

WORKPLACE ESSENTIAL SKILLS



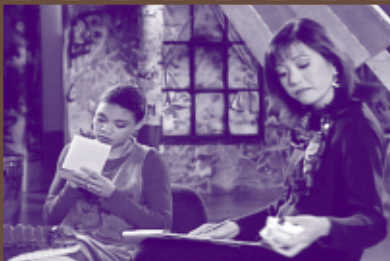
PRINT PREVIEW

Employment

Chapter 2 - Matching Skills and Jobs

Math

Chapter 21 - Solving Problems



PROGRAM 2: Matching Skills and Jobs



OBJECTIVES

1. Assess your skills, experiences, and interests.
2. Use want ads and job postings to find out about available jobs.
3. Make the job search your job.

Program 2 at a Glance—For Your Information

VIDEO STORY VIGNETTES

- Cheryl begins to identify her skills by thinking about her talents and interests. With Dawnelle's help, she searches the want ads and learns to make sense of the abbreviations. Later, Cheryl hears about a job at the hotel where her aunt works. She uses a phone script to call about the job.
- Lamar visits his former teacher, Mr. Nichols, to talk about his job prospects. He is frustrated because he will need a certificate to work as a mechanic. His teacher helps him see that he has choices to make and gives him a letter of recommendation. Later, Lamar uses the letter to persuade a shop owner to let him turn in an application.
- Dawnelle learns about a sales rep job in the cosmetics field from a friend. When Dawnelle calls the employer, she learns that the job is no longer available, but she remains positive and convinces the employer to let her come in to fill out an application.

MAJOR CONCEPTS IN THE VIDEO PROGRAM

1. Many of the skills people use in life are skills that employers are willing to pay for. People gain special skills at home, in school, and in the community.
2. Self-management skills such as being responsible, hard-working, and on time are important work skills.
3. Try to match skills and jobs that are available. Successful job seekers use their skills to market themselves.
4. Further training may be needed to gain specific job skills and reach long-term goals.
5. The want ads are only one place to find out about new jobs. Networking is a very important way to find out about jobs.
6. Always strive to make a good impression. Be friendly, polite, and dress appropriately.
7. A phone script is a useful tool for calling about a job.
8. Don't give up. Be positive in a discouraging situation and try to gain something rewarding from the experience.

Workbook Pages	Online Video Activity	Internet Activity
<p>Before You Watch Pages 29–32</p> <p>After You Watch</p> <ul style="list-style-type: none"> • Key Points from the Video Page 33 • Assessing Your Employability Pages 34–37 • Finding Job Leads Pages 38–41 • Making the Job Search Your Job Pages 42–45 <p>Review Page 46</p>	<p>Lamar Visits Duke's Garage</p> <p>Video Clip Summary Lamar inquires about a job opening.</p> <p>Key Ideas: networking, contacts, letter of recommendation, resume, application form</p> <p>Activities</p> <ul style="list-style-type: none"> • Answer questions based on a video clip. • Learn about networking. • Practice asking an employer for work. 	<p>CareerPath Want Ads</p> <p>Key Ideas: want ad, category, keyword, job title, job responsibilities, qualifications</p> <p>Activities</p> <ul style="list-style-type: none"> • Review your career goals. • Fill out the job search form. • Read over the want ads.

SAMPLE TEACHER'S GUIDE PAGES

Program 2 Activities



Set Up the Video Program

1. Before showing Program 2, explain that it is about how to discover the skills you have and match them to jobs that are available.
2. Ask, *What are some skills you use in the management of your home and family that could be used on a job?* Make a list of skills on the board. As each item is suggested, have the learner tell how the skill is used at home and how it could be used on the job.
3. Have learners do the **Sneak Preview** activity on workbook pages 30–31. Tell learners that the exercise is designed to introduce the topics that will be covered in the video program and the corresponding lesson. After the activity, you may wish to discuss the questions and answers using the feedback on page 31.
4. Discuss the vocabulary on page 32.
5. Advise learners to watch the video looking for five self-management skills that the people in the video demonstrate.



Show Program 2

Follow Up the Video Program

Ask, *What self-management skills did you observe in the video?* (Instructor could write the names of the major characters in the video and list skills under each character's name.)

In Program 2:

- Cheryl gets a job lead from her aunt who works at a hotel. *Who do you know that can help you in your job search? In your job notebook, make a list of people that you can ask for help.*
- Lamar refuses to give up even though the shop manager turns him away at first. *What are some things Lamar does to make a good impression on the shop manager?*
- Dawnelle calls about a job that is no longer available. *How does Dawnelle turn the situation into a positive one? Why is it important to have a positive attitude about the job search?*



Use Workbook Instruction and Practice

1. Discuss the **After You Watch** summary on page 33.
2. Assign pages 34–45. After learners have finished the lesson, have them work through the **Review** on page 46.



Have Learners Go to the Internet

- **Online Video Activity, Lamar Visits Duke's Garage**
In this activity, learners recognize their own networks and learn how to ask employers for jobs.
- **Internet Activity, CareerPath Want Ads**
In this activity, learners consider their goals, skills, and want ads to match their skills with job possibilities.



Lead Group Activities

Activity 1: In Your Life

In their job notebooks, have learners write a paragraph describing a hobby or special interest. Then working in pairs, have partners help each other identify skills that can be transferred from the hobby to a job setting.

Activity 2: In the Community

Each learner will need a copy of the want ads section of a newspaper. Working in small groups, have learners read ads to make two lists: one of specific work skills and one of personal or life-management skills. Working alone, have learners make a list of their work and life-management skills.

Activity 3: At the Workplace

Ask the working learners in the class to describe the personal and job-related skills that are needed to do their jobs. Discuss: *What are some things you can do to acquire new life-management skills or improve your current skills?*

BEFORE you WATCH



program

2

WATCH

Matching Skills and Jobs

OBJECTIVES

In this lesson, you will work with the following concepts and skills:

1. Assessing your skills, experiences, and interests
2. Using want ads and job postings to find out about available jobs
3. Making the job search your job

The video program you are about to watch shows some of the ways people find out about job openings. The program will help you prepare to gather information about job leads in person and over the telephone. You will also see how the classified ads and job postings can help you find out about job openings.

As you talk to employers about jobs, they will want to know more about you. They will be interested in how your skills and experiences could help them on the job. As you watch the video, think about the personal qualities you have that will make you a good employee. Think about your skills, talents, and interests. How can you use them on the job? Think about your work experience—both paid and unpaid. How can your experiences make you a better worker?

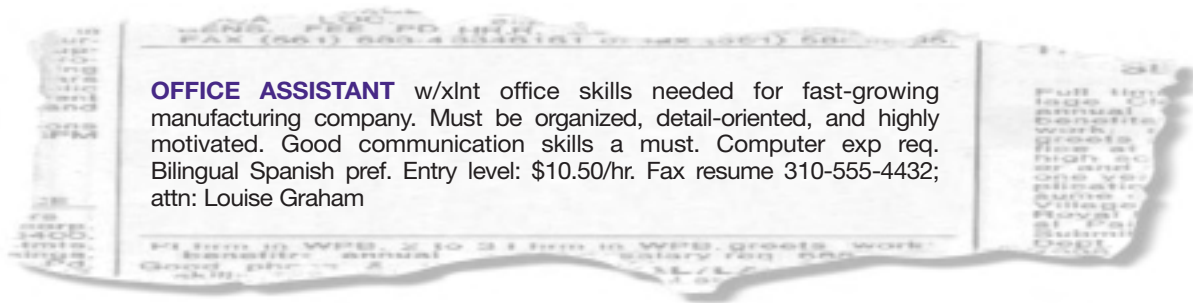
Successful job seekers treat the job search like a job. Plan to spend several hours a day preparing yourself, talking with people about job openings, visiting workplaces, and checking the want ads and other job postings. Keep all information in your job notebook or folder. Practice your work skills as you work to get a job and you will soon find a job that meets your needs.

Sneak Preview

This exercise previews some of the concepts from Program 2. After you answer the questions, use the Feedback on page 31 to help set your learning goals.



SERVICE: Marisol has been looking for a job for three weeks. She worked as a food server at a local restaurant for four months, but she would prefer to work in an office. So far, Marisol's only job-search strategy has been reading the want ads. Each day she reads the classified ads listed under *Office*. One day she finds the following ad in the paper. After reading it, she uses the library fax machine to send her resume to apply for the job.



Answer these questions based on the situation described above.

1. According to the ad, which skills are *required*? Check all that apply.

- ☐ a. good communication skills
- ☐ b. typing at 50 wpm
- ☐ c. computer skills
- ☐ d. high motivation
- ☐ e. previous work experience
- ☐ f. skill in organizing work
- ☐ g. ability to speak Spanish

Write *True* if the statement is true; *False* if it is false.

- ☐ 2. Marisol will be able to locate a job as an office assistant only through the want ads.
- ☐ 3. Employers looking for office workers will not be interested in hearing about Marisol's job as a food server.
- ☐ 4. Marisol could use examples from her experiences as a food server to demonstrate that she has good communication skills.

5. Why should Marisol read the entire want ads section instead of just the jobs listed under *Office*?
- (1) Employers may list office jobs under many different key words.
 - (2) She may decide to change careers.
 - (3) She can find out how much employees in other fields are earning.
 - (4) The newspaper often lists jobs incorrectly.
6. Write the phrase *Computer exp req* without abbreviations.
-
7. Marisol has been limiting her job search to reading the want ads. List three other ways that Marisol could find job leads.
-
-
8. Marisol receives a telephone call from Louise Graham, who explains that the job advertised in the paper has been filled. But Louise is impressed with Marisol's resume and offers to meet with her to help her find other job leads. To expand her network of contacts, what question should Marisol ask Mr. Graham?
- (1) Do you think I need to go back to school to improve my skills?
 - (2) Will you be hiring more office workers in the future?
 - (3) Can you suggest other people I could talk to about my career?
 - (4) Should I call you back in a few weeks to see if you have any openings?

Feedback

- If you got all of the answers right ... you have a good understanding of how to find job leads. You understand the kinds of skills employers look for in a worker. Use the techniques that the video suggests to find job leads in your area of interest.
- If you missed question 1, 2, 3, or 4 ... you need to think more about what kinds of skills are important to an employer and how your skills and strengths can help you find a job.
- If you missed question 5 or 6 ... you need to learn more about how the want ads can help you find job leads.
- If you missed question 7 or 8 ... you need to learn more about other job search strategies that can help you find job ads.

Answers for Sneak Preview:
 1. Choices a, c, d, f 2. False 3. False 4. True 5. Choice (1) 6. Computer experience required. 7. Any three of the following: check job postings, visit a career counseling service, network, look for job leads on-line. 8. Choice (3)

Vocabulary for *Matching Skills and Jobs*

adaptive skills	personality traits or personal qualities
administrator	a person who manages or is in charge of a business
alphabetical	arranged according to the letters of the alphabet
aptitude	ability
categories	groups with similar characteristics
initiative	the ability to use positive energy to begin or complete a task
inventories	tests or evaluations of related skills and abilities
networking	establishing contacts for help and support in the job search
prerequisite skills	skills you must have before you can do a particular job
requirements	skills, training, or conditions that an employer requires
transferable skills	skills that can be used on any job
volunteer work	work or a service that is done by someone who does not receive pay



LiteracyLink®

Now watch Program 2.

After you watch, work on:

- pages 33–46 in this workbook
- Internet activities at www.pbs.org/literacy

AFTERWATCH

you

program

2



Matching Skills and Jobs

On the following pages, you will learn more about the ideas discussed in the video program and have an opportunity to develop your skills.

Think About the Key Points from the Video Program

To assess your skills, you need to:

- Think about your skills, interests, and experiences.
- Find out about skill **inventories** and tests that may be available to you.
- Think about how your skills can help you achieve your goals for the future.

To find out what kinds of jobs can help you achieve your goals, you need to:

- Think about how your career goals relate to possible jobs.
- Use job postings to find out more about what kind of jobs are available in your community.
- Find work-related contacts through family members, friends, and acquaintances.

Now you are ready to make the job search your job.

At this point, you need to:

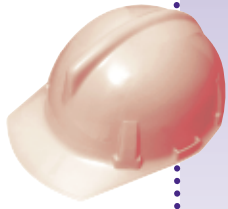
- Figure out how your skills can meet an employer's needs.
- Use the want ads to find job leads.
- Use all available resources to find job leads.

WORKTIP

As you talk about your career goals with others:

- Be specific about your goals and plans.
- Show interest and excitement when learning more about your career field.
- Don't be a know-it-all. Let the person you are talking to be the expert.
- Ask for information and advice. Then listen and take notes.
- Follow up on every job lead even if the job doesn't seem to be exactly what you were looking for.

Assessing Your Employability



CONSTRUCTION: Gordon is interested in a career in construction, but he isn't sure how to get started. One of his neighbors, Cal Sutton, is a roofer. One evening, Gordon calls first and then pays a visit to Cal. They talk about the roofing business. Impressed with Gordon's **initiative**, Cal tells Gordon that he and his partner are thinking of hiring an assistant. Suddenly, a talk between neighbors has become a job interview. Cal asks Gordon about his skills and strengths. **What skills and strengths do you think Cal might be looking for in an assistant?**

Think about some of your life experiences. In each experience, you mastered new skills or strengthened skills you already had. As a student, you have learned to manage your time, to study and take notes, and to take personal responsibility. All these skills will be valuable to your employer.

Think About the Three Areas of Skills

Adaptive skills are sometimes known as personality traits or personal qualities. These are the skills that make you a good friend, family member, and worker. Adaptive skills include patience, creativity, and cooperation.

You also have **transferable skills**. These are skills, acquired through many life experiences, that you can use on almost any job. You may have a talent for repairing things, making posters and signs, keeping records, or hosting a party. Your transferable skills will help you on any job.

Job-related skills are the skills that you need to fulfill your job duties. If you work in an office, you may need to know how to use a computer or a copier. To be a roofer's assistant, Gordon may need to learn how to lay shingles and patch leaks. Some job-related skills can be learned on the job. Others are **prerequisite skills** you must have before you can be hired.

Assess Your Skills and Strengths

People sometimes think that talking about their skills and strengths is boasting or bragging. But employers want to find out who you are. They need to know what skills you can bring to the workplace. How can you find out more about your skills and strengths so that you can discuss them with employers?

Try an organized approach. First, make a list of your life experiences. Include school, paid work, **volunteer work**, and your experiences in community and religious organizations. For each item on your list, think about the skills you used in that setting.

Second, ask your friends and family for help. Show them your list. They may be able to see skills and strengths you have overlooked.

Third, take tests and inventories. Career counseling services often administer test packages at little or no cost to you. One of the most frequently used tests is the ASVAB (Armed Services Vocational Aptitude Battery). **Aptitude** tests measure your ability to learn new skills and to do well in the career field you have chosen. Other kinds of tests measure specific job skills, such as typing and keyboarding speed.

WORKTIP

As you take tests and inventories:

- **Don't be nervous. You cannot fail an aptitude test.**
- **Get plenty of rest the night before. You want the test to reflect your best work.**
- **Answer questions thoughtfully. Your test results can help you make important career decisions.**
- **Always do your best work.**

WorkSkills

1. Write *A* if the skill is adaptive and *T* if it is transferable.
 - ___ a. dependable
 - ___ b. balancing a checkbook
 - ___ c. following directions to put something together
 - ___ d. willing to change
 - ___ e. reading and taking notes
 - ___ f. filling out forms
 - ___ g. hard-working
 - ___ h. responsible
2. An aptitude test can tell you
 - (1) how fast you will someday be able to type
 - (2) whether you have the ability to learn the skills you will need in your chosen career
 - (3) which adaptive skills you need to do certain jobs
 - (4) whether you have all the job-related skills you need to do a particular job
3. What are some skills you can develop during your job search that you can apply once you get a job? List them on a separate piece of paper.



SERVICE: Ramona has been volunteering at her child's school for the last year. She helped to organize a spring fair with game and food booths to help the school raise money. For the event, she had to get city permits and find volunteers to run the booths, do publicity, and sell tickets. She also had to keep records of income and expenses. **What adaptive skills do you think Ramona used to run the spring fair?**

Analyze Your Skills

Employers expect new employees to have the reading, writing, math, and communication skills needed to do the job. If you need to develop these skills, you can get further training.

Employers also look for applicants with specific job-related skills, such as the ability to run a certain machine or to work on an assembly line. Do not be discouraged if you do not have many job-related skills. Your adaptive and transferable skills may help you get a job. These skills come from life experiences. These are skills that employers are willing to pay for.

Read the following list of adaptive skills. Look up any words you don't know. Then put a checkmark by the skills you have. If you have other adaptive skills, add them to the list.

CHECKLIST OF ADAPTIVE SKILLS

- | | | |
|--------------------------------------|--|--|
| <input type="checkbox"/> adaptable | <input type="checkbox"/> flexible | <input type="checkbox"/> motivated |
| <input type="checkbox"/> cooperative | <input type="checkbox"/> friendly | <input type="checkbox"/> reliable |
| <input type="checkbox"/> courteous | <input type="checkbox"/> honest | <input type="checkbox"/> responsible |
| <input type="checkbox"/> creative | <input type="checkbox"/> independent | <input type="checkbox"/> tactful |
| <input type="checkbox"/> efficient | <input type="checkbox"/> positive attitude | <input type="checkbox"/> understanding |
| <input type="checkbox"/> energetic | <input type="checkbox"/> professional | <input type="checkbox"/> other: _____ |

Now do the same thing with this partial list of transferable skills.

CHECKLIST OF TRANSFERABLE SKILLS

- | | |
|--|--|
| <input type="checkbox"/> communicating with others | <input type="checkbox"/> repairing equipment |
| <input type="checkbox"/> handling cash | <input type="checkbox"/> speaking a second language |
| <input type="checkbox"/> following directions | <input type="checkbox"/> speaking in public |
| <input type="checkbox"/> keeping records | <input type="checkbox"/> teaching skills to others |
| <input type="checkbox"/> organizing materials | <input type="checkbox"/> troubleshooting |
| <input type="checkbox"/> problem solving | <input type="checkbox"/> writing letters and reports |
| <input type="checkbox"/> reading diagrams and maps | <input type="checkbox"/> other: _____ |

Next, think about how to market your skills. Analyze each skill. Make sure you know what it means. Think about how that skill could be used on the job you are considering. Then think of one or two examples from your life experience in which you have shown that skill.

For example, suppose Ramona decides to tell an employer that she is a good troubleshooter. A *troubleshooter* is someone who figures out why something isn't working and finds a way to solve the problem. How can Ramona back up her claim? She can use specific experiences in solving problems with the spring fair to demonstrate her troubleshooting abilities.

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WorkSkills

1. Check off all the statements that are true.
 - ☐ a. Employers are not interested in your personal qualities.
 - ☐ b. Doing research using the Internet is an example of a transferable skill.
 - ☐ c. Adaptive skills are acquired only in the workplace.
 - ☐ d. Being trustworthy is an adaptive skill.
2. Choose an adaptive skill and a transferable skill from the preceding page. For each, write an example explaining how or when you have used that skill.

Adaptive Skill: _____

Example: _____

Transferable Skill: _____

Example: _____

WRITE IT

.....

Think about the future. You have the skills you need to get a job, but what skills will you need to advance in your job? Think of a new skill you would like to have. Imagine ways to learn that skill. Then use the following steps to set a goal.

- Define your skill goal. Describe the skill you want to acquire or improve. Be specific. Include how well you expect to be able to do the skill.
- Record a series of steps in your notebook that will lead to your goal.
- For each step, write the date by which you plan to have completed it.
- Record the date when you plan to have finished the steps and acquired your new skill.

Finding Job Leads



SERVICE: Omar wants to be an automotive mechanic, but first he must go back to school for more training. He plans to work part-time while he goes to school. After talking with friends and family, he has three job leads. He could stock shelves at his uncle's grocery store, work as a gasoline station attendant, or be a salesperson at an automotive tire store. Omar would like to find a job that could help him in his career. **Which job do you think would best help Omar gain skills he could use in his career as a mechanic? Explain your thinking.**

WORKTIP

As you look for job leads:

- Talk to everyone you meet about your career goals.
- Communicate the skills you have to offer.
- Represent yourself in a positive light. Employers expect you to talk about your strengths.
- Always put your best foot forward. An employer who can't offer you a job may know someone who can.

Work to Learn New Skills

What can you do to make sure each job you pursue brings you closer to achieving your goals?

Within any career field, there are many different jobs. There are also related careers with jobs that use similar skills to those you will need in your career. Working in a related field can sometimes help you achieve your career goals. With careful planning, you can find jobs that will help you build the skills that you will need in the future. Think of each job as a way to build your skill base, not just a way to make money.

Explore Job Postings

Employers advertise for new workers in many ways. They may run an ad in the newspaper, send job notices out to their current employees, or post the job with a career counseling service. You can find the telephone number for your state's Employment Development Department, or Job Services, in the government pages of your telephone book. Job Services organizes the job postings and makes them available to the public. If you go through their counseling program, they can send you out on interviews for the jobs in which you have an interest.

Study the job posting below.



Job Services Office

Counselor: Jane R. Kimball Posting JOB# 1884531-6364
For the position of: **SALESPERSON**

Position Description and Requirements: Salesperson—fishing equipment. Requires some skills and knowledge in spin, fly, and warm-water fishing. Previous sales experience preferred but will train the right person. **Duties:** Selling fishing tackle, stocking, cashiering, cleaning.

Work: FULL-TIME **Hours:** Arranged **Salary:** \$6–\$7/hr **Days Off:** SUNDAY

Even before you are ready to start going on job interviews, you can learn about jobs from job postings. Job postings are organized in **categories**. For example, categories may include retail, health care, service, manufacturing, office work, and construction. Within the categories, the postings may be arranged in **alphabetical** order by job title. Read the postings for your career and related fields. Make notes about the duties and **requirements** for each. Think about the range of jobs that can help you reach your career goals.

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WorkSkills

1. What kinds of information can you gather from the job posting listed above?

Check all that apply.

- ☐ a. the job title for the position that is open
- ☐ b. the amount of experience required
- ☐ c. a brief description of the job
- ☐ d. the name of the employer
- ☐ e. a list of job duties
- ☐ f. the employer's phone number
- ☐ g. the amount you would be paid for the job

2. Think about Omar's situation. How could taking a job pumping gas help him achieve his career goal?

3. Write three reasons to read and study job postings.



RETAIL: Yuki is looking for a job in retail sales. She hopes to become a buyer someday for a department store. Yuki has read the want ads in the newspaper, but no one seems to be hiring. Yuki's mother has a friend named Ida Park who used to manage a clothing store, but Ida doesn't work in retail sales anymore. Yuki thinks it would be a waste of time to talk to Ida. **Why should Yuki call Ida? What kind of help do you think she could give Yuki?**

You have already seen how information interviews can help you gather information about your career field. You can also use these contacts to get job leads and make new contacts. This process is called **networking**.

Network to Find Leads

In the job search, your contacts form a network. Starting a network is easy. Talk to your friends, family, and neighbors. Ask them to suggest people you can talk to. Then follow through on every suggestion. Each time you talk to a new contact, talk briefly about your career goals. Ask if this contact person can suggest any other people you could interview. Then keep going.

As your network grows, you will learn more about your career field and you will develop job leads. Remember, word-of-mouth is still the most common way in which employers find the workers they need. As you network, you will find out about jobs that will not be advertised anywhere else. Even an employer who has no job openings may know an employer who is hiring.

Organize Your Efforts

As you network, keep a careful record of each interview. Take notes on note cards.

Record the following information:

- the name, address, and telephone number of your contact
- your contact's place of business
- any advice or information you gain
- the names and phone numbers of new contacts to make
- any follow-up steps you need to take

One of the keys to networking is to make sure you follow up on leads in a timely way. For each follow-up step you list, set a date for completion and write it on a calendar. Then check your calendar often and do the work.

Keep the Lines of Communication Open

Every contact is important. You never know when you may need to call on someone again for more information. Send a brief letter of thanks after each interview. If you promised to call, send a resume, or follow up in some other way, be sure to follow through on your commitment.

WorkSkills

1. A good way to find out about unadvertised job leads is to
 - (1) read the newspaper
 - (2) network
 - (3) read job postings
 - (4) keep careful records
2. Which of these questions should you always ask on an interview to expand your network?
 - (1) "How much pay should I expect to earn once I am hired?"
 - (2) "What skills will I need to succeed in this career?"
 - (3) "Do you think I should go back to school for more training?"
 - (4) "Are there any other people you suggest that I interview?"
3. Yuki decides to make an appointment to interview Ida. On a separate piece of paper, write a list of five questions and topics that she could discuss with Ida.

COMMUNICATE

When you are on an interview, what should you be doing when the interviewer is talking? You should be listening. Unfortunately, most people use the time when someone else is talking to think about what they are going to say next. Try this exercise to practice your listening skills.

- Ask a friend to read to you from a short magazine or newspaper article for about two minutes. Listen carefully. Then tell the main ideas and as many details as you can back to your friend. How did you do? Did you remember most of the details correctly?
- Now try the same exercise again with a new article. Immediately after your friend stops reading, write down a few notes. Then use your notes to retell the main ideas and details of the article. Did the notes help?
- Practice taking notes as you listen in daily conversation. Write only the most important points.

Making the Job Search Your Job



SERVICE: On Tuesday, Janice interviewed for a job as an assistant desk clerk at a large hotel. The job was advertised in the newspaper and many people applied. The **administrator** who interviewed Janice told her a decision would be made within two weeks. Janice really wants the job at the hotel. She could continue looking for job leads and go on more interviews, but then she might get another job offer. Janice decides to do nothing until she hears from the hotel. **Do you think Janice is making the right decision? Why or why not?**

By now, you have a career plan, including career goals and the steps you must take to reach your goals. How can you make your dreams a reality?

Establish a Routine

Start practicing now to be a full-time employee. Get up early, eat a good breakfast, and dress as you would to go to work. Even if you don't have an interview planned, you may have the chance to talk to someone to get information or find a new job lead. Be ready to make a good impression.

Make a list of tasks for the day. Check your calendar. Are there any important follow-up steps that you could complete today? Think about the steps you have written for your career goals. Is there anything you could do today that would help you accomplish one of the next steps in your plan?

Make a schedule for the day. Assign a time to accomplish each task you have on your list. Then follow the schedule. If new opportunities come up, adjust your schedule by moving some tasks to the next day's list.

It may be tempting to sit back and wait for employers to come to you. However, experience shows that successful people and businesses actively seek to achieve their goals.

If you run out of ways to find job leads, you need to broaden your network. Talk again to family and friends. Talk to former employers, former co-workers, friends from school, teachers and counselors from school, and other job seekers. Every time you broaden your network, you increase the number of people who are working to help you find a job.

Search Job Postings

If you are out of job leads and you have time on your hands, pay another visit to the state career counseling service in your area. Remember, job agencies and counseling services post information about the jobs they have available. Job postings are usually grouped by category.

When you find a posting you are interested in, find the job order number and take it to a counselor. If you have the skills required for the job, the counselor can give you the information you need to make an appointment for an interview. You may have to take tests to show you have the skills you need for the job.

WORKTIP

Try a variety of job search strategies:

- Register with a career counseling service.
- Take aptitude tests and inventories.
- Attend job fairs.
- Visit a small business and talk to the owner directly.
- Do volunteer work to make new contacts and gain job skills.

WorkSkills

1. Which of the following should you do every day of your job search? Check all that apply.
 - ☐ a. Make a list of tasks for the day.
 - ☐ b. Dress to make a good impression.
 - ☐ c. Schedule at least one information interview.
 - ☐ d. Get an early start.
 - ☐ e. Visit a career counseling service.
 - ☐ f. Review the steps for achieving your career goals.
2. You have talked to your family and friends about your career goals. Whom else could you interview to expand your network?

3. After a week goes by, Janice finds out that she didn't get the job at the hotel. She doesn't have any other job interviews lined up. How can she find new job leads? Give three suggestions.



CONSTRUCTION: Daryl wants a career in the construction industry. He worked as a drywall helper for a few months last summer, but he doesn't have any job leads right now. He checked the want ads under Construction, but most of the jobs had titles he had never heard of. Daryl decides to ask his friends for advice on what he should do to find a job. **What advice would you give Daryl? What steps could he take to learn more about his career and find job leads?**

Understand the Organization of the Want Ads

Employers pay to advertise job openings in the classified section of the newspaper. The Employment section of the want ads is organized alphabetically by key words representing job titles, career fields, and sometimes, places of employment. The same kind of job can be listed in more than one place. For example, you may find listings for medical assistant jobs under the key words *Medical Assistant*, *Health Occupations*, and *Hospital*. It is a good idea to scan all the ads from A to Z.

Understand Abbreviations

Study the list of abbreviations. Read the two want ads; the first one contains abbreviations, and the second one does not.

appt	appointment	hr	hour	ref	references
asst	assistant	K	thousand	req	required
ben	benefits	max	maximum	sal	salary
comm	commission	min	minimum	sched	schedule
exc, xInt	excellent	M-F	Monday-Friday	temp	temporary
exp	experience	mo	month	wk	week
DOE	dependent on	nec	necessary	w/	with
	experience	p/t, PT	part-time	wpm	words per minute
f/t, FT	full-time	pref	preferred	yr	year



Answering a Want Ad

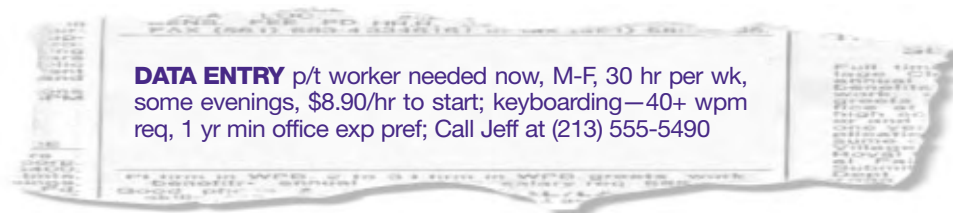
Want ads should tell you exactly what to do to apply for the job. Most require you to send a resume. Some direct you to apply in person, and some give you a telephone number to call. Follow the directions in the ad carefully.

Don't be disappointed if you find out an advertised job has already been filled. Instead, use the opportunity to make a new contact. Write down the name of the interviewer and call back in a few days to request an information interview.

The want ads can also help you gather information about your career field. Study the want ads to find out the names of jobs and careers, the starting pay for your target job, and the names of companies that are hiring.

WorkSkills

1. On a separate piece of paper, write this want ad without abbreviations.



2. What kinds of information can you usually learn by reading the want ads? Check all that apply.
 - ☐ a. the names of job titles in your career field
 - ☐ b. the name of the person who will be your supervisor
 - ☐ c. the number of hours you may be asked to work
 - ☐ d. the amount of money you can expect as a starting salary
 - ☐ e. the job requirements for your target job
 - ☐ f. the names of companies that are hiring
 - ☐ g. the times at which you can expect a raise or promotion

READ IT

Follow these steps to find key words that relate to your career field.

- Find out which day's paper has the largest classified ad section for your community. Obtain a newspaper for that day.
- Scan the want ads. Each time you find an advertisement related to your career area, write down the key word.
- Tally the number of ads you find under each key word on your list.

Report your findings to your class or a friend.

Review



SERVICE: Kevin wants to work part-time while he takes classes in education at City College. He would like a job working with children, perhaps as a teacher's aide or as a counselor in a day-care facility. Last summer, he was a counselor at a summer camp for children. Kevin speaks Korean and English, plays the piano, and has experience planning arts and crafts activities. He has worked as a volunteer math tutor for 7th graders. In each job, Kevin has shown that he is reliable, hard-working, and patient.

Every day for a week, Kevin has searched the want ads under the key word *children*. He is discouraged because he seldom finds more than one or two jobs listed and they require a college degree or several years of work experience.

1. List three transferable skills that Kevin has gained from previous experiences that he may be able to use in his next job.

2. To find more job leads, why would it be a good idea for Kevin to read the entire want ads section?

3. Besides reading the want ads, what other strategies could Kevin use to find job leads?

4. Kevin decides to visit a local school and talk to the principal, Kathy Hooper. Kathy tells Kevin that she doesn't have any job openings at her school at the present time. What are some questions that Kevin could ask Kathy to expand his network and find new job leads?

Inside This Preview Guide

Teacher's Guide Pages

For each of the twenty-five **Workplace Essential Skills** lessons you'll find two pages in the LiteracyLink Teacher's Guide. Each lesson plan is loaded with practical information to help you prepare students to get the most out of every lesson using a multimedia combination of videos, workbooks, and online activities.

Workbook Pages

The four **Workplace Essential Skills** workbooks are designed to provide a foundation for building new skills; that's why we recommend you start each lesson with a look at the workbook and have students return to the book as they watch segments of the video and work through the online lessons.

Each workbook chapter corresponds to a video program and a set of Internet lessons and activities at www.pbs.org/literacy. Look for these workbook sections to guide students through the lesson.

Before You Watch starts students thinking about the topics in the video program.

- Sneak Preview: Exercise to preview some of the key concepts from the program
- Answers for Sneak Preview: Answers to the preview exercise.
- Feedback: Information to help students personalize their work.
- Vocabulary: Key terms from the lesson and their definitions.

After You Watch allows students to apply skills from the program.

- Key Points from the Video Program: Lists summarizing the program.
- Situations: Real-world problem solving from health care, manufacturing, service, retail and construction industries.
- Information: In-depth information about important workplace concepts.
- WorkTips: Hints for success in the world of work.
- WorkSkills: Exercise that enables you to apply what you have learned.
- Connections: Extension of workplace skills through practice in other content areas.
- Review: Section for students to collect their new workplace knowledge.

Each workbook also contains a Skills Preview, a Skills Review, an Answer Key, a Glossary, an Index, and a Reference Handbook.

Do you have students ready to start preparing for the GED exam? **GED Connection™** provides specific information about all five parts of the GED 2002 test series, plus lots of instruction and practice to get ready for test day. With video, workbooks, and online lessons and activities, **GED Connection** reaches students with different learning styles and different life styles. **GED Connection** is part of the LiteracyLink System, available from KET.

Components of the PBS LiteracyLink® Workplace Essential Skills System:

VIDEOS: Twenty-five half-hour programs help learners prepare themselves to find a job and succeed in the world of work. Check local PBS station listings for possible broadcast times.



WORKBOOKS: Four workbooks – Employment, Communication & Writing, Reading, and Math – can be used in conjunction with the videos and online activities.



TEACHER'S GUIDE: This valuable resource provides lesson plans and other teaching materials for Workplace Essential Skills and GED Connection™.

ONLINE ACTIVITIES: Free learning activities on the Internet provide lots of practice and skill-building opportunity, at www.pbs.org/literacy.



ONLINE MANAGEMENT SYSTEM: Via the Internet, instructors can review and give feedback on learners' online work and get reports on learner data.

Call KET at (800) 354-9067 to request a preview, and visit us on the web at www.ket.org/ged.

PROGRAM 21: Solving Problems



OBJECTIVES

1. Add and subtract numbers.
2. Multiply and divide numbers.
3. Estimate with lead digits and compatible pairs.

Program 21 at a Glance—For Your Information

VIDEO STORY VIGNETTES

- Cheryl handles some of the financial matters for a hotel restaurant. She has a specific amount of money to spend on a food shipment. The chef changed an order of strawberries, and now the delivery costs more than Cheryl can pay. She estimates to find a short-term solution to the problem, then follows her supervisor's suggestion of raising the price of the dessert.
- Martina is the manager of a bookstore. At the last minute, she discovers the need to have 160 red velvet bookmarks for a book signing. Gabe, an assistant, estimates how long it would take him to go and return from a fabric store with ribbon to make the bookmarks. Martina, Gabe, and the fabric store clerk all work together to generate alternatives that will allow Gabe to purchase enough ribbon to make the number of bookmarks needed.

MAJOR CONCEPTS IN THE VIDEO PROGRAM

1. Problem solving is the ability to make careful choices. It involves logic and following a process to make decisions.
2. There is a process to follow in problem solving:
 - Understand the problem
 - Gather facts
 - Set it up
 - Estimate
 - Work it and check it
 The steps in the problem-solving process can be rearranged or repeated.
3. Estimation is an educated guess. It involves working with rounded numbers to make calculations easier. Estimation skills improve with experience.
4. Some workplaces have developed formulas to solve common or recurring problems.
5. Problem solving involves trying many approaches until you arrive at an acceptable solution.

Workbook Pages	Online Video Activity	Internet Activity
<p>Before You Watch Pages 33–36</p> <p>After You Watch</p> <ul style="list-style-type: none"> • Key Points from the Video Page 37 • Adding and Subtracting Pages 38–41 • Multiplying and Dividing Pages 42–45 • Estimating and Problem Solving Pages 46–49 <p>Review Pages 50–52</p>	<p>Problem Solving with Logic</p> <p>Video Clip Summary Baker describes the process he went through when a batch of cakes turned out poorly due to bad shortening. He details the reasoning and logic used.</p> <p>Key Ideas: logic, if/then reasoning, process of elimination, variables, mental checklist</p> <p>Activities</p> <ul style="list-style-type: none"> • Answer questions about steps the baker took to problem solve. • List approaches that can be used to solve a problem. • List problems that have not yet been solved. 	<p>Problem Solving with Numbers</p> <p>Key Ideas: problem solving, factor, calculator, unit price</p> <p>Activities</p> <ul style="list-style-type: none"> • Apply calculation skills and number sense to solve a work-related problem. • Use an online calculator to determine carpet costs; practice working within a budget. • Examine a problem-solving process.

SAMPLE TEACHER'S GUIDE PAGES

Program 21 Activities



Set Up the Video Program

1. Before viewing Program 21, explain that it shows a series of steps, or a process, for solving problems. It also illustrates how basic math skills are an integral part of the problem-solving process.
2. Ask, *How do you approach a problem? What is the first thing you do?* Have learners volunteer the first step in their problem-solving approach. Responses may include: understand what the problem is asking, estimate an answer, look for the necessary information, and so on.
3. Have learners do the **Sneak Preview** activity on workbook pages 34–35. Tell learners that the exercise is designed to introduce the topics that will be covered in the video program and the corresponding lesson. After they complete the activity, you may wish to discuss the questions and answers using the feedback on page 35.
4. Discuss the vocabulary on page 36.
5. Advise learners to watch the video looking for the steps that make up the problem-solving process.



Show Program 21

Follow Up the Video Program

Ask, *What were the steps in the problem-solving process?* (Instructor can list on the board.)

In Program 21:

- Cheryl calculated a new dessert price to cover the expense of the strawberries. She immediately knew the amount was wrong. *When have your problem-solving skills alerted you to an incorrect amount?*
- Gabe and Martina worked backwards from a fixed amount of money to solve their bookmark problem. *What experiences do you have with working backwards from an amount to reach a solution?*
- You saw workers use cause and effect to narrow down possible solutions. *In what situation would you use the problem-solving technique of “if/then”?*



Use Workbook Instruction and Practice

1. Discuss the **After You Watch** summary on page 37.
2. Assign pages 38–49. After learners have finished the lesson, have them work through the **Review** on pages 50–52.



Have Learners Go to the Internet

- **Online Video Activity,**
Problem Solving with Logic
This brief video clip shows learners various methods and approaches they can use to evaluate and solve problems.
- **Internet Activity,**
Problem Solving with Numbers
While planning an office renovation, learners use an online calculator to solve a real-life problem and practice applying math skills within a workplace context.



Lead Group Activities

Activity 1: In Your Life

Have learners bring in carry-out menus. Tell learners they have an imaginary limit of \$20 to spend. Using lead digits to estimate, have learners write down an order and estimate how much it will cost. Have their partner use a calculator to find the exact amount of the order. Compare how accurate their estimates were.

Activity 2: In the Community

In small groups, have learners find and compile a list of the populations of five towns or cities. Have learners round these populations to the same place value (of their choosing). Then have learners write three statements comparing the size of the populations. Give examples such as one population being twice the size of another or 5,000 more than another population.

Activity 3: At the Workplace

If possible, bring a couple of adding machines to class, preferably those with adding tape. Have learners take turns performing basic calculations using the **Review** on pages 50–52. Ask what advantages they see of using an adding machine with adding tape.

BEFORE you WATCH



program

21

WATCH

Solving Problems

OBJECTIVES

In this lesson, you will work with the following math concepts and skills to do workplace tasks:

1. Adding and subtracting numbers
2. Multiplying and dividing numbers
3. Estimating with lead digits and compatible pairs, and to check work done with a calculator

The video program you are about to watch will show how and when people do math **calculations** on the job. You'll see people adding, subtracting, multiplying, and dividing. You'll see them working with pencil and paper, as well as with calculators.

As you watch the video, notice the strategies that people use to get answers and check that their answers make sense. It's a good idea to develop such strategies, because we all make mistakes now and then. Problem-solving strategies will help you prevent many mistakes and correct the ones that do occur.

The best way to learn basic skills in math is through lots of practice. The more you practice adding, subtracting, multiplying, and dividing, the more number sense you'll develop. You can also enhance your number sense by estimating with these basic skills.

Sneak Preview

This exercise previews some of the concepts from Program 21. After you answer the questions, use the Feedback on page 35 to help set your learning goals.



MANUFACTURING: You are working as an assistant in the personnel office of a large factory. One of your jobs is to figure out how many hours each shift has worked on a daily, weekly, and monthly basis. The form below lists each employee's hours for one week.

Employee and Shift Number	Mon.	Tues.	Wed.	Thurs.	Fri.
William Antiago (Shift #1)	9	9	9	9	0
Joyce Azzoni (Shift #3)	8	8	8	8	8
Wayne Carleton (Shift #2)	7	7	7	8	8
Bradley Deghan (Shift #2)	6	7	8	9	8
Vera Delgado (Shift #2)	8	8	8	0	8
Nancy Finch (Shift #1)	5	5	5	6	6
Peter Grace (Shift #3)	0	0	9	9	9
Manuel Hanson (Shift #1)	8	9	9	7	9
Tyrone Larson (Shift #2)	8	8	8	8	9
Catherine Nyhan (Shift #3)	0	7	7	7	7
Nick Pochet (Shift #1)	4	4	4	5	4
Sheila Slade (Shift #3)	6	6	6	0	0
Max Wilson (Shift #1)	8	8	8	8	8
Michael Zerfas (Shift #1)	9	9	9	8	8
TOTAL					

1. Estimate the total number of hours worked by William Antiago by rounding to the nearest ten.

(1) 10	(4) 40
(2) 20	(5) 50
(3) 30	

2. Shift #2 employees worked a total of 148 hours this week. Divide this number by 4 to find the average hours worked per employee.

(1) 32	(4) 40
(2) 30	(5) 37
(3) 35	

3. Peter Grace earns \$5.80 per hour. How much money did he earn this week?

(1) \$156.60	(4) \$40.60
(2) \$116.00	(5) \$52.20
(3) \$540.50	

4. How many more hours were worked by all shifts on Thursday than on Monday?

(1) 92	(4) 86
(2) 178	(5) 12
(3) 6	

Feedback

- If you got all of the questions right ... your basic operation skills are good. Concentrate on the kinds of problem solving shown in the video.

- If you missed question 1 ... you need to work on your estimation skills.

- If you missed question 2 ... you need to work on your division skills.

- If you missed question 3 ... you need to work on your multiplication skills.

- If you missed question 4 ... you need to work on your ability to decide *how* to solve a problem.

Answers for Sneak Preview:
1. Choice (4) 2. Choice (5) 3. Choice (1) 4. Choice (3)

Vocabulary for *Solving Problems*

area	the size of a surface
calculations	math processes—such as adding, subtracting, multiplying, and dividing—carried out to solve a problem
compatible pairs	sets of two numbers that divide equally
decimal point	the point that separates whole numbers from parts of a whole or dollars from cents
difference	the result when one number is subtracted from another
dividend	the number being divided up in a division problem; the number inside the long division sign
front-end estimation	a method of estimating with large numbers by using only the first digits of the numbers
lead digits	the first (left) digits of numbers
products	the results when two or more numbers are multiplied together
quotient	the result when one number is divided by another
reconciliation sheet	a form that a store uses to record the flow of money at a cash register
regroup	to move an amount to or from a place value to complete a basic operation
remainder	the amount left after dividing two numbers that do not divide evenly; for example, $5 \div 2$ is 2 with a remainder of 1
square units	labels that express size in two dimensions (length and width)
sum	the result when two or more numbers are added together



LiteracyLink®

Now watch Program 21.

After you watch, work on:

- pages 37–52 in this workbook
- Internet activities at www.pbs.org/literacy

AFTERWATCH

program

21



Solving Problems

WORKTIP

Adding, subtracting, multiplying, and dividing numbers on the job can be easier if you:

- Work carefully and accurately.
- Remember basic number facts.
- Use a calculator when possible.
- Check your work when finished.

On the following pages, you will learn more about how to perform basic math operations. You'll use pencil and paper to find answers most of the time, and you'll have a chance to use a calculator to check your work. You'll also get some practice estimating.

Think About the Key Points from the Video Program

- Addition and subtraction are used on the job all the time. Many jobs involve adding and subtracting money amounts; these skills are especially important.
- Multiplying and dividing numbers solves many problems on the job. If you are working with money, you need to know where to place the **decimal point** when you multiply or divide.
- Estimating can save time and therefore money. To succeed with numbers on the job, you must know when estimation is appropriate.
- Calculators are extremely helpful tools. To use them successfully, be careful to input numbers correctly.

Adding and Subtracting

You know that adding is putting amounts together and subtracting is taking an amount away from another, or finding a **difference**. When you add or subtract using paper and pencil, you must *line the digits up correctly*—ones under ones, tens under tens, hundreds under hundreds, and so on. When you solve the problem $1240 + 145$, line up digits like this:

$$\begin{array}{r} 1240 \\ + 145 \\ \hline \end{array} \quad \text{NOT THIS:} \quad \begin{array}{r} 1240 \\ + 145 \\ \hline \end{array}$$

And when you subtract eight hundred thirteen from one thousand nine hundred eighty-five, the problem should look like this:

$$\begin{array}{r} 1985 \\ - 813 \\ \hline \end{array} \quad \text{NOT THIS:} \quad \begin{array}{r} 1985 \\ - 813 \\ \hline \end{array}$$

Once the problem is lined up correctly, start at the right column and move left, adding or subtracting each digit.

$$\begin{array}{r} 1240 \\ + 145 \\ \hline 1385 \end{array} \quad \begin{array}{r} 1985 \\ - 813 \\ \hline 1172 \end{array}$$



Solve these problems on a separate sheet of paper. Be sure to line up the digits correctly.

1. $9546 - 7321 = \underline{\hspace{2cm}}$

5. $823 + 46 = \underline{\hspace{2cm}}$

2. $1280 + 413 = \underline{\hspace{2cm}}$

6. $944 - 12 = \underline{\hspace{2cm}}$

3. $67 + 21 = \underline{\hspace{2cm}}$

7. $1582 - 371 = \underline{\hspace{2cm}}$

4. $89,488 - 135 = \underline{\hspace{2cm}}$

8. $647 + 22 = \underline{\hspace{2cm}}$

Adding and Subtracting with Regrouping

When you add digits in a place value column, their **sum** may be 10 or more. When this happens, an amount will have to be carried, or **regrouped**, to the next place value.

$$\begin{array}{r} 1 \\ 688 \\ + 59 \\ \hline 747 \end{array}$$

$8 + 9 = 17$, so put a 7 in the ones place and regroup the 1 to the tens place. Since $1 + 8 + 5 = 14$, put a 4 in the tens place and regroup the 1 to the hundreds place.

You may also have to regroup when you subtract. If you are subtracting a larger digit from a smaller one, regroup by borrowing. Regrouping does not change the number's value.

$$\begin{array}{r} \overset{1}{\cancel{2}}\overset{11}{2}\overset{1}{5} \\ - \quad 29 \\ \hline 196 \end{array}$$

You cannot take 9 from 5, so regroup 1 ten from the tens place. $15 - 9 = 6$, so put a 6 in the ones column. Since you cannot subtract 2 from the 1 left in the tens place, regroup 1 from the hundreds place. $11 - 2 = 9$, so put a 9 in the tens place. Bring down the 1 left in the hundreds place, since nothing is being subtracted from it.

For help with subtracting from zeros, turn to Reference Handbook page 145.



Solve these problems on a separate sheet of paper. Regroup when necessary. Be sure to line the digits up correctly.

- | | |
|--|--|
| 1. $2017 - 345 = \underline{\hspace{2cm}}$ | 4. $458 + 275 = \underline{\hspace{2cm}}$ |
| 2. $8380 - 298 = \underline{\hspace{2cm}}$ | 5. $1409 + 11 = \underline{\hspace{2cm}}$ |
| 3. $229 + 984 = \underline{\hspace{2cm}}$ | 6. $1950 - 160 = \underline{\hspace{2cm}}$ |

Adding and Subtracting Money

Adding and subtracting money is like working with whole numbers except that you need to remember where the decimal point goes. When you line up the digits, be sure to line up the decimal points, one under the other.

To add \$435.98 to \$112.03, line up the decimal points and add.

$$\begin{array}{r} \$112.\overset{\downarrow}{0}3 \\ + \quad 435.\overset{\downarrow}{9}8 \\ \hline \$548.\overset{\downarrow}{0}1 \end{array}$$

decimal points lined up

To subtract \$47.52 from \$358.90, line up the decimal points and subtract.

$$\begin{array}{r} \$358.\overset{\downarrow}{9}0 \\ - \quad 47.\overset{\downarrow}{5}2 \\ \hline \$311.\overset{\downarrow}{3}8 \end{array}$$

decimal points lined up



Add or subtract these money amounts on a separate piece of paper. Be careful to line up the decimal points correctly.

- | | |
|---|--|
| 1. $\$879.65 - \$402.87 = \underline{\hspace{2cm}}$ | 5. $\$342.68 - \$24.89 = \underline{\hspace{2cm}}$ |
| 2. $\$2870.45 + \$1590.23 = \underline{\hspace{2cm}}$ | 6. $\$4128.14 + \$670.29 = \underline{\hspace{2cm}}$ |
| 3. $\$245.75 - \$95.09 = \underline{\hspace{2cm}}$ | 7. $\$905.62 - \$796.54 = \underline{\hspace{2cm}}$ |
| 4. $\$675.50 + \$250.75 = \underline{\hspace{2cm}}$ | 8. $\$290.86 + \$824.81 = \underline{\hspace{2cm}}$ |

WorkSkills



SERVICE: As a restaurant server, Rosalie Chen works hard to make sure that her customers have a pleasant experience. She is responsible for writing down orders, answering customer questions about the menu, and collecting proper payment at the end of the meal. Rosalie's pleasant personality and good communication skills are very important to her success in her job at Danita's Diner.

Rosalie also needs good math skills. Servers sometimes use a calculator, but like many servers, Rosalie must add and subtract with paper and pencil. She has to work carefully so that the bill and the amount of change back are accurate.

Below is a menu from Danita's Diner. Rosalie's first four tables placed the orders shown in the guest checks on the next page.

Problem Solving

Use the menu prices to fill in the correct amount for each item ordered. Then add up all the amounts, and write the total due in the space provided. Finally, figure out the change back if each customer paid with a \$20 bill.

DINER DANITA'S		
SPECIAL VALUES	PANCAKES, ETC.	SIDE ORDERS
3 x 3: 3 eggs, 3 slices toast, 3 slices bacon.....\$3.95	regular pancakes\$2.45	bacon\$1.45
2 timer: 2 eggs and 2 slices bacon.....\$2.95	tall stack\$2.95	sausage\$1.55
EGGS	pancake platter	ham.....\$1.55
1 egg any style/toast.....\$1.05	with side bacon\$3.95	hash browns.....\$1.05
2 eggs any style/toast.....\$1.95	waffle: plain.....\$2.15	cold cereal\$0.95
3 eggs any style/toast.....\$2.95	with strawberries.....\$2.75	fruit plate\$2.05
eggs benedict\$3.25	muffin.....\$0.90	BEVERAGES
omelette: plain\$2.45	bagel: plain\$0.80	coffee.....\$0.75
with cheese.....\$2.75	with cream cheese\$1.15	tea.....\$0.65
mushroom & cheese\$3.05	French toast.....\$2.15	milk\$0.95
		orange juice: small.....\$0.85
		large.....\$1.15

Check No. 4507	
Server: _____	Date: _____
eggs benedict	_____
side bacon	_____
2 eggs over easy / toast	_____
lg. orange juice	_____
2 coffees	_____
TOTAL DUE _____	

Check No. 4508	
Server: _____	Date: _____
side sausage	_____
pancake platter	_____
2 muffins	_____
bagel/cream cheese	_____
sm orange juice	_____
waffle w/strawberries	_____
2 sides bacon	_____
1 milk	_____
3 coffees	_____
1 tea	_____
TOTAL DUE _____	

Change back from \$20: _____

Change back from \$20: _____

Check No. 4509	
Server: _____	Date: _____
3 eggs scrambled/toast	_____
ham	_____
mushroom/cheese omelet	_____
lg. orange juice	_____
cold cereal	_____
fruit plate	_____
4 coffees	_____
TOTAL DUE _____	

Check No. 4510	
Server: _____	Date: _____
3 X 3 Special	_____
pancakes	_____
French toast	_____
bagel/butter	_____
2 soft-boiled eggs/toast	_____
2 sides bacon	_____
1 coffee	_____
2 teas	_____
2 milks	_____
TOTAL DUE _____	

Change back from \$20: _____

Change back from \$20: _____

COMMUNICATE

Pair up with a classmate or friend. Using the menu above, take turns having one person give an order and the other person take down orders as if you were a customer and a restaurant server. Add up the total of each order you take.

Multiplying and Dividing

Whether you're estimating or calculating exact amounts, it is vital that you know the basic number facts. If you do not know the basic multiplication facts by heart, practice them until you can recall them automatically.

After you know the multiplication facts, you can move on to more challenging calculations. Multiplying two-digit numbers involves just three processes: 1) using basic multiplication facts, 2) regrouping just as you did with addition, and 3) adding **products** together to find a total. To multiply 43 by 72, follow the steps below.

STEP 1

$$\begin{array}{r} 43 \\ \times 72 \\ \hline 86 \end{array}$$

$2 \times 3 = 6$
 $2 \times 4 = 8$

STEP 2

$$\begin{array}{r} 43 \\ \times 72 \\ \hline 86 \\ 301 \end{array}$$

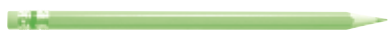
$7 \times 3 = 21$, so put
1 in the tens place,
and carry the 2.
 $7 \times 4 = 28$. Add
the 2 to get 30.

STEP 3

$$\begin{array}{r} 43 \\ \times 72 \\ \hline 86 \\ 301 \\ \hline 3096 \end{array}$$

Add the products.

Notice in Step 2 that when you are multiplying the top number by the 7 in the tens place, the last digit of the product is written *in the tens place*. That's because you're really multiplying by 70. Similarly, when you multiply by a digit in the hundreds place, the product ends in the hundreds place, and so on.



Multiply the following numbers on a separate sheet of paper. Put the larger number on the top to make your work easier.

1. $21 \times 4 =$ _____
2. $63 \times 6 =$ _____
3. $65 \times 95 =$ _____
4. $15 \times 49 =$ _____
5. $223 \times 41 =$ _____
6. $78 \times 325 =$ _____

Dividing

When you divide, work from left to right. Notice the placement of each digit in the solution to $496 \div 8$.

STEP 1

$$\begin{array}{r} 6 \\ 8 \overline{) 496} \\ \underline{48} \\ 1 \end{array}$$

6 ← Divide: 8 goes into 49 six times.
48 ← Write the product: $8 \times 6 = 48$.
1 ← Subtract: 49 minus 48 equals 1.

STEP 2

$$\begin{array}{r} 62 \\ 8 \overline{) 496} \\ \underline{48} \\ 16 \\ \underline{16} \\ 0 \end{array}$$

62 ← Bring down the 6.
16 ← Divide: 8 goes into 16 two times.
16 ← Write the product: $2 \times 8 = 16$.
0 ← Subtract: 16 minus 16 equals 0.
There is no **remainder**.

Dividing by a number with more than 1 digit involves the same steps, but the numbers you are working with may be more challenging. To solve $300 \div 12$, follow the steps below.

STEP 1

$$\begin{array}{r} 2 \\ 12 \overline{)300} \\ \underline{24} \\ 6 \end{array}$$

12 goes into 30 two times with 6 remaining.

STEP 2

$$\begin{array}{r} 25 \\ 12 \overline{)300} \\ \underline{24} \\ 60 \\ \underline{60} \\ 0 \end{array}$$

Bring down the 0. 12 goes into 60 five times with no remainder.

Divide the following numbers on a separate sheet of paper. Set up the problem so that the number being divided is *inside* the division bracket.

1. $224 \div 16 =$ _____
2. $3220 \div 20 =$ _____
3. $410 \div 5 =$ _____
4. $3285 \div 9 =$ _____
5. $720 \div 24 =$ _____
6. $3876 \div 34 =$ _____

Multiplying and Dividing with Money

Multiplying and dividing with money is almost the same as working with whole numbers. However, you must decide where to place the decimal point.

When you multiply, add the number of digits that come after the decimal point in both numbers. That is the number of digits that should follow the decimal point in your answer. Take a look:

$$\begin{array}{r} \$1.39 \\ \times 12 \\ \hline 278 \\ 139 \\ \hline \$16.68 \end{array}$$

2 decimal places following the decimal point
0 decimal places
 $2 + 0 = 2$ decimal places

When you divide a decimal by a whole number, place the decimal point in your answer directly above the decimal point in the **dividend**. (The dividend is the number being divided.)

$$\begin{array}{r} \$4.65 \\ 4 \overline{) \$18.60} \\ \underline{16} \\ 26 \\ \underline{24} \\ 20 \\ \underline{20} \\ 0 \end{array}$$

The decimal point in \$4.65 is directly above the decimal point in \$18.60.

Multiply or divide as indicated.

1. $\$5.87 \times 24 =$ _____
2. $35 \times \$8.80 =$ _____
3. $\$205.45 \div 5 =$ _____
4. $\$603.50 \div 17 =$ _____
5. $\$14.15 \times 25 =$ _____
6. $\$60.95 \div 5 =$ _____

WorkSkills



CONSTRUCTION: As a tile worker, Celia McClintock takes measurements of floors and walls to be tiled, buys materials, and lays the tile. Many of these tasks require basic math operations.

For example, some jobs require that Celia multiply the lengths and widths of a kitchen to find the number of square feet in the room. Or she may have to add the costs of materials and labor to get the total amount. Whatever the math operation, she often checks her work by using a calculator as well as paper and pencil.

The worksheet on the next page summarizes several of Celia's jobs. To complete these jobs, Celia will have to make a trip to the tile warehouse to pick up materials. She wants to do all measuring and math operations correctly to avoid buying too much or having to go back for more materials.

Problem Solving

To figure out how much tile to buy, Celia needs to know the **area** of the space to be tiled, that is, the amount of flat surface to be covered. To find the area of a rectangular surface, you multiply the width of the surface by its length. The formula used to express this relationship is:

$$\text{area} \rightarrow A = l \times w \leftarrow \text{width}$$

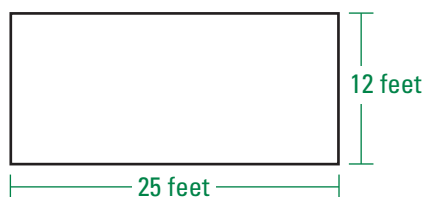
\uparrow
length

Therefore, if a room measures 25 feet long and 12 feet wide, you find the area of this room by inserting these values into the area formula:

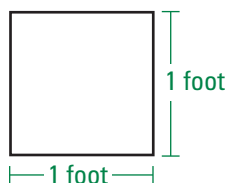
$$A = l \times w$$

$$A = 25 \text{ feet} \times 12 \text{ feet}$$

$$A = 300 \text{ square feet}$$



Area is given in **square units**. A square foot measures 1 foot in length and 1 foot in width as shown below.



Complete Celia’s worksheet below using the following directions. The 121 Larks St. job is filled in for you. Use a calculator if you wish.

1. In Column C, write the amount of tile needed for each job on the tile list (length multiplied by width).

Example:

Press:

8

×

9

=

Calculator Displays:

8.

8.

9.

72.

2. In column E, write the number of cases of tile needed for each job. One case of tile covers eleven square feet. (Note: If there is a remainder when you divide, always order another full case.)

Example:

Press:

7

2

÷

1

1

=

Calculator Displays:

72.

72.

11.

6.545454545

number of square feet of tile needed

number of square feet covered per case

number of cases needed

You need to order **7 cases**.

A	B	C	D	E
Job	Room Measurements (length × width)	Tile Needed	Type/Cost of Tile (per sq. ft.)	Number of Cases Needed
121 Larks St.	8' × 9'	72 sq. ft.	slate/\$1.19	7
79A Bellingham Dr.	13' × 11'	sq. ft.	quarry tile/\$1.77	
9205 Main	27' × 19'	sq. ft.	ceramic/\$1.58	
33 Pine Rd.	18' × 16'	sq. ft.	vinyl/\$.59	

READ IT

Look at the labels on paint cans, carpet cleaners, stains, or varnishes. Find where each label tells how many square feet can be covered or cleaned by the contents of the can. Make a list of each can’s amount and the area the contents will cover. Which products cover a larger area?

Estimating and Problem Solving

In the video program, you saw some examples of how and when people estimate. As you learned, estimating is simply using numbers that are close but not exact. People may estimate because some numbers are easier to work with than others and because they do not always need an exact answer.

One common way to estimate is called **front-end estimation**, and it is used when the numbers you are working with are large. Suppose you want a quick estimate of the difference between \$3365.83 and \$5231.15. To use front-end estimation, subtract the **lead digits** (the first digit in a number). In this case, the lead digits are both in the thousands place, so you subtract 3 from 5.

$$\begin{array}{r} \$5231.15 \\ - 3365.83 \\ \hline \end{array} \qquad \begin{array}{r} 5 \\ - 3 \\ \hline 2 \end{array} \qquad \text{The answer is about \$2000.}$$

To get a closer estimate, try using the *two* lead digits in each number.

$$\begin{array}{r} \$5231.15 \\ - 3365.83 \\ \hline \end{array} \qquad \begin{array}{r} 52 \\ - 33 \\ \hline 19 \end{array} \qquad \text{The answer is about \$1900.}$$

When using front-end estimation, you still have to line up digits with the same place value.



Use front-end estimation to estimate the answer to each problem. Use the first two digits to get a closer estimate. (Remember \approx means *is approximately equal to*.)

- | | |
|------------------------------------|------------------------------------|
| 1. $1315 + 2220 \approx$ _____ | 5. $95,600 - 23,150 \approx$ _____ |
| 2. $4345 - 1250 \approx$ _____ | 6. $4136 + 8500 \approx$ _____ |
| 3. $19,560 + 22,500 \approx$ _____ | 7. $2950 - 1120 \approx$ _____ |
| 4. $6789 - 3501 \approx$ _____ | 8. $20,900 + 10,550 \approx$ _____ |

Compatible Pairs

To make estimating with division much easier, you can use **compatible pairs** of numbers. Compatible numbers are numbers that divide exactly. To use the compatible pair method when estimating, find numbers that are close to the original numbers but are easy to divide.

$6 \overline{)349}$ does not divide evenly, but $6 \overline{)360}$ does.
So $6 \overline{)349}$ is approximately **60**.

$9 \overline{)211}$ does not divide evenly, but $9 \overline{)180}$ does.
So $9 \overline{)211}$ is approximately **20**.



Use compatible pairs to estimate answers to these problems.

1. $532 \div 5 \approx$ _____

3. $773 \div 9 \approx$ _____

2. $233 \div 6 \approx$ _____

4. $617 \div 3 \approx$ _____

Estimation and the Calculator

As you've seen in the video program, calculators are handy tools on the job. A calculator is quick and easy to use. And if you enter numbers and operations correctly, calculators almost never make mistakes.

But even work on a calculator should be checked. For example, if a person makes a mistake and inputs 100 instead of 1000, imagine how wrong the calculator answer will be! A good check to be sure the calculator is displaying a reasonable answer is to estimate the answer.

Suppose you want to add 3554 and 2419 on a calculator. You enter what you think are the correct numbers and see this result on the display:

2975.

Now use front-end estimation to add the two numbers:

$$\begin{array}{rcl} 3554 & \approx & 3500 \\ 2419 & \approx & 2400 \\ \hline & & 5900 \end{array}$$

Your estimate is 5900. If you compare this estimate to the calculator display, you'll realize that you must have made a mistake entering the numbers. If you do the calculation again, you'll find the actual answer is **5973**. This answer is much closer to your estimate.



Use estimation to check the calculator displays below. If the display is incorrect, write the correct amount on the line provided.

1. $6797 \div 7 =$

971.

2. $786 - 328 =$

1214.

3. $22,934 \times 4 =$

22938.

4. $1409 + 3167 =$

5526.

5. $5520 \times 2 =$

10000.

6. $490 \div 2 =$

245.

7. $3198 - 1086 =$

1100.

8. $5602 + 4449 =$

10051.

WorkSkills



RETAIL: Nina Polovchek is a salesperson at Bloom's Sporting Goods. Her job involves working with customers, merchandise, and money. As with most jobs that include handling money, Nina's job requires her to be careful and accurate. She knows she needs to check any math calculations.

At the end of each day, stores often require employees to fill out a **reconciliation sheet**, which is sometimes also called a balance sheet. On this sheet a salesperson records the amount of money in the cash drawer at the beginning of the day. He or she then writes down information about what money came in during the day and what money went out. This final amount should match the amount recorded by the cash register.

Problem Solving

One of Nina's jobs is to quickly check that the balance recorded on the reconciliation sheet is accurate. This is a time when her estimation skills are useful.

Nina used the information below to fill out the reconciliation sheet on the next page. To determine whether the final balance makes sense, follow the steps on the next page.

Beginning Drawer Balance: \$485.50

Sales

9 A.M. – 12 P.M.	\$290.77
12 P.M. – 3 P.M.	\$401.55
3 P.M. – 6 P.M.	\$288.32

Refunds

9 A.M. – 12 P.M.	\$0.00
12 P.M. – 3 P.M.	\$5.99
3 P.M. – 6 P.M.	\$42.98

Coupons Redeemed

9 A.M. – 12 P.M.	\$8.00
12 P.M. – 3 P.M.	\$0.00
3 P.M. – 6 P.M.	\$20.00

Gift Certificates Redeemed

9 A.M. – 12 P.M.	\$0.00
12 P.M. – 3 P.M.	\$100.00
3 P.M. – 6 P.M.	\$0.00



BLOOM'S Sporting Goods

RECONCILIATION SHEET



DATE: _____ COMPLETED BY: _____ REVIEWED BY: _____

Beginning Drawer Balance:	\$ 485.50
(add) Total Sales:	\$ 98.64
(add) Gift Certificates Redeemed:	\$ 100.00
(subtract) Total Refunds:	\$ 48.97
(subtract) Coupons Redeemed:	\$ 28.00
<hr/>	
END-OF-DAY TOTAL:	\$ 607.17

1. Use front-end estimation to check each of the amounts recorded on the reconciliation sheet above. If your estimate is close to the figure given, put a check mark next to it.
2. If your estimate is not close to the amount given, use a calculator to check the addition or subtraction. Cross out the incorrect amount, and write in the correct one.
3. Use your calculator to find the corrected end-of-day total. Read carefully so that the appropriate amounts are added or subtracted.


COMMUNICATE

Suppose you found a mistake in the calculations of a co-worker. What do you think you would do? How would you like the situation to be handled if it were you who had made the mistake?

Use the space below to tell how you would handle the situation and why.

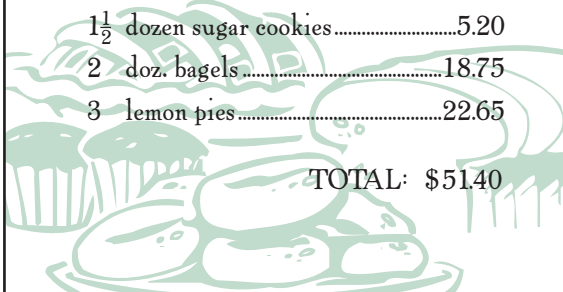
Review

When Doug Silverstein ran out of paper in the middle of an important copying job, his boss at the real estate office gave him money from petty cash to buy some at a nearby store. Petty cash refers to money that a business has on hand to pay for the occasional needs of the office. According to company policy, Doug returned with a receipt for his purchase, and his boss kept a careful record of the transaction.

Petty Cash Report		Date: _____
	Beginning total:	\$ _____ (A)
	Cash on hand:	\$ <u>392.74</u>
	Receipts:	\$ _____
	Total:	\$ _____ (B) (should equal A)

A petty cash report is shown above, with some of the information already filled in. “Cash on hand” refers to the amount of money actually in the petty cash drawer or envelope at this time. Below you’ll find several receipts from purchases made with the petty cash. Following the receipts is a table listing information about the money in petty cash at the start of the day. Use all of this information to answer the questions that follow. You may use a calculator for all or part of the exercise.


deluxe bakery	
12 choc. cupcakes.....	4.80
1½ dozen sugar cookies.....	5.20
2 doz. bagels.....	18.75
3 lemon pies.....	22.65
TOTAL: \$51.40	



BEST Office Supplies	
2 boxes #2 pencils @ \$3.99 ea	\$7.98
12 file folders @ \$.29 ea	\$3.48
2 3-ring binders @ \$2.99 ea	\$5.98
2 boxes thumbtacks @ \$1.39 ea	\$2.78
SUBTOTAL	\$20.22
TAX 5%	1.01
TOTAL	\$21.23

The Copy Connection		
# of Copies	Price	Amount
7	0.07	\$0.49
35	0.11	\$3.85
SUBTOTAL		\$4.34
5% Tax		.22
TOTAL		\$4.56

Downtown Hardware		\$ 1.19
66 Office Sq. Park		2.89
		9.90
		14.75
		22.50
		3.59
		4.20
SUBTOTAL		\$ 59.02
TAX		2.95
TOTAL		\$ 61.97

	
casual catering	
chicken salad platter.....	\$3.95
Greek salad.....	4.95
vegetable soup.....	2.50
diet cola.....	\$0.95
coffee.....	0.80
skim milk.....	1.00
TOTAL.....	\$14.15

DISCOUNT	
<u>FURNITURE WAREHOUSE</u>	
one polished steel bookcase	
3 ft. by 5 ft. by 1 ft.	
<hr/>	
\$48.95	

Petty Cash Drawer	
(start of day 4/12)	
<hr/>	
\$100 bills:	2
\$ 50 bills:	2
\$ 20 bills:	6
\$ 10 bills:	10
\$ 5 bills:	10
\$ 1 bills:	25

- How much money was in the petty cash drawer at the start of the business day on 4/12? Write this total on line (A) of the petty cash report.

2. What was the total amount in petty cash receipts, including purchases made at Deluxe Bakery, Best Office Supplies, The Copy Connection, Downtown Hardware, Casual Catering, and Discount Furniture Warehouse? Write this amount in the space labeled "Receipts" on the petty cash report.
3. Add the total receipts to the cash on hand. Write this amount on line (B). Does this total match line (A)?
4. The employee who took out petty cash to purchase baked goods remembered that she had bought one lemon pie for her own family. She gave money back to petty cash to cover the expense herself. How much did she give back to petty cash? _____
5. Fill out a new petty cash report reflecting the change described above in problem 4.

<h2 style="margin: 0;">Petty Cash Report</h2>		Date: _____
\$	Beginning total:	\$ _____ (A)
	Cash on hand:	\$ _____
	Receipts:	\$ _____
	Total:	\$ _____ (B) (should equal A)



SAMPLE WORKBOOK AND TEACHERS GUIDE PAGES

The award-winning *Workplace Essential Skills* video series and companion workbooks were produced by KET as part of the innovative multimedia PBS LiteracyLink Project. Online activities, created by the National Center on Adult Literacy, are available free to learners at www.pbs.org/literacy.

These sample chapters come from four workbooks written for *Workplace Essential Skills*. Each workbook chapter corresponds with a video program and learning activities on the Internet. The four instructional strands, Employment, Communication & Writing, Reading, and Math, help guide learners through the process of finding a job, fitting into the new environment, and succeeding in the world of work. The sample Teacher's Guide pages come from the LiteracyLink Teacher's Guide, which covers both *Workplace Essential Skills* and *GED Connection™*.

Video Programs/Workbook Chapters

ORIENTATION

Making it Work

EMPLOYMENT

Finding a Job

1. Planning To Work
2. Matching Skills and Jobs
3. Applying for Jobs
4. Resumes, Tests and Choices
5. Interviewing

New to the Job

6. Ready for Work
7. Workplace Safety
8. Learning at Work

COMMUNICATION & WRITING

Communication Skills

9. The Language of Work
10. Communicating with Co-Workers and Supervisors
11. Working Together
12. Communicating with Customers

Writing Skills

13. A Process for Writing
14. Supplying Information: Directions, Forms, and Charts
15. Writing Memos and Letters

READING

16. Reading for a Purpose
17. Finding What You Need: Forms and Charts
18. Following Directions
19. Reading Reports, and Manuals

MATH

20. Number Sense
21. Solving Problems
22. Fractions, Decimals, and Percents
23. Measurements and Formulas
24. Trends and Predictions: Graphs and Data

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