their work at a desk for most of the day are examples.
9. *Precision*—work involves high standards of accuracy. Accountants, air traffic controllers, and machinists are examples.
10. *Works with detail*—refers to technical data, numbers, or written materials. Machinists who consult blueprints or written specifications before making each machined product and programmers who write instructions for the computer are examples.
11. *Frequent public contact*—work involves day-to-day contact with people who need information or service. Automobile service advisers, receptionists, hotel clerks, bank tellers, waiters, and barbers are all examples.
12. *Part time*—refers to occupations in which many workers are employed for fewer than 35 hours a week. Waiters and waitresses and real estate agents are examples.
13. *Able to see results*—refers to jobs that produce an actual product or accomplishment. Bricklayers, chefs, and choreographers all see results.
14. *Creativity*—work involves new ideas, programs, designs, or products. Writers, industrial designers, and engineers are examples of the many different kinds of workers whose jobs require creativity.
15. *Influences others*—the ability to stimulate others to think or act in a certain way. Automobile sales workers who influence customers to buy and teachers who inspire students to learn are examples.

16. *Competition on the job*—refers to occupations in which competition with co-workers for recognition or advancement is an integral part of the job. College teachers who compete for tenure, securities sales workers who compete for commissions, and models who compete for assignments are all examples.
17. *Works as part of a team*—refers to occupations in which cooperation with co-workers is an integral part of the job. Instrument makers, who work closely with scientists and engineers to translate designs into models, and school counselors, who work closely with other staff members, are examples.
18. *Jobs widely scattered*—occupations that are found in most parts of the country. Occupations that do not have a dot in this space tend to be highly concentrated in one or a few geographic locations. For example, secretaries work throughout the country while petroleum engineers work mostly in the oil-producing States of Texas, Oklahoma, Louisiana, and California.
19. *Initiative*—jobs that demand the ability to determine on one's own what should be done, as well as the motivation to do it without close supervision. Lawyers and newspaper reporters need initiative.

A career may offer the opportunity to express creative abilities.

Table 2. Personal Characteristics and Jobs

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
INDUSTRIAL PRODUCTION OCCUPATIONS																			
Foundry occupations																			
Patternmakers		•					•	•	•	•			•					•	
Molders		•		•	•		•	•					•					•	
Coremakers		•		•			•	•		•			•					•	
Machining occupations																			
√ All-round machinists	•	•			•		•	•	•	•			•					•	
Instrument makers (mechanical)	•	•			•			•	•	•			•	•			•		•
Machine tool operators	•	•		•	•		•	•	•	•			•					•	
Setup workers (machine tools)	•	•			•			•	•	•			•					•	
Tool-and-die makers	•	•			•		•	•	•	•			•					•	
Printing occupations																			
√ Compositors		•						•	•	•								•	
Lithographers		•						•	•	•			•	•				•	
Photoengravers		•						•	•	•			•						
Electrotypers and stereotypers		•		•			•	•		•			•					•	
Printing press operators		•		•	•		•	•										•	
Bookbinders and bindery workers		•		•	•		•	•					•						
Other industrial production and related occupations																			
√ Assemblers		•		•				•	•								•		
Automobile painters																			
Blacksmiths		•		•	•		•		•			•	•					•	
Blue-collar worker supervisors	•		•							•					•		•	•	•
Boilermaking occupations	•	•		•	•		•		•	•			•					•	
Boiler tenders		•			•		•											•	
Electroplaters		•		•	•			•	•				•						
Forge shop occupations		•		•	•		•		•				•						
Furniture upholsterers		•		•			•	•					•	•				•	
Inspectors (manufacturing)	•	•		•				•	•	•								•	
Millwrights	•	•			•		•		•	•			•					•	
Motion picture projectionists		•		•				•				•						•	
Ophthalmic laboratory technicians		•		•				•	•									•	
Photographic laboratory occupations		•		•				•										•	
Power truck operators		•		•	•	•	•	•										•	
Production painters		•		•	•		•	•	•				•					•	
Stationary engineers	•	•			•		•											•	
Wastewater treatment plant operators	•	•				•			•	•								•	•
Welders		•		•	•	•	•		•				•					•	
OFFICE OCCUPATIONS																			
Clerical occupations																			
Bookkeeping workers				•				•	•	•		•	•				•	•	
Cashiers				•				•	•	•	•	•						•	
Collection workers				•				•		•	•				•		•	•	•
File clerks				•						•		•					•	•	
Office machine operators		•		•				•	•	•	•						•	•	
Postal clerks		•		•			•	•		•								•	
Receptionists			•	•				•		•	•	•					•	•	
Secretaries and stenographers				•				•	•	•		•	•				•	•	

Table 2. *Continued*

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
Shipping and receiving clerks		•		•			•			•							•	•	
Statistical clerks				•				•	•	•							•	•	
Stock clerks		•		•			•			•							•	•	
Typists				•				•	•	•		•	•					•	
Computer occupations																			
Computer operating personnel	•	•		•				•	•	•							•	•	
√ Programmers	•							•	•	•							•	•	
Systems analysts	•		•						•	•									•
Banking occupations																			
Bank clerks				•				•	•	•							•	•	
√ Bank officers	•		•					•	•	•	•				•		•	•	•
Bank tellers				•				•	•	•	•	•					•	•	
Insurance occupations																			
Actuaries	•							•	•	•								•	
Claim representatives	•		•				•		•	•	•						•	•	
Underwriters	•							•	•	•							•	•	
Administrative occupations																			
Accountants	•		•					•	•	•	•						•	•	
Advertising workers	•									•	•		•	•	•	•	•		•
Buyers	•									•				•	•	•	•	•	
City managers	•		•							•	•			•	•		•	•	•
Credit managers	•		•					•	•	•	•				•		•	•	
Industrial traffic managers	•									•							•	•	
Lawyers	•		•							•	•			•	•	•	•	•	•
Market research workers	•								•	•				•	•			•	•
Personnel and labor relations workers	•		•							•	•			•			•	•	
√ Planners	•									•	•		•	•	•		•	•	•
Public relations workers	•									•	•			•	•	•	•		•
Purchasing agents	•									•					•		•	•	
SERVICE OCCUPATIONS																			
Cleaning occupations																			
√ Building service workers		•		•			•					•						•	
Pest controllers		•			•		•				•							•	
Food service occupations																			
Bartenders							•	•			•	•					•	•	
√ Chefs		•					•	•				•	•	•			•	•	
Dining room attendants and dishwashers				•			•				•	•					•	•	
Food counter workers				•			•	•			•	•					•	•	
Meatcutters		•		•	•		•	•			•		•					•	
Waiters and waitresses				•			•				•	•					•	•	
Hotel occupations																			
Bellhops and bell captains				•			•				•	•					•	•	
√ Hotel clerks	•		•	•				•		•	•						•	•	
Hotel housekeepers and assistants		•		•			•			•	•							•	
Hotel managers and assistants	•		•							•	•				•		•	•	
Personal service occupations																			
Barbers		•		•			•	•			•	•	•	•				•	
Cosmetologists		•		•			•	•			•	•	•	•			•	•	
Funeral directors and embalmers	•				•						•		•				•	•	

Some jobs involve meeting the public.

Table 2. *Continued*

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
Private household occupations																			
Private household workers		•		•			•					•						•	
Protective service occupations																			
Correction officers			•	•	•		•	•		•					•		•	•	
FBI special agents	•		•		•		•		•	•	•				•		•	•	•
Firefighters	•	•	•		•	•	•				•						•		
Guards				•	•		•	•			•							•	
√ Police officers	•		•		•	•	•			•	•				•		•	•	•
State police officers	•		•	•	•	•	•			•	•				•		•	•	•
Construction inspectors	•		•		•	•			•	•							•	•	•
Health and regulatory inspectors	•		•		•				•	•							•	•	•
Occupational safety and health workers	•		•		•				•	•							•	•	•
Other service occupations																			
Mail carriers				•		•	•				•							•	•
Telephone operators		•	•	•				•			•							•	
EDUCATION OCCUPATIONS																			
School occupations																			
Kindergarten and elementary school teachers	•		•							•	•			•	•		•	•	•
Teacher aides			•							•		•			•		•	•	
√ Secondary school teachers	•		•							•	•			•	•		•	•	•
√ School counselors	•		•							•	•			•	•		•	•	•
College occupations																			
College and university teachers	•		•							•	•			•	•	•	•	•	•
College student personnel workers	•		•							•	•				•		•	•	•
College career planning and placement counselors	•		•							•	•			•	•		•	•	•
Library occupations																			
√ Librarians	•		•							•	•			•	•		•	•	•
Library technicians and clerks			•							•	•	•					•	•	
SALES OCCUPATIONS																			
√ Automobile parts counter workers			•	•			•				•							•	
Automobile sales workers											•	•			•	•		•	•
Automobile service advisers	•		•				•				•						•	•	
√ Gasoline service station attendants		•	•	•	•	•	•				•	•						•	
Insurance agents and brokers	•		•							•	•	•			•	•		•	•
Manufacturers' sales workers	•									•					•	•		•	•
Models				•			•				•					•	•		
Real estate agents and brokers	•		•			•				•	•	•			•	•		•	•
Retail trade sales workers				•			•				•	•			•	•		•	
Route drivers				•		•					•				•	•		•	•
√ Securities sales workers	•		•						•	•	•	•			•	•		•	•
Travel agents	•		•							•	•				•	•		•	•
Wholesale trade sales workers	•									•	•				•	•		•	•
CONSTRUCTION OCCUPATIONS																			
√ Bricklayers	•	•			•	•	•						•	•				•	
√ Carpenters	•	•			•	•	•						•	•				•	
Cement masons and terrazzo workers		•			•	•	•						•				•	•	
Construction laborers		•			•	•	•										•	•	
Drywall installers and finishers		•		•	•		•						•					•	
Electricians	•	•			•	•	•		•				•					•	
Elevator constructors	•	•			•		•		•				•					•	

Table 2. *Continued*

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
Floor covering installers		●		●			●				●		●					●	
Glaziers	●	●			●	●	●		●				●				●	●	
Insulation workers		●		●	●		●						●					●	
Ironworkers		●			●	●	●						●				●	●	
Lathers		●		●									●					●	
Operating engineers	●	●		●	●	●	●						●					●	
Painters and paperhangers		●		●	●	●	●				●		●					●	
Plasterers		●					●						●					●	
√ Plumbers	●	●			●	●	●		●		●		●					●	
Roofers		●		●	●	●	●						●				●	●	
Sheet-metal workers	●	●			●		●		●				●					●	
Tilesetters		●					●						●					●	
TRANSPORTATION OCCUPATIONS																			
Air transportation occupations																			
√ Air traffic controllers	●		●					●	●	●							●	●	●
Airplane mechanics	●	●			●	●	●		●				●				●	●	
Airplane pilots	●	●						●	●								●	●	●
Flight attendants			●	●			●				●						■		
Reservation, ticket, and passenger agents	●		●	●				●		●	●						■	●	
Merchant marine occupations																			
Merchant marine officers	●	●	●		●	●		●		●							■		●
Merchant marine sailors		●		●	●	●	●	●									●		
Railroad occupations																			
Brake operators		●		●	●	●	●										●	●	
√ Conductors	●		●	●													●	●	●
Locomotive engineers	●	●		●				●									●	●	
Shop trades	●	●			●	●	●										●	●	
Signal department workers	●	●				●			●				●				●	●	
Station agents	●		●	●				●		●	●						●	●	
Telegraphers, telephoners, and tower operators				●				●									●	●	
Track workers		●			●	●	●						●				●	●	
Driving occupations																			
Intercity busdrivers		●		●				●			●							●	
√ Local transit busdrivers		●		●				●			●							●	
Local truckdrivers		●		●				●										●	
Long-distance truckdrivers		●		●				●										●	
Parking attendants		●		●		●	●	●			●	●						●	
Taxicab drivers		●		●		●		●			●	●						●	
SCIENTIFIC AND TECHNICAL OCCUPATIONS																			
Life science occupations																			
√ Biochemists	●	●							●	●				●				●	●
Life scientists	●	●							●	●				●				●	●
Physical scientists																			
Astronomers	●	●							●	●				●				●	●
Chemists	●	●							●	●				●				●	●
Food scientists	●	●							●	●				●				●	●
Physicists	●	●							●	●				●				●	●
Environmental scientists																			
Geologists	●	●				●			●	●				●				●	●

Table 2. *Continued*

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
Geophysicists	•	•				•			•	•				•				•	•
Meteorologists	•	•							•	•				•				•	•
Oceanographers	•	•				•			•	•				•			•		•
Mathematics occupations																			
Mathematicians	•								•	•				•				•	•
Statisticians	•								•	•				•				•	•
Engineers																			
Aerospace	•								•	•			•	•			•		•
Agricultural	•								•	•			•	•			•	•	•
Biomedical	•								•	•			•	•			•	•	•
Ceramic	•								•	•			•	•			•	•	•
Chemical	•								•	•			•	•			•	•	•
Civil	•								•	•			•	•			•	•	•
√ Electrical	•								•	•			•	•			•	•	•
Industrial	•								•	•			•	•			•	•	•
Mechanical	•								•	•			•	•			•	•	•
Metallurgical	•								•	•			•	•			•	•	•
Mining	•								•	•			•	•			•	•	•
Petroleum	•								•	•			•	•			•		
Technicians																			
√ Broadcast technicians	•	•						•	•	•								•	
Drafters		•		•				•	•	•			•				•	•	
Engineering and science technicians	•	•							•	•							•	•	
Surveyors		•				•	•		•	•							•	•	
MECHANICS AND REPAIRERS																			
Air-conditioning, refrigeration, and heating mechanics	•	•			•								•					•	
Airplane mechanics	•	•			•	•	•		•				•				•	•	
Appliance repairers	•	•			•						•		•					•	
Automobile body repairers	•	•			•		•	•					•					•	
√ Automobile mechanics	•	•			•		•	•	•		•		•					•	
Boat-engine mechanics	•	•			•		•	•			•		•					•	
Bowling-pin-machine mechanics	•	•		•	•		•	•					•					•	
Business machine repairers	•	•			•				•		•		•					•	•
√ Computer service technicians	•	•			•				•		•		•					•	•
Diesel mechanics	•	•			•		•	•	•				•					•	
Electric sign repairers	•	•			•	•	•				•		•					•	
Farm equipment mechanics	•	•			•	•	•		•				•					•	
Industrial machinery repairers	•	•			•		•		•				•					•	
Instrument repairers	•	•					•		•				•					•	
√ Jewelers	•	•		•				•	•				•	•				•	•
Locksmiths	•	•							•		•		•					•	
Maintenance electricians	•	•			•		•				•		•					•	
Motorcycle mechanics	•	•			•			•			•		•					•	
Piano and organ tuners and repairers	•	•							•		•	•	•					•	
Shoe repairers		•		•	•		•	•			•		•					•	•
Television and radio service technicians	•	•			•				•		•		•					•	•
Truck mechanics and bus mechanics	•	•			•		•	•	•		•		•					•	
Vending machine mechanics	•	•		•	•								•					•	•
Watch repairers	•	•						•	•		•		•					•	•
Telephone craft occupations																			
Central office craft occupations	•	•			•				•				•					•	

The ability to solve problems is important in many jobs.

Table 2. *Continued*

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
Central office equipment installers	•	•			•		•		•				•					•	
Line installers and cable splicers	•	•			•	•	•		•									•	
Telephone and PBX installers and repairers	•	•			•		•		•		•							•	
HEALTH OCCUPATIONS																			
Medical practitioners																			
Chiropractors	•	•	•				•		•	•	•	•	•		•		•	•	•
Optometrists	•	•	•				•		•	•	•	•	•		•		•	•	•
Osteopathic physicians	•	•	•		•		•		•	•	•		•		•		•	•	•
Physicians	•	•	•		•		•		•	•	•		•		•		•	•	•
Podiatrists	•	•	•				•		•	•	•		•		•		•	•	•
Veterinarians	•	•	•		•		•		•	•	•		•		•		•	•	•
Dental occupations																			
Dentists	•	•	•						•		•		•		•		•	•	•
Dental assistants		•	•	•						•	•	•					•	•	
Dental hygienists		•	•	•				•			•	•	•				•	•	
Dental laboratory technicians	•	•		•				•	•				•				•	•	
Nursing occupations																			
√ Registered nurses	•	•	•		•		•		•	•	•	•	•		•		•	•	•
Licensed practical nurses		•	•		•		•		•	•	•	•	•		•		•	•	
Nursing aides, orderlies, and attendants		•	•	•	•		•				•	•					•	•	
Therapy and rehabilitation occupations																			
Occupational therapists	•	•	•							•	•		•	•	•		•	•	•
Occupational therapy assistants and aides		•	•								•	•	•		•		•	•	
√ Physical therapists	•	•	•				•			•	•		•	•	•		•	•	•
Physical therapist assistants and aides		•	•				•				•		•		•		•	•	
Speech pathologists and audiologists	•	•	•						•	•	•		•	•	•		•	•	•
Medical technologist, technician, and assistant occupations																			
Electrocardiograph technicians		•	•	•					•	•	•	•					•	•	
Electroencephalographic technologists and technicians		•	•	•					•	•	•						•	•	
Emergency medical technicians	•	•	•		•	•	•		•	•	•						•	•	
√ Medical laboratory technologists		•		•	•			•	•	•							•	•	
Medical record technicians and clerks				•				•	•	•							•	•	
Operating room technicians		•	•		•				•	•	•						•	•	
Optometric assistants		•	•						•	•	•						•	•	
Radiologic (X-ray) technologists		•	•		•				•	•	•	•						•	
Respiratory therapy workers		•	•						•	•	•						•	•	
Other health occupations																			
Dietitians	•		•							•	•	•		•			•	•	•
Dispensing opticians		•	•						•	•	•						•	•	
Health services administrators	•									•				•	•		•	•	•
Medical record administrators	•								•	•					•		•	•	•
Pharmacists	•		•					•	•	•	•						•	•	•
SOCIAL SCIENTISTS																			
Anthropologists	•		(1)							•	(1)			•				•	•
Economists	•		(1)							•	(1)			•				•	•
Geographers	•	•	(1)							•	(1)			•				•	•
√ Historians	•		(1)							•	(1)			•				•	•
√ Political scientists	•		(1)							•	•			•				•	•

[1] Teachers only.

Table 2. *Continued*

	1 Problem-solving ability	2 Uses tools, machinery	3 Instructs others	4 Repetitious	5 Hazardous	6 Outdoors	7 Physical stamina required	8 Generally confined	9 Precision	10 Works with detail	11 Frequent public contact	12 Part time	13 Able to see results	14 Creativity	15 Influences others	16 Competition on the job	17 Works as part of a team	18 Jobs widely scattered	19 Initiative
Psychologists	●		●							●	●			●				●	●
Sociologists	●		(1)							●	●			●				●	●
SOCIAL SERVICE OCCUPATIONS																			
Counseling occupations																			
School counselors	●		●							●	●			●	●		●	●	●
College career planning and placement counselors	■		●							●	■			●	●		■	●	●
Employment counselors	■		●					●		●	■		●		■		■	●	
Rehabilitation counselors	■		●							●	●			●	●		●	●	■
Clergy																			
√ Protestant ministers	●		●								●			●	●	●	■	●	●
Rabbis	●		●								●			●	●	●	●	●	●
Roman Catholic priests	●		●								●			●	●		●	●	●
Other social service occupations																			
Cooperative extension service workers	●		●								●		●		■		●	●	●
Home economists	●		●								●			●	●		●	●	●
Homemaker-home health aides			●								●				●			●	●
Park, recreation, and leisure service workers	●		●			●	■				■	●		●	■		■	●	●
Social service aides	●		●	●							●	●					●	●	
√ Social workers	●		●								●		●	●	●		●	●	■
PERFORMING ARTS, DESIGN, AND COMMUNICATIONS OCCUPATIONS																			
Performing artists																			
Actors and actresses			(1)				●				●	●		●		●	●		●
Dancers			(1)				●				●			●		●	●		●
√ Musicians			(1)				■		●		●	●		●		●	●		■
Singers			(1)				●				●			●		●	■		■
Design occupations																			
√ Architects	●	●							●	●	●		●	●		●	●	●	●
Commercial artists		●								●			●	●		●	●	●	●
Display workers		●											●	●	●			●	●
Floral designers								●			●		■	●				●	
Industrial designers	●								●	●			●	●			●	●	●
Interior designers										●	●		●	●		●	●	●	●
Landscape architects	●									●	●		●	●				●	●
Photographers											■		●	●		●		●	■
Planners	●									●	■		●	●			■	●	●
Communications occupations																			
Advertising workers	●									●	●		●	●	●	●	●		●
Interpreters			●						●		●								■
√ Newspaper reporters			●						●	●	●		●	●	●	●		●	●
Public relations workers	●									●	●			●	●	●	●	●	●
Radio and television announcers			●					●			●			●	●	●		●	●
Technical writers	●		●					●	●	●			●	●			●	●	●
AGRICULTURE, FORESTRY, AND FISHERY OCCUPATIONS																			
Agricultural production occupations																			
√ Farmers	●	●			■	●	●						■				■	●	■
Farm managers	●		●		●	●	●						■		●		●	●	●

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Table 2. *Continued*

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Farm laborers		●		●	●	●	●						■				●	●	
Farm labor supervisors	●		■		●	●	●						●		●		●	●	●
Agricultural support occupations																			
√ Cooperative extension service workers	●		●								●		●		●		●	●	●
Soil conservationists	●		●			●							●					●	■
Soil scientists	●								●	●								●	●
Range managers	●				●	●	●										●	●	●
Agricultural engineers	●								■	●			■	●			●	●	●
Food scientists	●								●	●				●			●	●	●
Farm equipment mechanics	●	●			●	●	●		●				■					●	
Buyers and shippers, farm products	●										●				●	●		●	●
Veterinarians	●	●	●		●				●	●	●		●		●		●	●	●
Forestry occupations																			
√ Foresters	●				●	●	●										●	●	●
Forestry technicians		●			●	●	●										●	●	
Loggers		●		●	●	●	●						●				●		
Fishery occupations																			
Fishers	●	●		●	●	●	●	●					●			●	■		●
Fish farmers	●	●				●	●						●				●		■

[1] Teachers only.

Some people look for a career with excitement and adventure.

School and Work

So far, you've heard a lot about the importance of career exploration. You know that finding out about yourself is the first step. You've discovered that different kinds of jobs suit different people. The right kind of career depends on the person you really are—or want to be.

You've completed the work values exercise. You may have a clearer picture now of your reasons for working—and a better idea of the things about a job that matter to you.

The table on personal and job characteristics may have helped you narrow down the occupations to those that appeal to you the most.

Now let's look at another way of exploring careers, one that involves your school subjects. First, decide what your favorite subject is. Then list the subjects that come easily for you. *If you like a subject and do well in it, it's worth investigating occupations that involve that subject.*

We'll use mathematics as an example. (You may have chosen English or science or industrial arts.) Some of the jobs in which you'd use mathematics are written up in this book: Bricklayer, carpenter, plumber, machinist, air traffic controller, medical technologist, biochemist, electrical engineer, architect, computer programmer/systems analyst, computer service technician, bank officer, securities sales worker, and forester. There are stories and activities in *Exploring Careers* for each of these occupations. And these are just a few of the occupations that require either practical or theoretical ability in mathematics. Your teacher or counselor can direct you to more.

Suppose you are uncomfortable and confused in math class and don't like the subject at all. Does that mean you have to rule out a career in construction, or health, or forestry? Not necessarily. But it does require some more digging on your part. You need to be honest with yourself. Is it the subject matter you dislike, or is something else influencing your feelings about math? Is it a particular teacher, for example, or a particular textbook? Or is it your own attitude?

It's up to you, with the aid of your teacher or counselor, to determine just how much ability in mathematics you have. It's important, too, to find out exactly how math is used in the kinds of jobs that interest you. Machinists, for example, need to be good at arithmetic to calculate quickly and make precise measurements. Systems analysts use calculus and must be able to apply mathematical theory to practical problems. Talking to people about their work and asking how they use math on the job should help you determine whether you should seriously consider work that involves the use of math. Or, whether, instead, you should rule it out.

You can also *test some of your career ideas by exploring high school subject areas in greater depth.* Say you're good at science and like to build things and work with your hands. You're aware that engineering and drafting are possible career choices. Now is the time to test your

You can test your career ideas by exploring school subjects.

interest in those and related fields. Use class assignments, projects, and science fairs to learn about the kind of work engineers and drafters actually do. If one branch of engineering in particular appeals to you, try to figure out why. Find out what engineering and scientific technicians do, and how their work fits in with that of engineers and scientists. In the Suggested Activities sections in chapter 9, you'll find ideas for things you can do—in school and on your own—to learn more about scientific and technical occupations. While you're at it, investigate the activities in other chapters of the book. With an interest in science, you'd probably find it worthwhile to learn more about the work of a computer programmer/systems analyst (chapter 3), an architect (chapter 14), or a forester (chapter 15).

Perhaps you're deeply interested in consumer issues but don't know quite where that might lead you. Try taking a home economics course and use the opportunity to find out about careers in consumer economics, food and nutrition, or clothing and textiles. Other courses that give you a good chance to explore career interests are art, music, business education, and distributive education.

Table 3 lists subjects taught in many high schools. Opposite each subject, we've listed one or more chapters of *Exploring Careers*. Use this list as a starting point.

Table 3. School Subjects and *Exploring Careers* Chapters

Subject	*Chapter*
Agriculture	Agriculture, Forestry, and Fishery Occupations
Art	Education Occupations Performing Arts, Design, and Communications Occupations
Business education	Agriculture, Forestry, and Fishery Occupations Education Occupations Office Occupations Service Occupations
Distributive education	Sales Occupations
Driver education	Transportation Occupations
Health	Health Occupations Scientific and Technical Occupations
Home economics	Agriculture, Forestry, and Fishery Occupations Education Occupations Service Occupations Social Service Occupations
Industrial arts	Agriculture, Forestry, and Fishery Occupations Construction Occupations Industrial Production Occupations Mechanics and Repairers Performing Arts, Design, and Communications Occupations Scientific and Technical Occupations Service Occupations Transportation Occupations
Language arts	Education Occupations Office Occupations Performing Arts, Design, and Communications Occupations Sales Occupations Service Occupations Social Scientists Social Service Occupations
Mathematics	Agriculture, Forestry, and Fishery Occupations Construction Occupations Health Occupations Industrial Production Occupations Office Occupations Performing Arts, Design, and Communications Occupations Sales Occupations Scientific and Technical Occupations Social Scientists
Music	Education Occupations Performing Arts, Design, and Communications Occupations
Physical education	Construction Occupations Education Occupations Health Occupations Service Occupations
Science	Agriculture, Forestry, and Fishery Occupations Education Occupations Health Occupations Industrial Production Occupations Office Occupations Scientific and Technical Occupations Social Scientists Transportation Occupations
Social studies	Education Occupations Office Occupations Performing Arts, Design, and Communications Occupations Service Occupations Social Scientists Social Service Occupations

Suppose you believe that your true interest lies in language arts. You want to be a writer. People who have a love of language and a talent for putting words together may work as:

- Journalists
- Script writers
- Advertising workers
- Technical writers
- Greeting card writers
- Crossword puzzle writers
- Public relations workers
- Textbook editors
- Manuscript readers
- Index editors
- Literary agents
- Bookstore managers
- Publishers' representatives
- Book club sales associates
- Magazine circulation assistants.

Writing and publishing jobs aren't the only ones that require an excellent command of language, however. All sorts of people need the ability to put ideas into words so that they can influence others or get things done. Language arts are important to a lawyer writing a brief for a court case . . . to a planner writing an environmental impact statement . . . to a sales manager writing a memorandum to company executives . . . to a college teacher writing an article for a scholarly journal. All these people use language arts on the job every day. Get some new ideas about careers that use language arts by browsing through the chapters that appear opposite "Language arts" in table 3. Each chapter, in turn, will give you ideas for further exploration.

The Training You'll Need

Do you have any idea of how you might go about becoming a secretary? A carpenter? A computer programmer? A pilot? The first thing you'd have to do for

The best way to launch your career is to finish high school.

each of these jobs is learn a set of skills. To work as a secretary, you'd have to learn to type, take shorthand, and handle office procedures. To be a carpenter, you'd have to learn to use your tools properly and work without wasting your materials. To work as a computer programmer, you'd have to learn how to translate ideas into a language the computer could understand and instructions it could follow. To become a pilot, of course, you'd have to learn to fly a plane.

Like a hobby or a sport, every job involves knowledge and skills that you must learn. However, the amount of preparation you need varies from job to job. *Deciding how much time and effort you're willing to put into job training is an important part of career exploration.* It doesn't make sense to aim for a career as a veterinarian, for example, unless you do well in school, are interested in science, and are willing to put in 10 years or more of hard work and study after you graduate from high school.

Examine your attitude toward school. How long are you willing to stay in school? Do you plan to finish high school? Would you be willing to take job training afterwards that might might last anywhere from 6 months to 6 years? Do you plan to go to college? Are you willing to study in college for 6 or 8 years or even more? Some occupations—veterinarian is one—require that much formal education.

The cost of education or training after high school is something else to consider. You'll have to think about how much training you or your family can afford as well as how much you'd like to obtain. The cost of the schooling necessary to become a veterinarian is much greater than the cost of the training you'd need to become a medical technologist, for example. Yet both are health occupations. Within most career clusters, you'll find occupations with varying training requirements.

Bear in mind, too, that there are many sources of financial aid your counselor can help you investigate. Don't be discouraged if you have the ability to pursue education or training after high school but your family can't afford the cost. Scholarships, loans, grants, and other financial aids are available from schools, educational foundations, business firms, religious groups, community organizations, and Federal, State, and local governments. The question of how to finance your education after high school will become more important later on. For now, let's take a look at some of the different ways you could get the preparation you need for the world of work.

The best way to launch your career is to complete high school. High school courses give you a foundation in basic skills that will help you function intelligently as a worker, consumer, and citizen. A high school diploma is necessary if you want to go to college. And it's usually required for admission to trade schools, technical institutes, or apprenticeship programs. Moreover, many employers prefer to hire high school graduates.

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Chart 1 illustrates the choices that are open to you after high school. As you can see, there are a number of ways of getting the education and training you'd need for a job. You can learn a trade while you work; you can enroll in an apprenticeship program that combines on-the-job training and classroom instruction; you can attend a vocational or trade school to learn job skills from cutting hair to operating excavating equipment; you can get training and work experience in the Armed Forces; or you can prepare for a career by going to college. The path you select depends on the particular kind of career

you have in mind—and the time and effort you are willing to put into your training.

As you continue to investigate careers that interest you, make a point of finding out about training—how much is required and what kind is recommended. See how well this matches your own willingness to study and learn. You'll find a summary of the training requirements for each of nearly 300 occupations in the Job Facts sections in chapters 2–15.

Training After High School

Sometimes you may get the feeling, from hearing people talk, that almost everybody gets a college education these days. That just isn't so. About half of those who graduate from high school do take some additional schooling of some kind, but not necessarily in college.

On-the-Job Training

Almost every job involves some sort of "learning by doing"—one of the major kinds of on-the-job training. Employers see to it that the people they hire have an opportunity to learn how to handle the jobs they were hired to do. This training takes many forms and can last from a few days to a year or more. Assemblers, for example, learn their skills from more experienced workers by helping and observing them and working under their supervision. Learning the job may take no more than a few hours. For other occupations, on-the-job training is more formal and includes classes in related subjects. Power truck operators, for example, take courses on safe driving that last several days. In some cases, on-the-job training continues for several years. Air traffic controllers take a 16-week course and then need 2 or 3 years of work experience before they are considered fully qualified to handle their jobs.

Almost every job involves some sort of "learning by doing."

There are many occupations in which you can learn your job as you do it. You can train on the job for careers in the following clusters:

Agriculture, Forestry, and Fishery Occupations
Construction Occupations
Industrial Production Occupations
Mechanics and Repairers
Office Occupations
Service Occupations
Transportation Occupations

Apprenticeship

Apprenticeship is a way of learning a trade that combines on-the-job training and classroom instruction. Apprenticeship programs are sponsored by unions and employers. When you have completed your apprenticeship program—in 1 to 6 years—you are formally recognized as fully qualified in your trade.

As an apprentice you are taught by experienced workers. You learn your trade by helping them and working under their supervision. Your training covers all aspects of a trade. For example, apprentice auto mechanics don't just learn how to repair engines; they also learn how to diagnose engine problems and how to care for their tools. They study such subjects as shop safety practices and customer relations in a classroom or through home study. Often, classes are held at local high schools or vocational schools.

Every year, thousands of men and women learn to become auto mechanics, carpenters, bricklayers, electricians, machinists, plumbers, pipefitters, sheet-metal workers, and tool-and-die makers through apprenticeship programs. And these are only a few of the apprenticeable trades. Through apprenticeship, you can prepare for jobs in the following career clusters:

Construction Occupations
Industrial Production Occupations
Mechanics and Repairers
Service Occupations

Vocational and Technical Schools

Many types of schools offer vocational training—courses to learn the skills you'll use on the job. You're probably familiar with your school system's vocational education program. This is one important source of vocational training. Others include trade schools, technical institutes, business schools, and correspondence or home study schools. In classes that last from several weeks to several years, these schools will teach you cosmetology or barbering, flying, business and office procedures, computer operating, medical assisting, fashion design, commercial art, automobile mechanics, locksmithing, radio and television broadcasting, truckdriving, and many other skills.

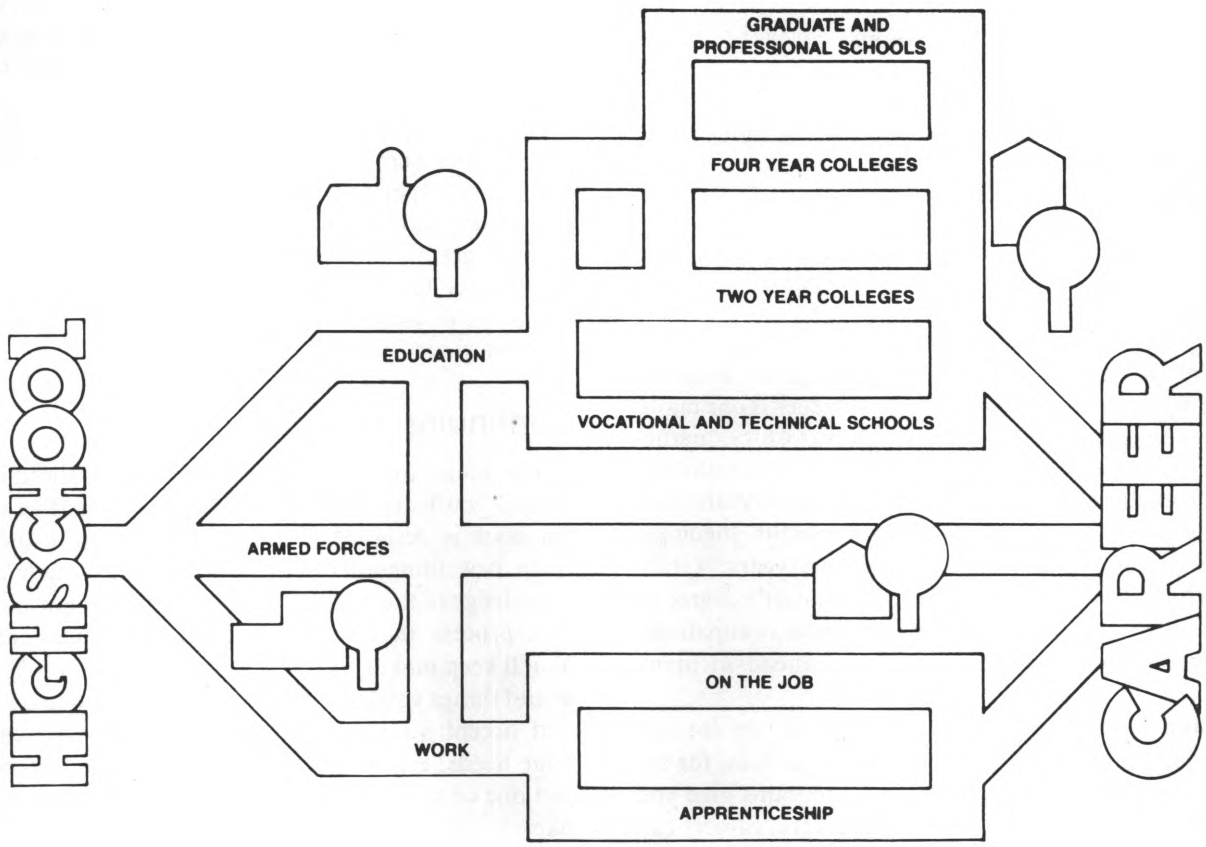
Usually you'll practice—in the classroom—things you'll be expected to do at work. In business school, you might type, file, take shorthand, or keep books. In programs for health occupations you might operate medical equipment. You'll also study subjects that will help you on the job. In programs for mechanics and repairers you would take classes in blueprint reading and shop math.

When you complete your program, you'll receive a certificate of achievement. Although your employer may also want to give you some on-the-job training, you generally are ready to begin work once you finish a vocational program.

Vocational and technical schools provide the necessary preparation for jobs in the following career clusters:

Agriculture, Forestry, and Fishery Occupations
Health Occupations
Industrial Production Occupations
Mechanics and Repairers
Office Occupations
Performing Arts, Design, and Communications Occupations
Sales Occupations
Service Occupations
Transportation Occupations

Chart 1. Education and Training after High School



Community and Junior Colleges

In community and junior colleges, you can prepare for a specific occupation. Depending on your curriculum, you may be able to begin work for a bachelor's degree. Although the typical program lasts 2 years or more and leads to an associate degree, a number of courses can be completed within 1 year.

By attending a community or junior college, you can prepare for employment as a computer service technician, a drafter, a surveyor, a forestry technician, a nurse, an emergency medical technician, a recreation leader, a secretary, a computer programmer, an automobile mechanic, or a welder. These are just a few of the areas in which these colleges offer job training! Community colleges have close ties with local business and industry and try to tailor their occupational training programs to the needs of the local area.

The course offerings and classes are similar to those in vocational and technical schools; you are taught the skills you need on the job.

These colleges offer programs that prepare you for jobs in the following career clusters:

Agriculture, Forestry, and Fishery Occupations
Construction Occupations
Health Occupations
Industrial Production Occupations
Mechanics and Repairers
Office Occupations
Performing Arts, Design, and Communications Occupations
Scientific and Technical Occupations
Service Occupations

College and Universities

In colleges and universities, you can get a bachelor's degree with a major in one or more subjects. Your major is the subject you specialize in, such as history, mathematics, biology, business administration, or accounting. Most bachelor's degree programs require 4 years, and training for such professions as law, medicine, theology, and social work requires several additional years. "Graduate" study–that is, courses towards a master's degree or Ph.D.—is essential preparation for some occupations. And it helps your chances of getting ahead in many more.

By and large, college does not prepare you for one particular job—the way an apprenticeship does, for example. Instead, most undergraduate programs give you a foundation upon which any one of several careers can be built. In 4 years of college, you can expect to gain a basic knowledge of your field and to develop a certain intellectual discipline. You will learn to work with abstractions, to sharpen your analytical skills, and to develop your writing and speaking skills. Very often, college graduates with a bachelor's degree start out in the world of work as trainees. They are regarded as beginners, people who have the basics but still have more learning to do. As they gain experience on the job or continue their schooling, they move ahead in their careers.

A bachelor's degree is necessary for many jobs in the following career clusters:

Agriculture, Forestry, and Fishery Occupations
Education Occupations
Health Occupations
Office Occupations
Performing Arts, Design, and Communications Occupations
Scientific and Technical Occupations
Social Scientists
Social Service Occupations.

Armed Forces

Another way to prepare for a job is to join the Armed Forces. The Armed Forces train people in most of the same occupations that civilians work in—cooks, clerks, secretaries, nurses, carpenters, mechanics, newspaper reporters, photographers, meteorologists, air traffic controllers, and many more. You can learn job skills and gain work experience while you're in the service and then, when you complete your tour of duty, use these skills to get a civilian job. Veterans' benefits can help you finance further training at a vocational or technical school, or in college. You may decide to make a career of military service.

Continuing to Explore

The ideas and activities in this chapter should have helped you learn something about yourself. The rest of the book is designed to help you go on from there, to learn new things about yourself as you broaden your knowledge of the world of work. Learning about yourself is a process that will continue throughout your life. You'll keep making discoveries about things you're good at and things you like to do that will help you understand and accept yourself—your strengths and weaknesses, your needs, and your goals. Testing career interests is just one of many ways of discovering what you're really like.

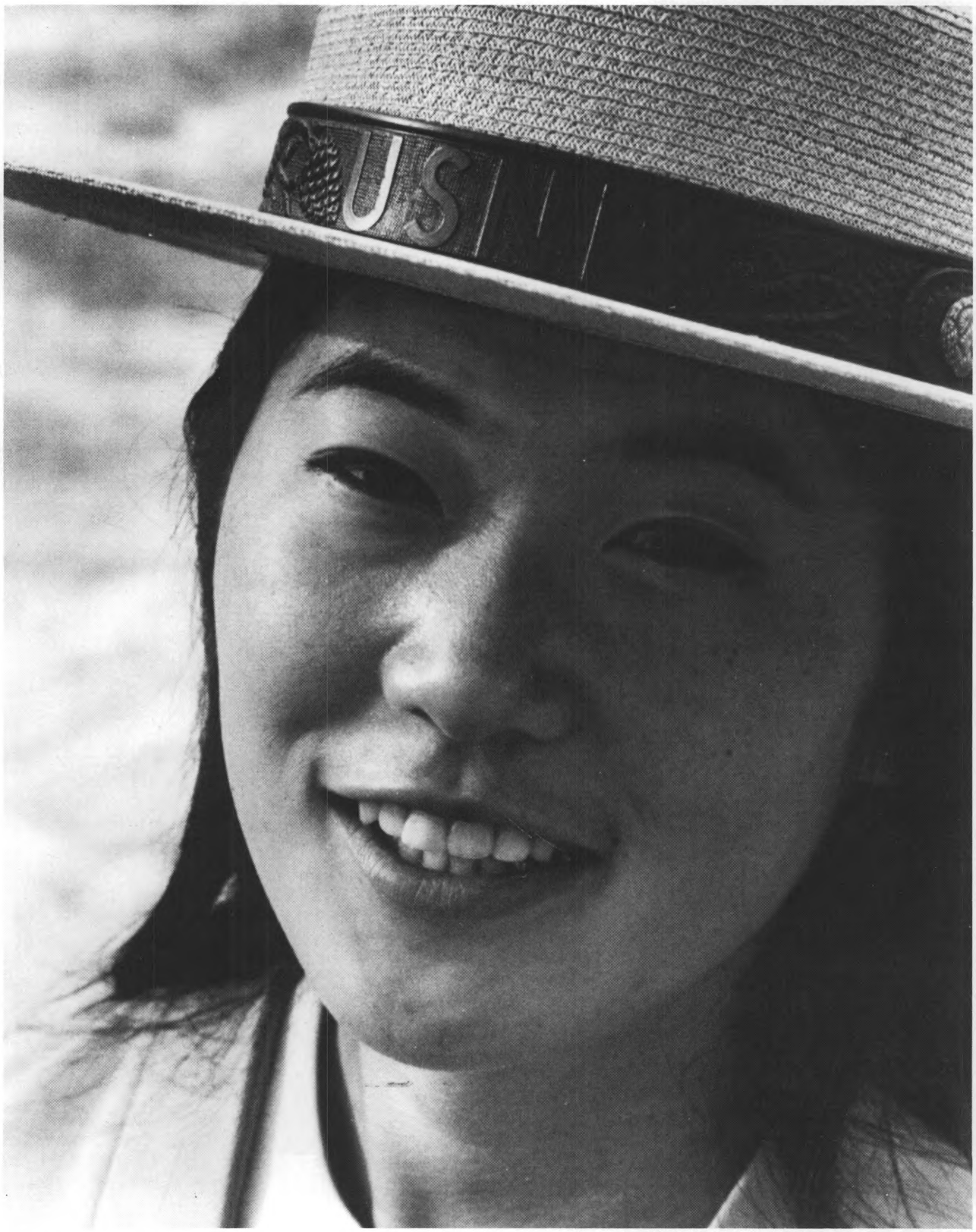
Now is the time to let your imagination soar, to test your dreams, to try all kinds of things that are new. Try to explore the world of work with a truly open mind. Don't limit yourself by examining only a few kinds of work. You'll want to begin with the fields that interest you most, of course, but don't rule out other fields too soon. Some jobs may not appeal to you simply because you're not familiar with them. They might be worth looking into. Remember, too, that you haven't wasted your time if you investigate a career only to decide that it's *not* right for you. Finding out what you don't like—and figuring out why—is important, too.

Career exploration isn't something you do just once. Taking stock of your interests is something you'll do again and again throughout your life. You will continue to change as the years go by, and as you do, your ideas of what's important and what's not will also change.

It's likely that your career interests and goals will change as well. As people grow older, their reasons for working often change, as do their long-term goals. People change jobs a lot, in fact. And most people experience periods when they don't have jobs. They may be unemployed, or they may stop working for a while in order to go to school, travel, or raise a family. Many people change jobs because they've taken a second look at their interests and abilities and decided it's time for something else. Changing jobs, training for a brand new career, or going back to school to keep up with the latest developments in your field are all things to expect once you have entered the world of work.

Exploring careers is important right now, as you begin getting ready to enter the world of work. It will be just as important to repeat the process later in your life—whenever the time seems right to stand back, take another look at yourself, and test your career interests.

Now is the time to let your imagination soar.



Feeling that your job is worthwhile and knowing that you do it well can make you feel terrific.

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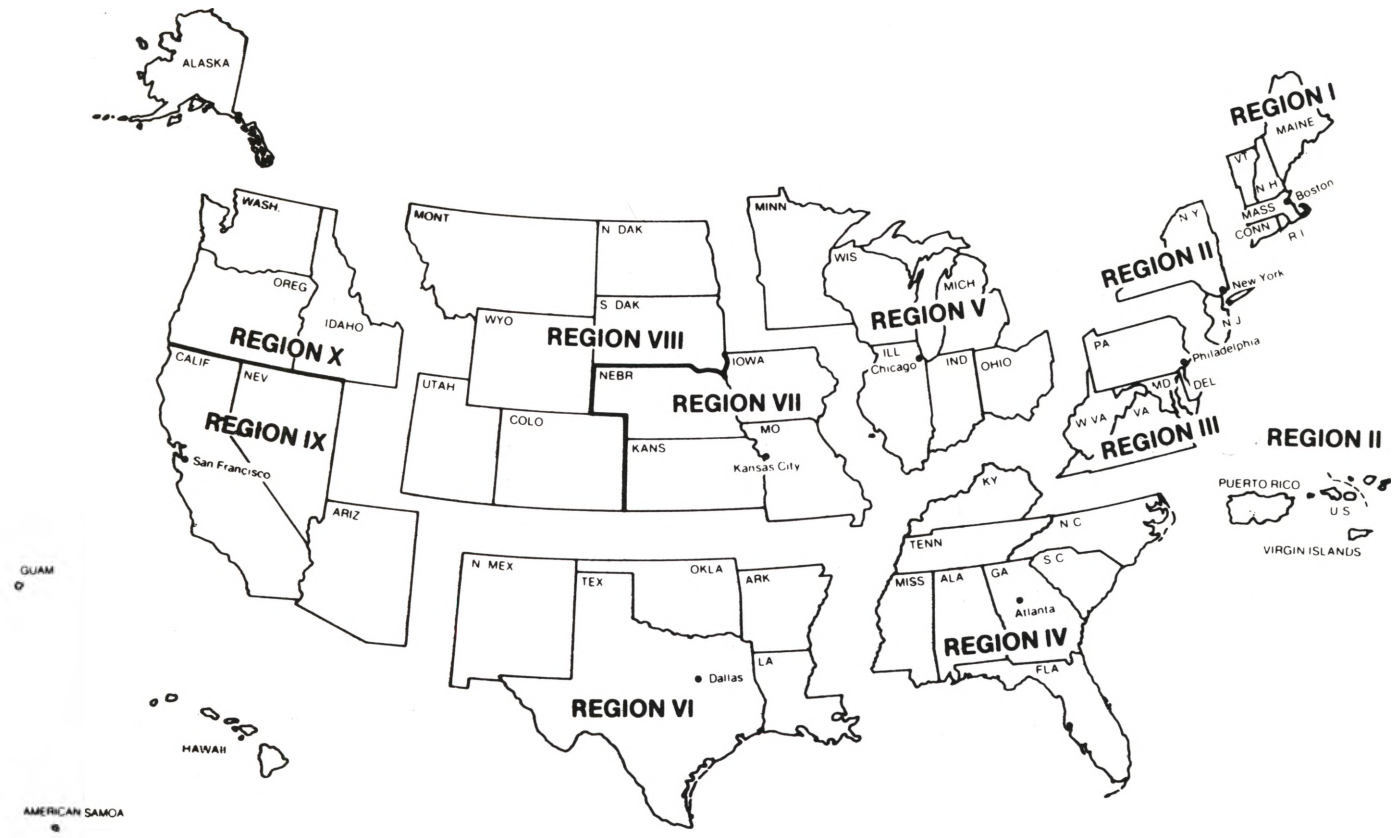

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