



K-12 Career Strand

an additional component to
the Comprehensive Counseling
Program

August 2010

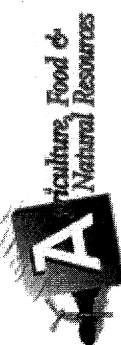
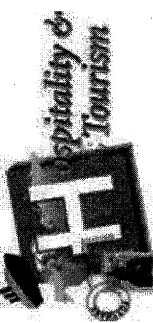



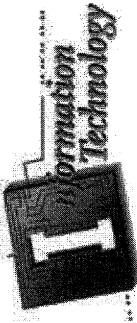





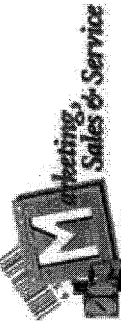
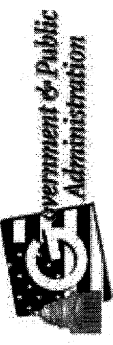
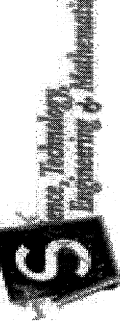
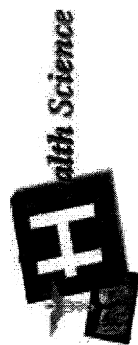



K-12 Career Strand Acknowledgements

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THE 16 CAREER CLUSTERS

Career Cluster	Description	Career Cluster	Description
	The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.		Hospitality & Tourism encompasses the management marketing and operations of restaurants and other food services
	Careers in designing, planning, managing, building and maintaining the built environment.		Preparing individuals for employment in career pathways that relate to families and human needs.
	Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.		Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.
	Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy.		Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.
	Planning, managing and providing education and training services, and related learning support services.		Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.
	Planning, services for financial and investment planning, banking, insurance, and business financial management.		Planning, managing, and performing marketing activities to reach organizational objectives.
	Executing governmental functions to include Governance; National Security; Foreign Service; Planning; Revenue and Taxation; Regulation; and Management and Administration at the local, state, and federal levels.		Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.
	Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.		Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.



The Career Clusters icons and definitions are being used with permission of the States' Career Clusters Initiative, 2008, www.careerclusters.org

Career Development and Education Plan: Grades K-3

Elementary School Career Awareness Program

K-1:		2 nd Grade: Agriculture Food and Natural Resources	3 rd Grade: Transportation, Distribution, and Logistics
Law Enforcement/Public Safety/Security Health Sciences and Education and Training			

RECOMMENDED ELEMENTARY CAREER DEVELOPMENT SCHEDULE

Kindergarten		1st Grade		2nd Grade		3rd Grade	
Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
Suggested Activities:		Suggested Activities:		Suggested Activities:		Suggested Activities:	
Understanding the Role of the Police Officer (WIN, pg. 97-98)	The Little Red Hen (Career Track pg. 43)	My Personal Career Trek Card (Career Track, pg. 173)	February is Career Month Job Shadowing (Individual Counseling Activities, pg. 63)	List of People You Admire (Career Game Booklet)	Things That Make You Proud (Career Game Booklet - Career Track)	What Makes You Special? (Career Game Booklet)	Transportation (My Career Adventure #12)
Dental Hygienist (WIN, pg. 33-34)	Ten Things I Love to Do (Career Track pg. 51)	Career Bingo (Career Track)	Service Learning (Individual Counseling Activities, pg. 62)	Explore Your Bedroom (Career Game Booklet)	Tractor-Trailer Truck Driver (WIN, pg. 73)	What Do You Enjoy? (Career Game Booklet, pg. 4)	Interview a person in transportation, distribution, or logistics
Physical Therapist (WIN, pg. 35-36)	Career Charades (Individual Counseling Activities, pg. 61)	Who Keeps Us Healthy (Career Track, pg. 141-144)	Teacher (WIN, pg. 12-13)	Share Favorite Places (Career Game Booklet)	Automobile Mechanic (WIN, pg. 20)	Make copies of schedules and teach to read – For example: bus or train schedule	
Pharmacist (WIN, pg. 10-11)	Family Career Tree WIN, (Individual Counseling Activities pg. 62)			Cook (WIN, pg. 19)		Plan a trip using a mode of transportation	
	Nursery School Attendant (WIN, pg. 71-72)	Speakers: Nurse, PA, doctor, and/or physical therapist	Speakers: Teachers, Principals, Daycare Providers, UAF Professors, and/or Coaches	Plants/Flowers/Trees/Carrots (My Career Adventure #7, pg. 15)			
Speakers: Police and/or fire		Field trip: Sports Medicine Clinic	Optional: Create a Career Folder		Speakers: Forest Service, Army Corp of Engineers	Field Trip: Airport	Field trip: Train and/or Bus Station
				Optional: Update Career Folder	Field trip: Fish and Game, Fish & Wildlife Service, or Greenhouse	Optional: Update Career Folder	Optional: Update Career Folder

Career Development and Education Plan: Grades 4-6

Elementary School Career Awareness Program

4 th Grade:	5 th Grade:	6 th Grade:
Business Management and Administration Hospitality and Tourism	Information Technology Architecture and Construction	Arts, Video Technology, and Communications Finance

RECOMMENDED ELEMENTARY CAREER DEVELOPMENT SCHEDULE:

4 th Grade		5 th Grade		6 th Grade	
Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
Suggested Activities:		Suggested Activities:		Suggested Activities:	
<p>Your Interests (Career Game Board, pg. 8-12)</p> <p>What is Important to You (Career Game Board)</p> <p>Newspaper Scavenger Hunt (Career Track, pg. 177)</p> <p>Administrative Assistant (WIN, pg. 5-7)</p> <p><i>Optional: Update Career Folder</i></p>	<p>Brainstorm list of jobs related to Fairbanks tourism</p> <p>Interview person in Fairbanks tourism trade</p> <p>Research tourism trade from different state</p>	<p>What's My Line? (Young Person's Occupational Outlook Handbook, #3)</p> <p>Interesting Jobs (Young Person's Occupational Outlook Handbook, #4)</p> <p>Do What You Like (Young Person's Occupational Outlook Handbook, #6)</p> <p>Discuss newspaper articles involving technology</p> <p>Research job in technology and report to class</p> <p><i>Optional: Update Career Folder</i></p>	<p>A Job That Fits Your Personality (Young Person's Occupational Outlook Handbook, #7)</p> <p>Help Wanted (Young Person's Occupational Outlook Handbook, #13)</p> <p>Job Interviews (Young Person's Occupational Outlook Handbook, #14)</p> <p>Brainstorm list of construction jobs</p> <p>Research construction job on internet, share with class</p> <p>Introduce AKCIS JR "Who Am I?"</p> <p>Speaker: Union representative</p> <p><i>Optional: Update Career Folder</i></p>	<p>Career lesson on current economic times and traditional and nontraditional careers</p> <p>Create portfolio (AKCIS JR)</p> <p>Learning About Me (AKCIS JR)</p> <p>Research communication jobs</p> <p>Interview TV or radio anchor</p> <p>Field trip: TV/Radio Station, Advertising Company</p> <p><i>Optional: Update Career Folder</i></p>	<p>WIN Benchmark - OPTIONAL</p> <p>Learning About My Community (AKCIS JR)</p> <p>Explore volunteer jobs in community</p> <p>Mock interview</p> <p>Introduce stock market, Stock Market Game</p> <p>Discuss educational levels and advantages</p> <p>Speakers: Financial advisor, stock broker, president of bank, realtor</p> <p><i>Optional: Update Career Folder</i></p>

Career Development and Education Plan: Grades 7-8

Middle School Career Awareness Program

The middle school counselors will work closely with parents and the high school counselors to help in the transition to high school.

RESOURCES: AKCIS JR & AKCIS (Alaska Career Information Center) and WIN (Alaska Career Ready)

RECOMMENDED MIDDLE SCHOOL CAREER DEVELOPMENT SCHEDULE:

7 th Grade			8 th Grade	
Semester 1	Semester 2		Semester 1	Semester 2
<p>Update or create portfolio in AKCIS JR</p> <p>Who Am I? AKCIS JR activities:</p> <p>My Accomplishments</p> <p>Important Life Events</p> <p>My Network</p> <p>Qualities for Success</p> <p>What are Skills?</p> <p>Things I Like to Do</p> <p>Career Cluster Inventory</p>	<p>Where Am I Going? AKCIS JR Activities:</p> <p>Bobilator</p> <p>Scavenger Hunt</p> <p>If I Became...</p> <p>Cluster Mobile</p> <p>My Favorite Cluster</p> <p>What's My Cluster?</p> <p>Cluster Posters</p> <p>How Do I Make Decisions?</p> <p>Career Action Plan</p> <p>Learn a new Skill</p> <p>Make a Change</p> <p>What are Work Conditions?</p> <p>What Rewards do I want from work?</p> <p>Why Do People Work?</p>		<p>Update or create portfolio in AKCIS</p> <p>How Do I Get There? AKCIS JR Activities:</p> <p>Working Together</p> <p>Being Dependable</p> <p>Are You Listening?</p> <p>Listening Skills on the Job</p> <p>Planning Time for Success</p> <p>Job Success Scale</p> <p>Free Job Training</p> <p>Getting Fired</p>	<p>WIN Benchmark - OPTIONAL</p> <p>How Do I Get There? AKCIS JR Activities:</p> <p>Class Performance Review</p> <p>Reality Check</p> <p>Create High School Plan - Developed with high school counselors and parents in AKCIS, becomes part of portfolio.</p>
			<div>Complete Personal Learning & Career Plan (PLCP)</div>	

Career Development and Education Plan: Grades 9-12 Career Development and Education Plan Portfolio

Secondary Career Development Program

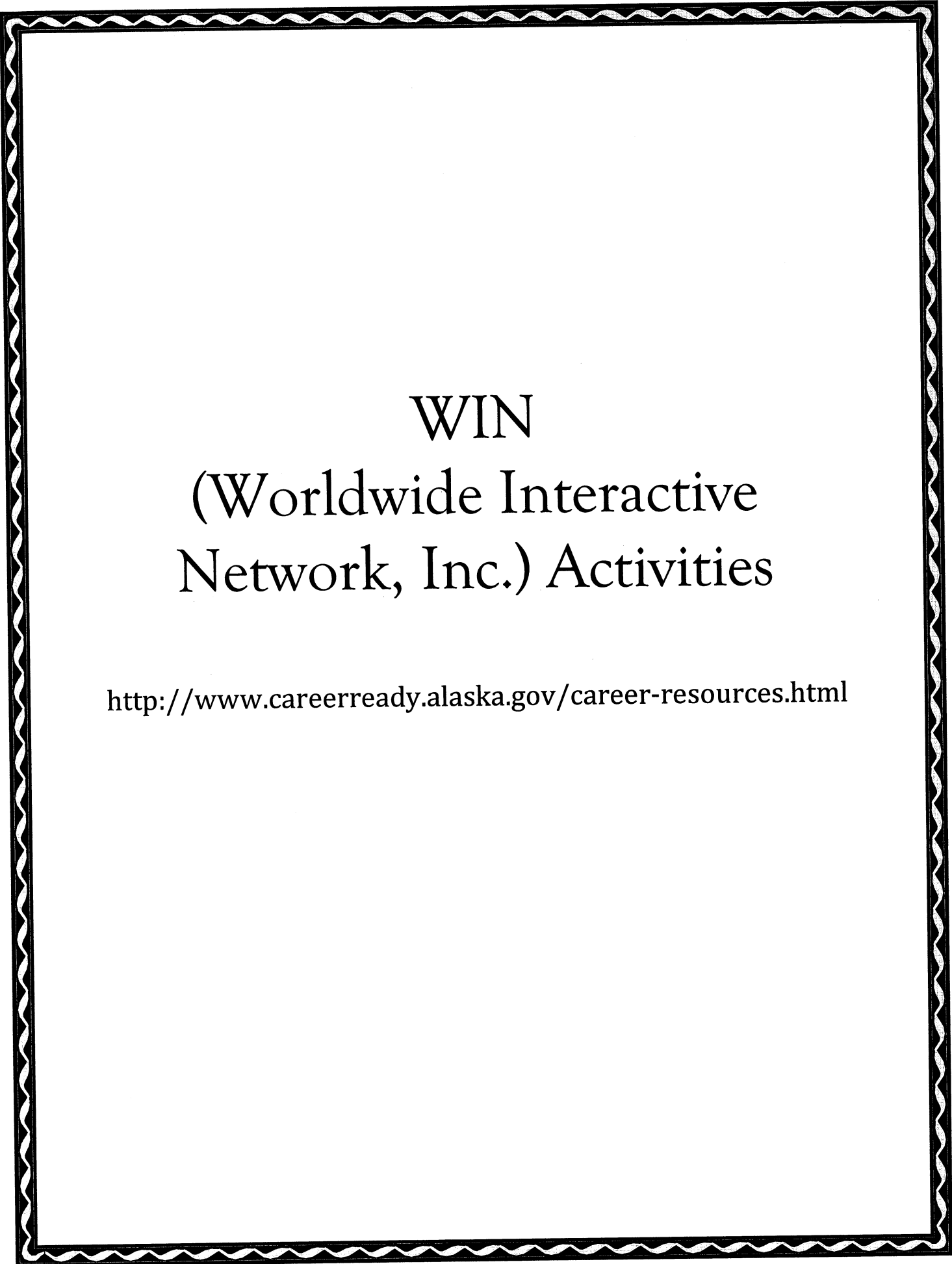
Each grade level will have Parent Planning Events that will share each step of career planning process AKCIS & TERC

Resources: AKCIS (AK Career and Information Center), TERC (Testing and Education Reference Center), and AKSCA (AK School Counselors Association)

RECOMMENDED SECONDARY CAREER DEVELOPMENT SCHEDULE: Total Components

9 th Grade		10 th Grade		11 th Grade		12 th Grade	
Semester 1	Semester 2	Semester 1	Semester 2	WorkKeys Testing	Semester 2	Semester 1	Semester 2
Create or update AKCIS Portfolio	Where in the World am I Going? - AKCIS	Create or update AKCIS Portfolio	Practice WorkKeys-TERC	Create or update AKCIS Portfolio including education and work history	Education plan Gr 12-14 -AKCIS	Create or Update AKCIS Portfolio including education and work history	College Essay- AKCIS
High School Course Plan- AKCIS	Cluster Exploration- AKCIS	Update Accomplishments- AKCIS	Comparing Occupations- AKCIS	Portfolio including education and work history	Comparing Schools- AKCIS	Reality Check – AKCIS	Scholarship Essay- AKCIS
Interest Profiler- AKCIS	Getting Involved With School and Community- AKCIS	IDEAS Assessment- AKCIS	Analyze, Prioritize, Decide- AKCIS	Undergraduate school search or Occupation search	Scholarship search- TERC	Resume’ – AKCIS	Awards Analyzer- TERC
Input Current Classes- AKCIS	Update Reflections- AKCIS	My High School Course Plan with activities- AKCIS	Update Reflections- AKCIS	Optional: Begin personal/college essay - AKCIS	Reality Check- AKCIS	Optional: Financial Aid Sort	Complete school and scholarship applications
SKILLS – create a list of occupations based on preferred skills	Guest Speakers	Optional: Reality Check - AKCIS	Relating My Education to My Goals- AKCIS	IDEAS - AKCIS			
	Thinking and Learning Style Preference Survey- AKSCA	Work Importance - AKCIS		Getting a Job/Keeping a Job – AKCIS			
				Financial Aid Sort - AKCIS			
Review Personal Learning Plan (PLCP) developed in 8 th grade		Review Personal Learning Plan (PLCP)		Review Personal Learning Plan (PLCP)			Review Personal Learning Plan (PLCP)
		PLAN test	HSGQE	PSAT ASVAB	1 st SAT/ACT	2 nd SAT/ACT	
High School Course Plan		Service learning (Community Service)		Education Plan, Resume, and Personal Essay		Deadline calendar, school and scholarship applications	

Work-Based Learning Opportunities	Career-Technical Student Organizations	Certifications
<ul style="list-style-type: none"> Career-Related Learning Experiences (CRLEs) Job Experience Community Service Summer Internship 	<ul style="list-style-type: none"> CTSO membership 	<ul style="list-style-type: none"> Entry level certifications



WIN (Worldwide Interactive Network, Inc.) Activities

<http://www.careerready.alaska.gov/career-resources.html>



Kindergarten

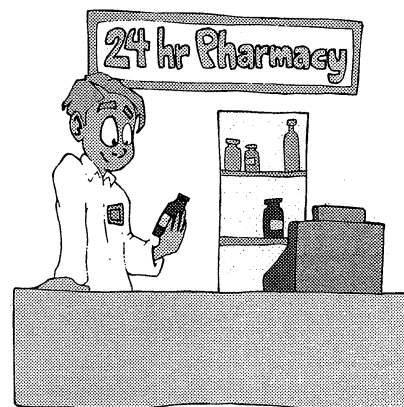
JOB TITLE: Pharmacist
OBJECTIVES: To recognize basic sets
To count and sort

MATERIALS:

Activity sheets, crayons (red, blue, green, and yellow), and scissors

PREPARATION:

Copy and cut picture cards of pills for each student to have one set of the four different pills.



INTRODUCTION:

Explain that a pharmacist is a person in charge of medicine. A pharmacist must be able to identify pills. It is also important for the pharmacist to put the right number of pills in each bottle.

ACTIVITY:

Give each student a set of the 4 different pills. Have the students color each pill a different color. Then students should cut out each pill before continuing the activity.

Tell students, that as pharmacists, they must sort the pills by color, size, and shape. Begin by letting one student stand and show others one of the colored pills. The student must tell if the pill is large or small, round or oval, and the color. Students who have the same size, shape, and color should raise their hands. Ask one student to collect all pills that match the one that was described.

Repeat the process until all of the cards have been collected. (At most, 16 types of pills may be collected.) Tell students that they have made "sets" of pills. Allow student to count the number of pills in each set.



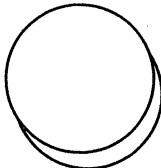
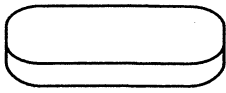

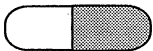
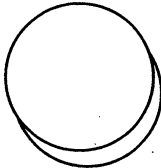
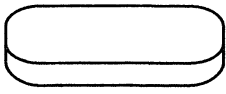


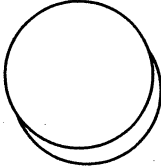
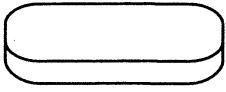


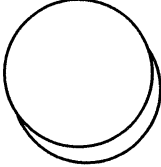
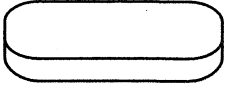


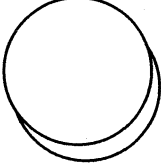
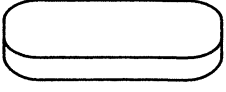


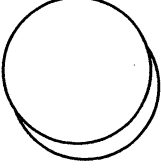
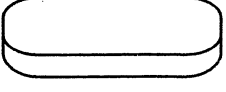


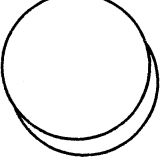
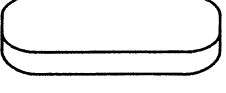
DISCUSSION POINTS:

What might happen if the pharmacist put the wrong pill in a bottle?

Pharmacist	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	6	-	-	5	6	6	4	-

ACTIVITY SHEET

DIRECTIONS: *Cut along dotted lines and follow your teacher's directions.*

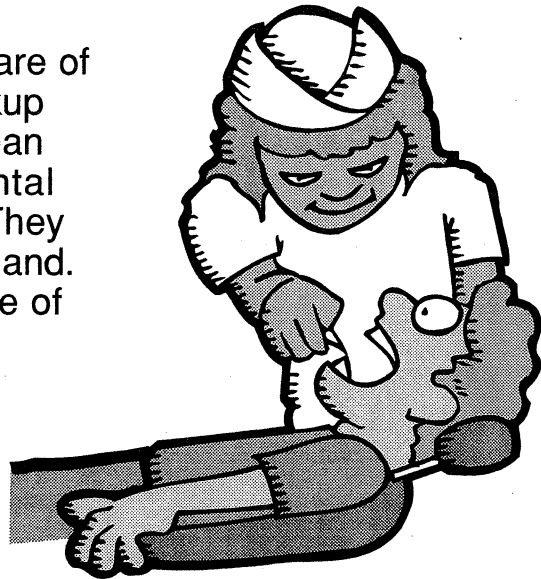
			
			
			
			
			
			
			

JOB TITLE: Dental Hygienist

OBJECTIVE: To listen to and analyze information

INTRODUCTION:

Dental hygienists help us to take good care of our teeth. You should have a dental checkup every six months to a year. Hygienists clean our teeth and check for cavities. Dental hygienists are assistants for dentists. They help when the dentist needs an extra hand. They often tell the dentist if you take care of your teeth.



ACTIVITY:

Tell students that you are going to pretend to be the dental hygienist. Explain to them that you will read advice on how to have healthy teeth. Students are to listen closely. After reading the information, hand out activity sheets. Tell students to put an X on the items that are not good for your teeth. Put a smiley face on the items that will help keep teeth healthy. Review responses when students complete activity.

ADVICE: *(Read prior to activity sheet distribution.)*

It is important to take very good care of your teeth. You should brush teeth for at least three minutes two times a day, once in the morning and once before bedtime. Some people take extra good care of their teeth and brush after every meal! It is also important to floss your teeth once a day to help keep your gums nice and healthy. Staying away from eating a lot of bad foods like chocolate, candy, and gum that isn't sugar-free can help keep you from getting cavities. Most of all...don't forget to visit the dentist and me at least once a year for your checkup. Taking good care of your teeth is easy to do and will give you strong, healthy teeth, as you grow older. There's nothing better than a smile that shows off those beautiful white teeth!

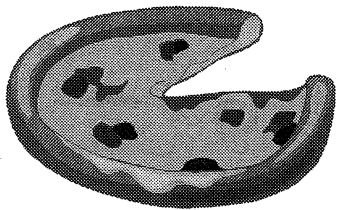
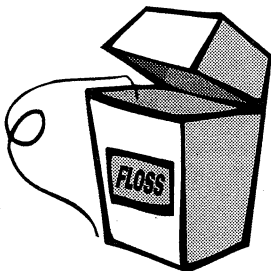
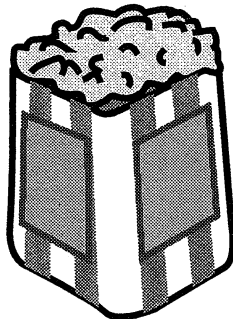
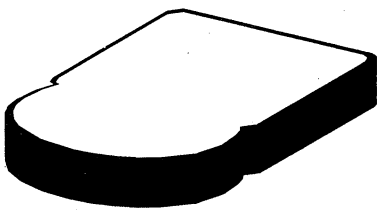
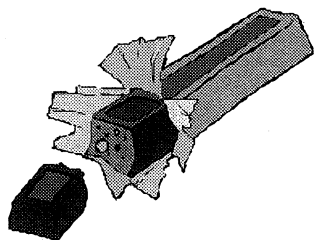
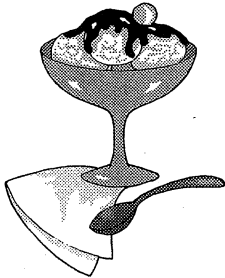
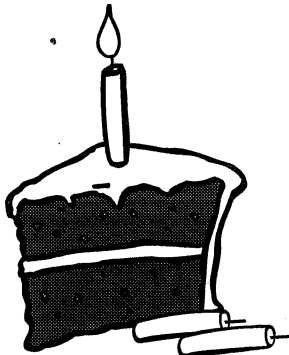
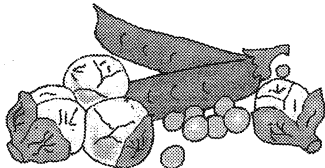
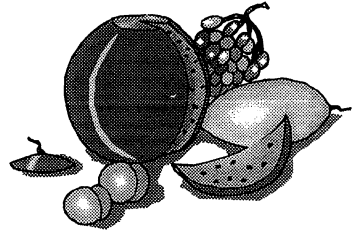

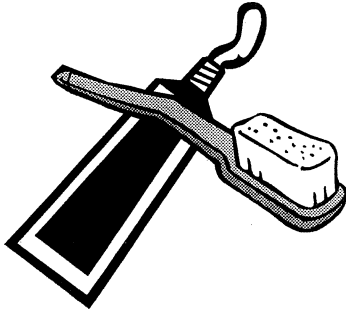
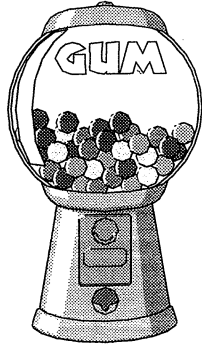
DISCUSSION POINT:

Why would a hygienist need to be a good listener?

Dental Hygienist	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	3	3	3	4	5	5	3	3

ACTIVITY SHEET

DIRECTIONS: Put an X on the items that are not good for your teeth.

JOB TITLE: Physical Therapist

OBJECTIVE: To listen to information and follow directions

INTRODUCTION:

A therapist's job is to help people. There are different kinds of therapists. A physical therapist helps people after they are hurt.

ACTIVITY:

Listen as I tell you about some people who need therapy. Follow the instructions as you listen, using your activity sheet.



Joey hurt a muscle in his arm. The therapist helps to exercise the muscle. Then she puts Joey's arm in a sling to keep him from using his arm. Put a circle around the sling.

Jack was in an accident. Jack uses a wheelchair until his leg is well enough to walk on again. The therapist bends Jack's leg to exercise it. Put a line under Jack's wheelchair.

Mr. James had an operation on his arm. It is better now, but he is weak. The therapist helps Mr. James use weights to build his strength. Draw a circle around the weights.

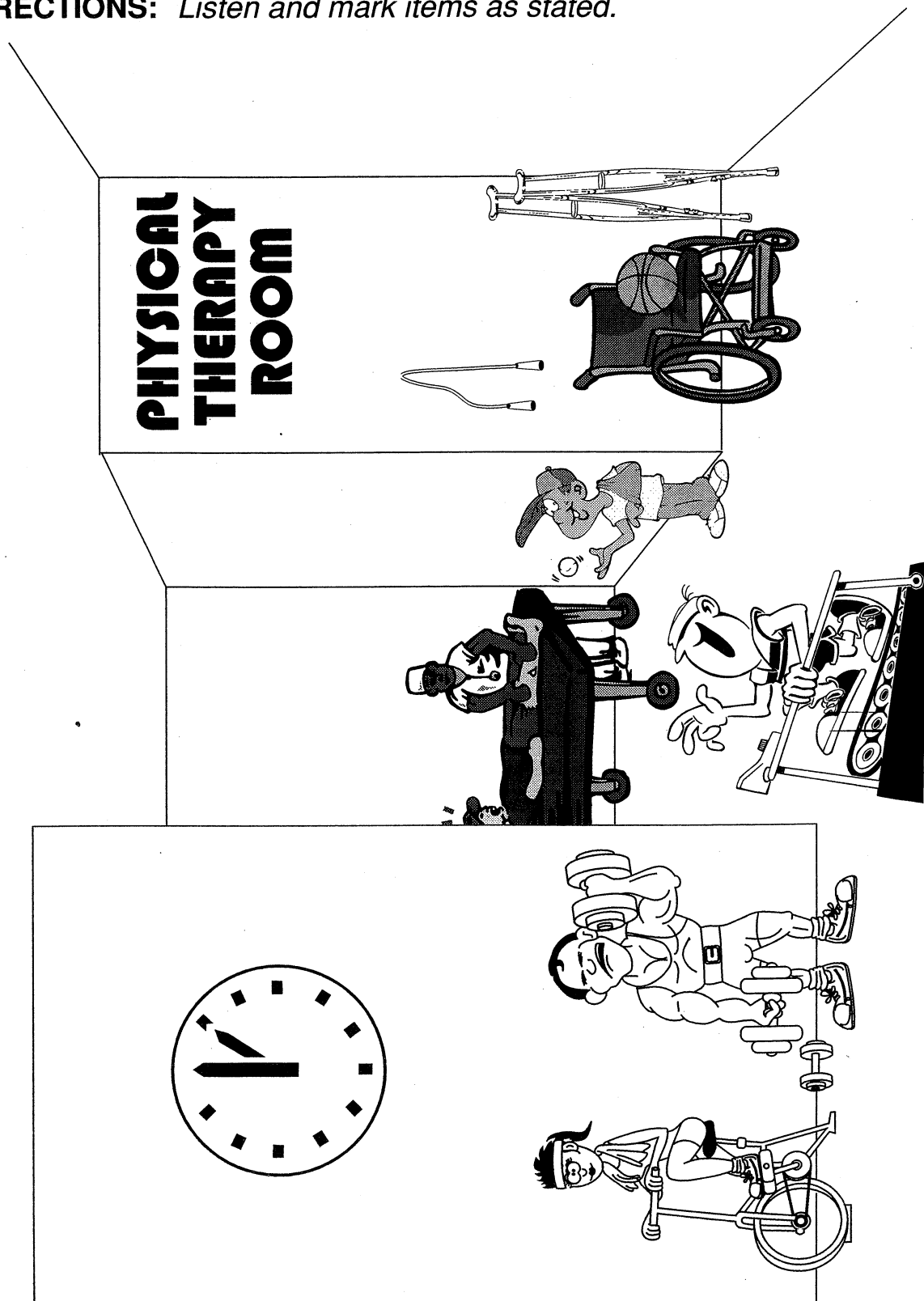
DISCUSSION POINTS:

What other ways can therapists help patients? What other jobs help people?

Physical Therapist	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	4	3	5	5	6	6	5	5

ACTIVITY SHEET

DIRECTIONS: *Listen and mark items as stated.*



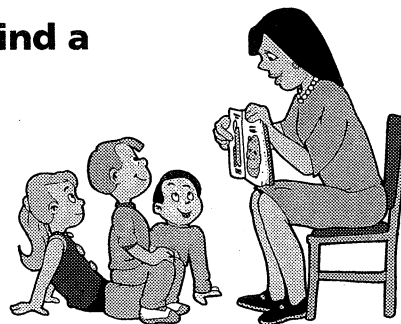
JOB TITLE: Nursery School Attendant
OBJECTIVE: To use a consonant sound to find a name

MATERIALS:

Activity sheets and crayons (red, green, and blue)

INTRODUCTION:

Nursery schools provide places of learning for children ages three through five. What are some activities that nursery schools have?



Just as there are many activities for children, the person who has the job called nursery school attendant has many tasks to do. He or she greets the children when they arrive.

ACTIVITY:

At Kite Strings Preschool, Mary, who is the attendant, puts name tags on arriving children. Three-year-olds have red tags, the four-year-olds have blue ones, and the five-year-olds have green tags.

Color a tag by the name of each child. Listen for the beginning sound of each child's name. Find the name that begins with that letter sound. For example, when Felicity comes in, I will tell you to color her tag blue. Find the name Felicity. Hear the "F" sound?

Remember that you will have to listen carefully to the sound of the first letter of the name. Then find the name that has that sound at the beginning.

Felicity	She is 4 years old.	Color her tag blue.
Susan	She is 5 years old.	Color her tag green.
Mark	He is 3 years old.	Color his tag red.
Connie	She is 3 years old.	Color her tag red.
Kyle	He is 4 years old.	Color his tag blue.
Landon	He is 5 years old.	Color his tag green.
Heather	She is 5 years old.	Color her tag green.
Wayne	He is 3 years old.	Color his tag red.
Adam	He is 5 years old.	Color his tag green.
David	He is 4 years old.	Color his tag blue.

DISCUSSION POINT:

Why do the teachers and helpers at a nursery school or a day care center need to know all of the children's names?

Nursery School Attendant	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	3	3	3	3	5	4	4	4

ACTIVITY SHEET

DIRECTIONS: Find the name and color the tag.

Felicity



Kyle



David



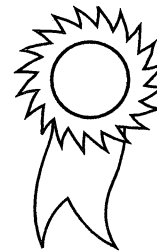
Adam



Susan



Landon



Connie



Wayne

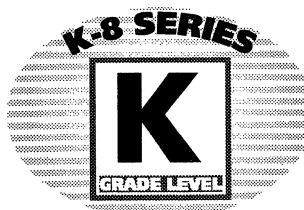


Heather



Mark





WIN Instruction Solution

Skill	WRITING
Job Family	Social Service



JOB TITLE: Police Officer I
OBJECTIVES: To write numbers
 To predict outcomes

INTRODUCTION:

Police officers have different jobs. They need to be prepared for whatever happens while they are working. An officer on a patrol has a certain area to work in while on duty. He or she may have a car and a partner. Officers may walk, ride a bicycle, or even ride a horse to get around the beat. The beat is the area (it could be a neighborhood) that is assigned to the officer. This becomes a familiar place where an officer must carefully observe what is going on. What kinds of things do you think a police officer would find out of order and therefore need to write a report? What would the officer do? (Discuss.)



ACTIVITY:

Here is a situation in which a police officer, Lisa Kite, had to take action. A person called in a report of a small child walking on the side of a busy street. The child was alone. It was 7 p.m. and getting dark. Officer Kite was driving her police cruiser that evening and when she received the call on her radio, she answered that she was two blocks away. She arrived on the scene in one minute and found the small child, who looked to be about four years old. What do you think Officer Kite did? What kinds of things would she need to write down?

Ask students to play the role of the police officer as she talks with the child. Each officer has a form to fill out like the one on the activity sheet. It records information such as name, age, phone number, and the date.

Write the child's information on the board. Students should write the numbers on their police report forms.

Name: Mark Lee **Age:** 4 **Phone:** 555-5124 **Date:** 9/28/00

DISCUSSION POINTS:

Talk about how the incident might end. Why must the officer write a report? What other information with numbers would a police officer request? (address, height and weight of a missing person, etc.)

Police Officer I	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	4	4	4	4	5	5	4	4



WIN Instruction Solution

Skill	WRITING
Job Family	Social Service



ACTIVITY SHEET

DIRECTIONS: Write information on the police form.



Name: _____

Age: _____

Phone:  _____

Date:  _____



1st Grade



WIN Instruction Solution

Skill	APPLIED MATHEMATICS
Job Family	Social Service



JOB TITLE: Teacher

OBJECTIVE: To identify and model halves, fourths, and wholes

INTRODUCTION:

A teacher's job is to help students learn. Teachers tell students information. Some teachers show students how things work. Students who take part actively in a teacher's lesson usually learn more than those who do not.

ACTIVITY:

A class of students is shown on the worksheet. Count the number of students in the class.

Twenty-four students make up the whole class. Fractions show parts of a whole. One half of the students in the class own dogs. Fold your sheet so that the class is shown in two equal parts. Each part shows one-half of the class. How many students own dogs?

There are 12 students in one half of the class. (Write on the board: $\frac{1}{2}$ of 24 equals 12)

We divided the class into two equal parts to find one half. Did you notice that there is the same number of students who own dogs as there are students who do not? When you see $\frac{1}{2}$, you should remember that two halves make a whole.

If we put the students from each half of the class together again, we have a whole class. Open the folded sheet. You can see that two halves equal one whole.

One fourth of the class takes piano lessons. Let's divide the class into four equal parts to find fourths. Fold the sheet in half like we did before. Then fold it in half again. (Show students how to fold the sheet creating one-fourth.) This makes four equal parts. How many students are in one-fourth of the class? Count the number of students showing on the folded sheet.

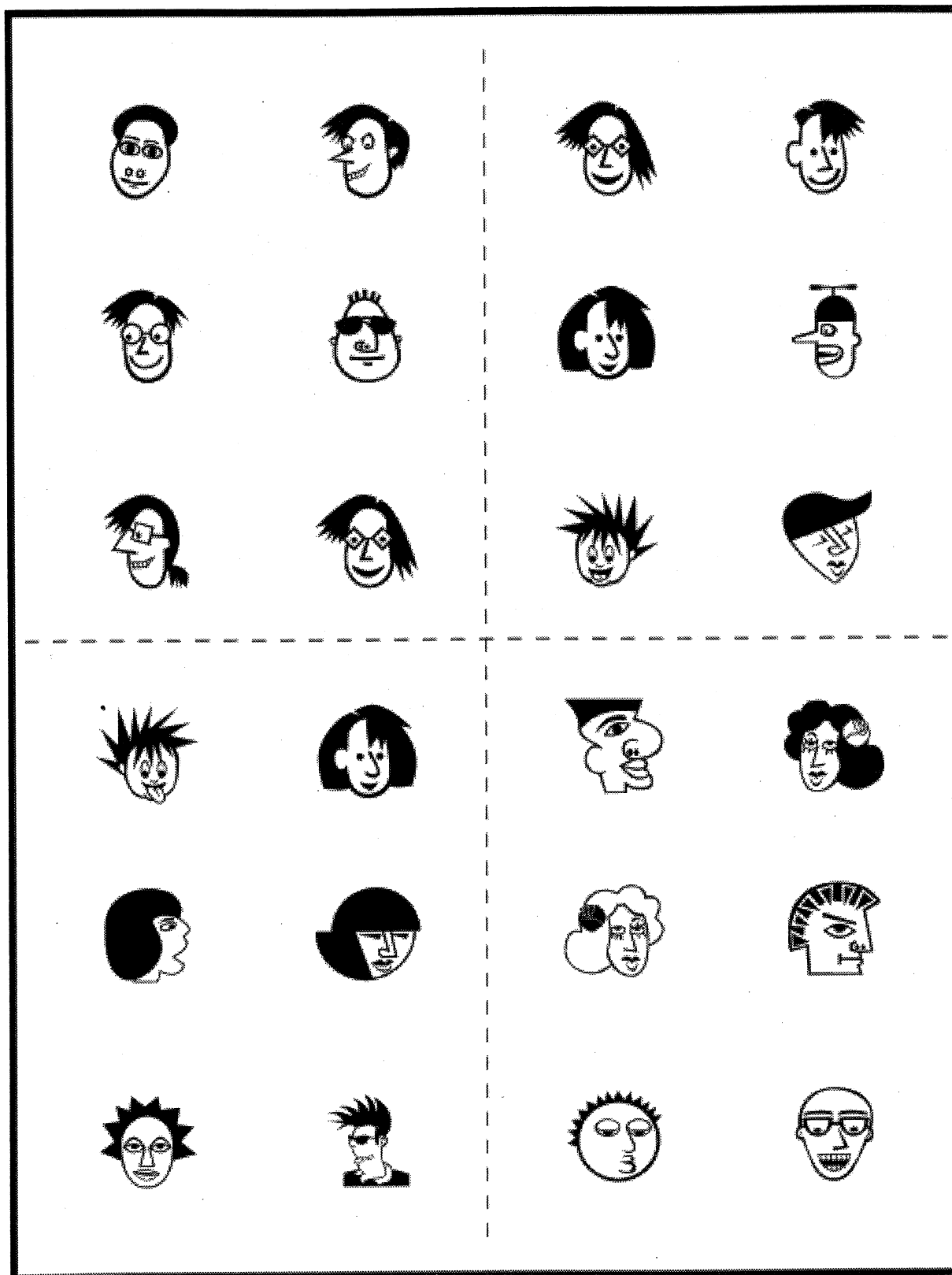
(Write on board: $\frac{1}{4}$ of 24 equals 6) – Fractions are simply parts of a whole.

DISCUSSION POINT:

Can we make fractions using our class? (Include yourself in the class only if necessary to make an even number of class members.) Use different criteria to write fractions. For example, how many boys are in the class? Write this as a fraction.

Teacher	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	5	6	3	5	4	5	6	4

ACTIVITY SHEET





2nd Grade



WIN Instruction Solution

Skill	APPLIED TECHNOLOGY
Job Family	Business Contact



JOB TITLE: Cook

OBJECTIVE: To discover how matter changes from one state to another

MATERIALS:

2 Tablespoons of whipping cream for each group, salt, small containers such as baby food jars with lids, crackers, and plastic spoons

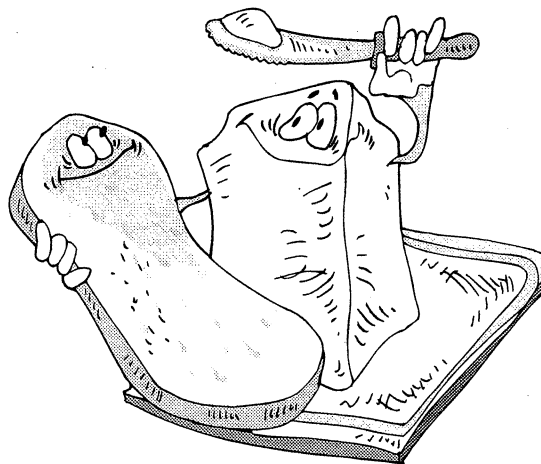
INTRODUCTION:

A cook gets paid for preparing food. Sometimes cooks make their own ingredients instead of purchasing them.

ACTIVITY:

Begin by pouring the whipping cream into the small containers. Place the lid on the container tightly. Allow the cream to reach room temperature. While waiting, you might discuss that the cream is a liquid.

Ask students to take turns shaking their containers for about 2-5 minutes until butter forms. (Smaller amounts of cream take less time than larger amounts.) Show the students that this is now a solid. Add salt and spread on crackers. Enjoy the snack!!!!



DISCUSSION POINTS:

Does this taste as good as the butter or margarine at your house? What other foods change from a liquid to a solid? What solids change to liquids? What are some other things that can be purchased in a store but can also be made at home?

WARNING: Be sure that students are not allergic to dairy products.

Cook	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	4	4	3	4	4	4	4	3

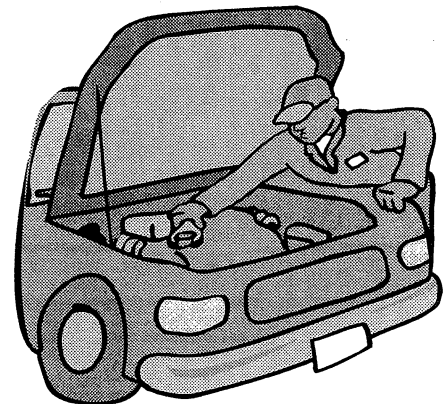
JOB TITLE: Automobile Mechanic
OBJECTIVE: To discover fluid power

MATERIALS:

Small cups or glasses, water, straws

INTRODUCTION:

A mechanic fixes cars. They must know how all of the parts work. This helps them know how to make them run properly.



Most car brakes use fluid power to work. Fluid is used to create pressure. It is the power from that pressure that stops a car. This brake system is called a hydraulic system.

ACTIVITY:

Give each student a cup filled with water and a straw.

Have each student blow gently (GENTLY!) into the water using the straw to see how easy it is for the air to pass and make some bubbles in the water. Then, have each student lightly pinch the straw to nearly closed and blow gently again on the straw. Comment on how difficult it can be for air to pass through the straw when something is blocking it?

Explain that fluid will behave in much the same way as the air in the straw, and that mechanics always must be aware of problems that could be caused from something pinching or blocking a line that carries fluid or air.

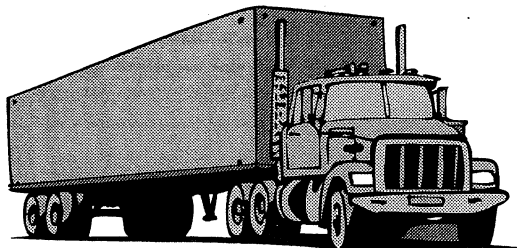
DISCUSSION POINT:

In what ways, other than brakes, is fluid power used?

Automobile Mechanic	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	5	6	4	5	5	5	4	3

JOB TITLE: Tractor-trailer Truck Driver

OBJECTIVE: To make predictions based on conditions



INTRODUCTION:

A tractor-trailer truck driver may drive in a local area, or he may drive long distances. Most of his or her time is spent behind the wheel. If there are two drivers, one driver may decide to sleep on long trips. They stop

for food, fuel, and to load and unload. The driver may help load and unload. Some trucks carry cars. The driver drives cars on and off the ramp on the truck.

A truck driver must file a report after each shift. The report gives details about trips. It tells the number of miles driven, how many hours the trip took, and how much fuel was used. The report also tells the condition of the truck and gives details about any accidents.

Driving safely is very important. Truck drivers must be alert. They must take time to rest. A careful driver takes a break before feeling sleepy. Part of safe driving is seeing hazards. These are some things that a driver looks out for:

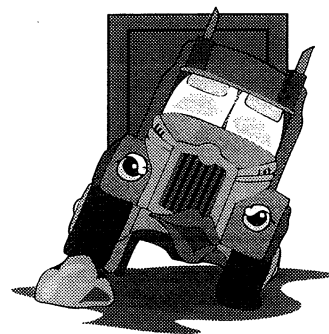
- work zones
- things in the road
- drivers using phones
- icy roads
- slow drivers
- narrow roads
- children
- accidents
- fast drivers
- reckless drivers

ACTIVITY:

Select three or four of the hazards in the list. Discuss with the class the importance of awareness of conditions.

DISCUSSION POINTS:

What are some skills that a truck driver needs to have?
What things would a truck driver need to read?



Tractor-trailer Truck Driver	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	4	4	4	4	x	5	4	3



4th Grade

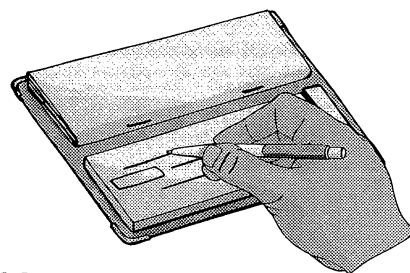


JOB TITLE: Administrative Assistant

OBJECTIVE: To use a calculator to solve operations with money

INTRODUCTION:

Administrative assistants are often the brains behind a business. They have to do a lot of the day-to-day operations that it takes to run a business. Sometimes they do the work of a secretary. They might be responsible for the business budget or some other type of financial operation. Communications is also an important part of any business, and the administrative assistant sometimes helps in this area as well.



ACTIVITY:

Students will use a calculator to determine the balance in a business' bank account after making deposits and paying bills. Give each student a copy of Activity Sheets 1 and 2. Read aloud the information on Activity Sheet 1 and help students understand these basic principles for maintaining checking account records.

Next, assist the class in understanding and completing the exercise on Activity Sheet 2.



DISCUSSION POINTS:

In what other ways would an administrative assistant use math besides balancing a checking account?

Answers:

BUSINESS BANK ACCOUNT			
DESCRIPTION	DEBIT (-)	CREDIT +	BALANCE
1. My current account balance			\$1,500.00
2. Valley Electrical Company	(\$ 89.95)		1,410.05
3. EdWIN	(\$900.00)		510.05
4. Deposit		500.00	1010.05
5. Valley Free Press	(\$35.00)		975.05
6. Office Supplies	(24.63)		950.42

Administrative Assistant	Applied Mathematics	Applied Technology	Listening	Locating Information	Observation	Reading for Information	Teamwork	Writing
	5	3	4	4	4	5	4	5



WIN Instruction Solution

Skill	APPLIED MATHEMATICS
Job Family	Business Contact



ACTIVITY SHEET 1

Read and discuss before completing the exercise that follows:

You must learn to keep accurate records of your bank account so that you will know how much money you have in your account at all times. Always enter your daily transactions into an account register (see example on Activity Sheet 2). Your account register, also known as your transaction record, is generally kept inside of your checkbook.

Your account balance (checkbook balance) is the actual amount of cash you have in the bank. A transaction record (see Activity Sheet 2) must be maintained in order to know exactly how much money you have left after you put money into the bank or take money out of the bank. A transaction can be a deposit, a withdrawal, or a payment made to someone whom you owe money to by writing them a check.



A deposit (also a credit) is money you put into the bank and should be added to your balance. This increases the amount of money you have in your account. A withdrawal or payment (also a debit) is money taken out of the bank and should be subtracted from your balance. This type of transaction decreases the amount of money you have in your bank account.

DIRECTIONS FOR ACTIVITY SHEET 2:

Use a calculator to find the balance in your checking account at the bank. Enter the transactions listed on the following page into the transaction record shown at the bottom of the page.

Enter the description of the transaction in the first column. Next, enter the amount of the transaction (deposit, withdrawal, or payment) beside the transaction description in the correct column labeled debit or credit. Now, add or subtract the transaction amount from the balance (shown in the right hand column) on the previous line. Write your new balance in the far-right hand column beside the amount of your transaction. GREAT! Now you have completed a transaction. Remember, your balance is the amount of cash you have left in your account after each transaction. It's very important to keep up-to-date records! So remember, as soon as you take money out of the bank or put money into the bank, be sure to list it in your transaction record! GOOD LUCK!



WIN Instruction Solution

Skill	APPLIED MATHEMATICS
Job Family	Business Contact



ACTIVITY SHEET 2

DIRECTIONS: Enter the following transactions in the checkbook register below.

1 - You have \$1,500.00 in the bank. Notice that your balance has already been recorded in your transaction record below.

2 - You owe Valley Electrical Co. \$89.95 for your electricity bill. You wrote them a check to pay the bill and recorded it correctly in the register below. Notice the parentheses around the transaction amount in the debit column. This means it was subtracted from your balance.

3 - It's time to pay your employee for last month's work. EdWIN earned \$900.00. Record this payment into your register.

4 - You received \$500.00 for merchandise you sold today. Deposit this money into your account.

5 - You get the daily newspaper on your doorstep every morning. It's time to pay Valley Free Press for their delivery services. The amount you owe is \$35.00. Enter this amount into your register.

6 - You purchased supplies for your office in the amount of \$24.63. Record the amount in your transaction record.

How much money do you have in your bank account? _____

TRANSACTION RECORD

BUSINESS BANK ACCOUNT			
DESCRIPTION	DEBIT (-)	CREDIT +	BALANCE
1. <i>My current account balance</i>			\$1,500.00
2. Valley Electrical Company	(\$ 89.95)		1,410.05
3.			
4.			
5.			
6.			



Individual Counseling Activities for Children (Grades K-6)

by Robert P. Bowman, Ph.D. & Susan C. Bowman, Ed.S., L.P.C.

ISBN: 978-1-889636-12-2

LESSON 11:

“My Future Career”

Your career may seem like a long way off in the future. But, now is the time to begin thinking about different careers that are interesting to you.

There are many different kinds of jobs that you could do when you grow up. Some of these jobs involve working with a team of people. Other jobs involve working with machines and equipment. Some jobs include working outdoors. Other jobs take place in an office. Some jobs involve taking care of animals or people. Other jobs involve showing your art, music, or sports talents. There are many, many kinds of jobs to choose from.

Activity 76: Career Charades

Grades K-5

Materials: 10-20 index cards

Write the name of a different career on each of 10-20 index cards. Then place these cards in a bag or box and shake them up. Next, you and the child should each take a turn picking out a card and acting out the career while the other tries to guess what it is. Afterwards, take some time to discuss the child's understanding of and feelings toward the career.

Activity 77: Service Learning

Grades K-5

Materials: None

Find a service learning project in your community which you and the child can complete together. Service learning involves students in field projects that attempt to meet some community need. Examples of service learning projects include:

- Adopting a grandparent at a nursing home.
- Planting a tree, bush, or flower.
- Helping to keep an area of a park clean.
- Making a gift to send to a needy person in your community.
- Putting together a "care package" for a child from another country.
- Adopting a friend at a local children's home.
- Volunteering to care for animals at a local wildlife shelter.

When working together on a service learning project, help the child explore how the experience is good preparation for working in a career. For example, it may help him/her to learn how to be more generous, dependable, hard working, persistent, and/or committed.

Activity 78: Family Career Tree

Grades K-5

Materials: Large sheet of drawing paper or poster board, index cards, crayons or magic markers, tape or paste.

Have the child draw and/or write about the careers of different family members. If possible ask the child to interview family members and describe each on an index card. Other cards could be completed on ancestors.

Then, ask the child to draw a tree on a large sheet of drawing paper or poster board. Then, tape or paste each index card onto the tree. The child may create his/her tree following a "Family Tree" format. Or, your child could merely draw a tree and place the cards randomly in the branches.

Activity 79: Job Shadowing

Grades K-5

Materials: None

If possible, arrange with a parent or relative for the child to visit him/her in their work setting. Allow him/her to observe that person at work and become involved in a job related task, if this is possible and appropriate. In addition, you might arrange for the child to shadow workers in other careers. Or, you might work out a time for the child to meet and shadow a high school student who is currently taking classes in a vocational program.

Activity 80: Career Field Trips

Grades K-5

Materials: None

Arrange field trips for the child to visit different career settings where he/she can observe people at work. For example, visit a hospital, factory, farm, police or fire department, local government office, department store, airport, or construction project.

Activity 81: Tools of the Trade

Grades K-5

Materials: Drawing paper (4-10 sheets), crayons or magic markers

Ask the child to make a booklet filled with drawings of tools used in different careers. Each page will display the name of the career and the tools used. As an option, help the child collect some real tools and make a display for other children to learn about the careers.