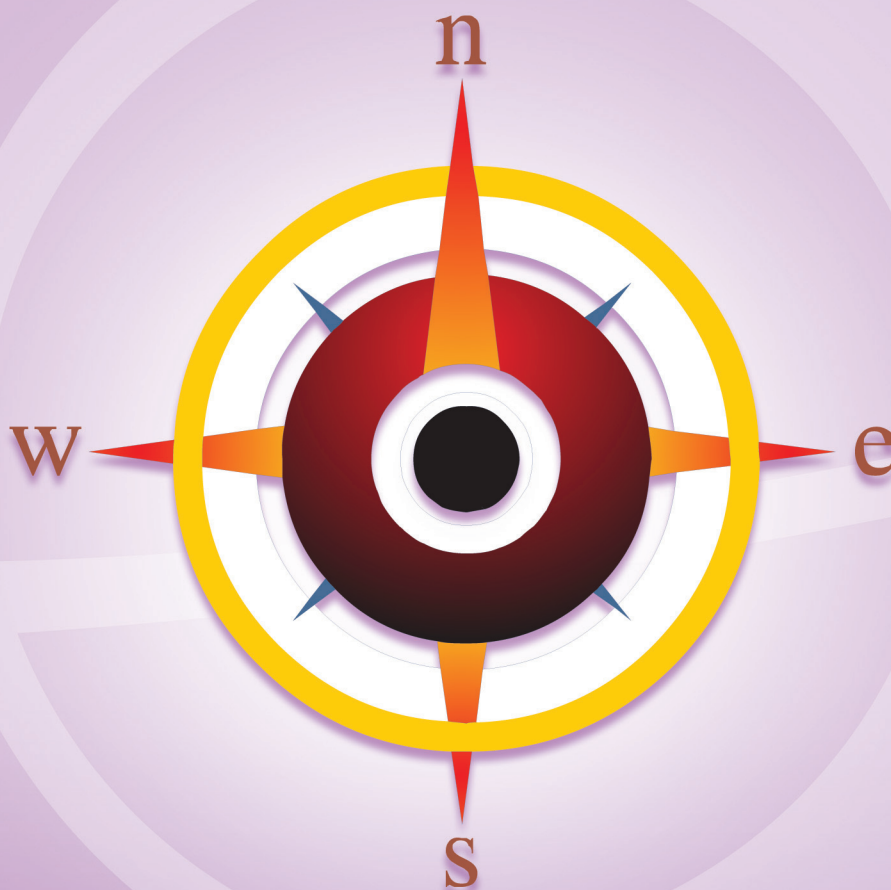


WIN CAREER READINESS COURSEWARE

Skill building for tomorrow's workforce... today!



Locating Information *Level 4*



WIN
W-WIN.COM

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1000 Waterford Place, Kingston, TN 37763 • 888.717.9461
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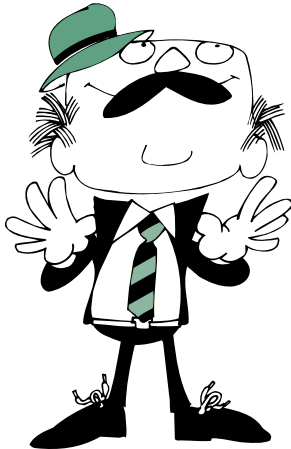
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www.w-win.com



INTRODUCTION

Hi, I'm EdWIN



HI!! My name is EdWIN... I will be your guide through this course study. I met some of you in *Locating Information* Level 3. As before, look for me to pop up throughout your lessons to give you a helpful tip, suggestion, reminder, or a pop quiz question as we go along. Be sure to check your answers which are located at the end of the course. Now, before you newcomers go screaming from the room at the thought of a long, boring study course, let me assure you that together we can accomplish the objectives of this course without too much pain and suffering!! When we are finished, you will be able to confidently apply what you have learned here to your everyday workplace. Really, I promise!!

Some of this material is review from Level 3, so you might move through it very quickly. But take time to do all of the exercises. Practicing to locate information is why you are taking this course.

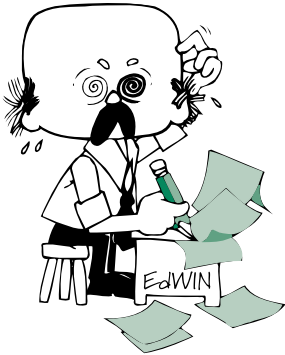
So, without further ado, let's begin... Are you ready? OK, turn the page.



- LESSON 1 Developing an Appreciation of Graphics
- LESSON 2 What Are Graphics and What Can They Do?
- LESSON 3 Identifying Basic Formats of Graphics and Their Primary Purpose
- LESSON 4 Extracting Data and Explaining the Significance
- LESSON 5 Summarizing Trends and Comparing Main Points
- LESSON 6 Drawing Conclusions from Two Similar Graphics
- LESSON 7 Posttest/Summary

DEVELOPING AN APPRECIATION OF GRAPHICS

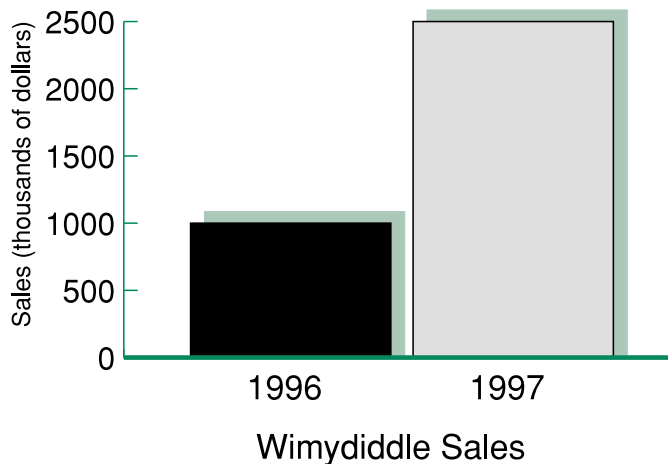
So, why do I need this stuff?



Locating information is an essential skill for success in many aspects of everyday life, and it is especially important in the workplace. In recent years, business and industry have become more reliant on graphics as a communication tool. Graphics can present a great deal of information in a succinct format, create visual impact, are easier to design, and save time for the reader. However, the benefits of graphic communications are not always realized because readers have not been trained in reading and applying information in a visual format. In the work environment, employees need to recognize different types of graphics and their purposes, understand the components of graphics and extract needed information, recognize comparisons and trends, and draw conclusions.

Let's look at an example of just what I mean. Suppose your boss at Whatchamacallit, Inc. asks you to create a bar graph comparing last year's sales of Wimydiddles with this year's sales. Could you do it? If so, can you see how much easier it would be to see the comparison in a graph rather than just reading the text? The visual aid would be much quicker, easier, and frankly, more interesting.

Whatchamacallit, Inc.



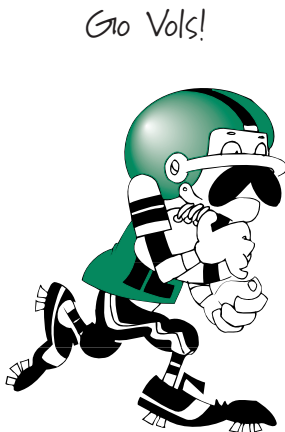
As you can see, Wimydiddle sales are booming. In 1996, Whatchamacallit, Inc. sold \$1,000,000 worth of product and in 1997 sales increased to \$2,500,000!

How else might a graphic be used in everyday life? Imagine you are in a huge airport and you need to find a certain place most desperately. Say, well, the nearest comfort station... To make matters worse, all written directions are in Svengaliese which you don't happen to read or speak a word!! Thank goodness for that man in the turban with the map that uses international symbols! Thanks to him (and the fact that you can read a map and international symbols) disaster is averted!!

Often, information is communicated through a narrative form like the following information.

The Tennessee Volunteer football schedule is as follows: On August 30, Tennessee plays Texas Tech at Knoxville. The Volunteers play UCLA at Pasadena on September 6th. On September 20th, Tennessee travels to Gainesville to play Florida. The Volunteers next play against Mississippi in Knoxville on October 4th and Georgia on October 11th. The next game sees Tennessee in Birmingham on the 18th of October. On November 1st, South Carolina visits Knoxville. The following week, November 8th, Southern Miss comes to Knoxville. The Volunteers then travel to Little Rock to face Arkansas on the 15th of November and on to Lexington on the 22nd of November to face-off against Kentucky. The Tennessee Volunteers' last regular season game is in Knoxville on November 29th against Vanderbilt. The SEC Championship game will be held on December 6th in Atlanta.

See how much easier the same information is communicated using a table!



Volunteer Schedule	
August 30	Texas Tech at Knoxville
September 6	UCLA at Pasadena
September 20	Florida at Gainesville
October 4	Mississippi at Knoxville
October 11	Georgia at Knoxville
October 18	Alabama at Birmingham
November 1	South Carolina at Knoxville
November 8	Southern Miss at Knoxville
November 15	Arkansas at Little Rock
November 22	Kentucky at Lexington
November 29	Vanderbilt at Knoxville
SEC Championship Game December 6 at Atlanta	

So, that's what this is all about – locating information using graphics. See how important this skill can be? I thought you would!



LESSON 1

WIN CAREER SOLUTIONS

EXERCISE - *RECOGNIZING GRAPHICS IN EVERYDAY LIFE*

1. Keep a list of every graphic you encounter in your workplace for one week.

Monday

Tuesday

Wednesday

Thursday

Friday

_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
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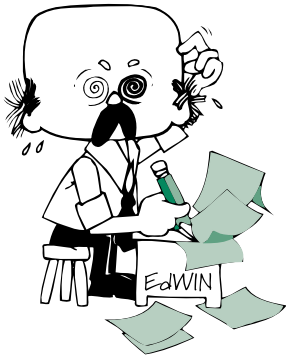


LESSON 1

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WHAT ARE GRAPHICS AND WHAT CAN THEY DO?

What are graphics?



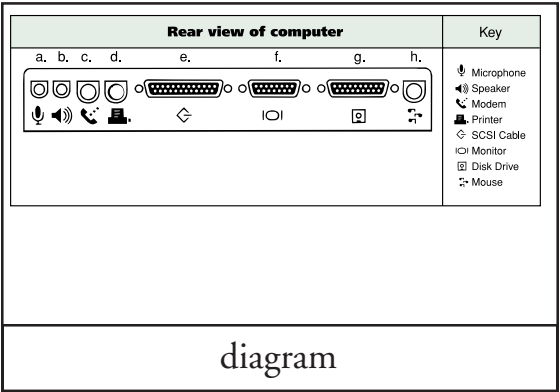
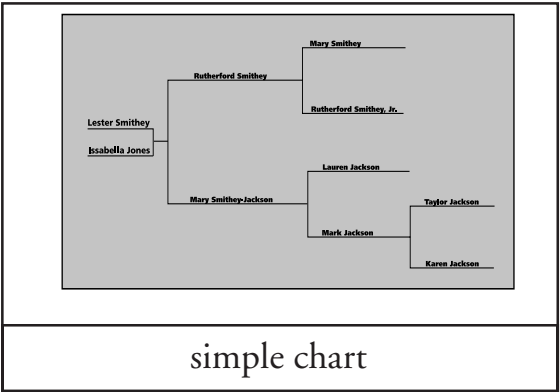
GRAPHICS ARE:

Simply put, a graphic is any visual means of communicating information contained within a document.

GRAPHICS CAN:

- Represent concrete or abstract ideas
- Be simple or complex
- Contain numerical or non-numerical information
- Be incorporated into text or can be used independently
- Condense multiple details into a more manageable and understandable form
- Allow readers to see relationships and comprehend patterns within data
- Clarify, explain, illustrate, simplify, compare, compile, and sort information

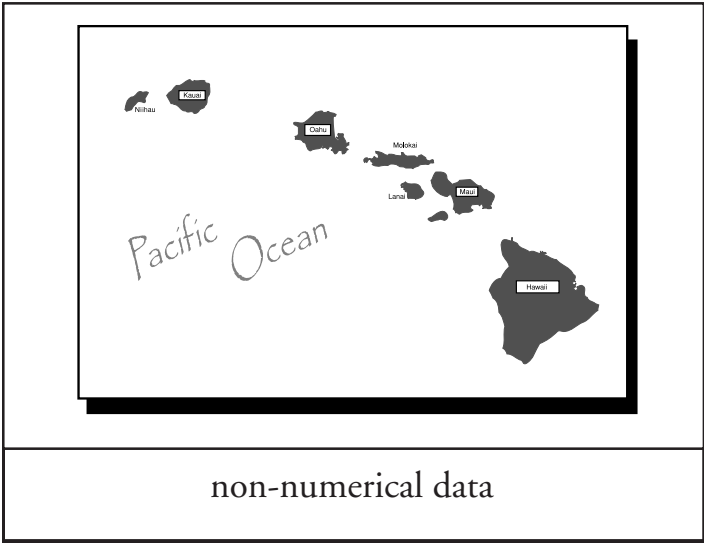
Example graphics



July

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

numerical data



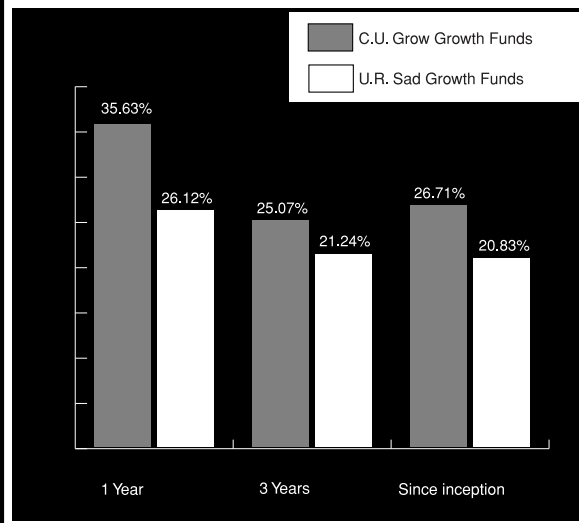
WIN CAREER SOLUTIONS

Example graphics

Football Volunteer Schedule	
August 30	Texas Tech at Knoxville
September 6	UCLA at Pasadena
September 20	Florida at Gainesville
October 4	Mississippi at Knoxville
October 11	Georgia at Knoxville
October 18	Alabama at Birmingham
November 1	South Carolina at Knoxville
November 8	Southern Miss at Knoxville
November 15	Arkansas at Little Rock
November 22	Kentucky at Lexington
November 29	Vanderbilt at Knoxville
SEC Championship Game December 6 at Atlanta	

manageable data

Average Annual Total Returns



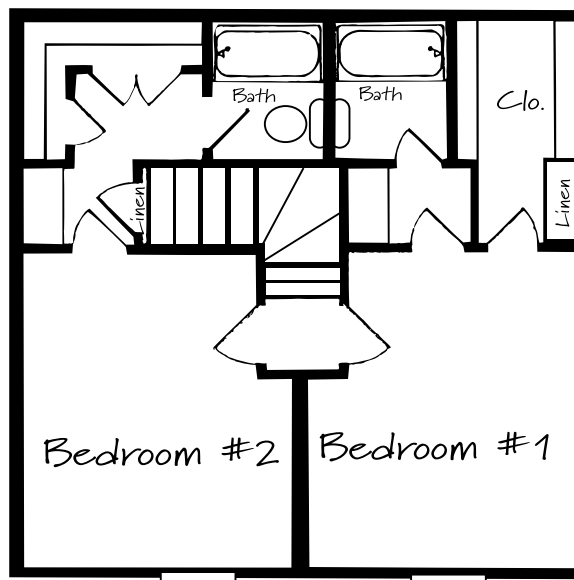
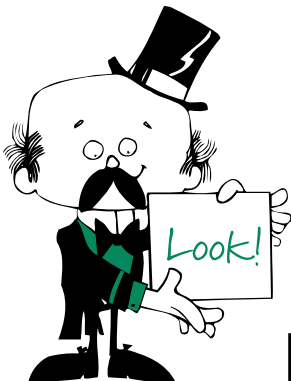
bar graph to compare relationships

UNDERSTANDING GRAPHICS IN THE WORKPLACE

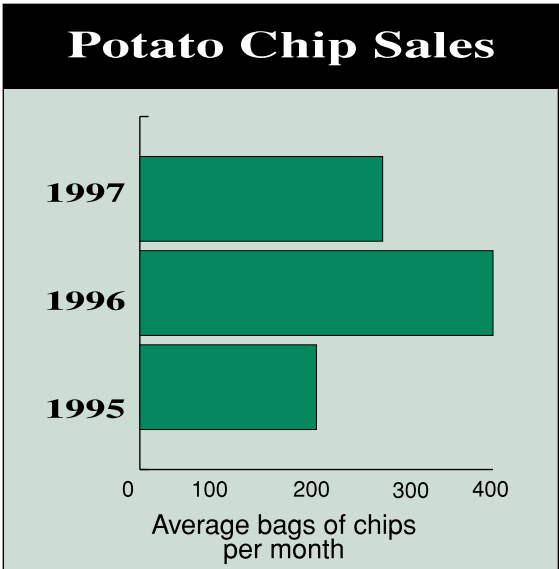
Graphics of all types can be found in newspapers, magazines, annual reports for business and industry, company literature and brochures, operation manuals for home and workplace, telephone books, television guides, tax forms, surveys, travel maps, and more.

It is important to understand that graphics in the workplace are commonplace and are used as highly effective tools of communicating. There are times when text alone can be confusing (no matter how well written it may be), incomplete, or simply too difficult to understand without the aid of some type of visual to illustrate its meaning. Imagine trying to visualize the floor plan of a house by reading all of the dimensions and room locations, closets, entrances, doors, windows, and other important factors. Now, look at a simple drawing of the floor plan. So much easier, isn't it?

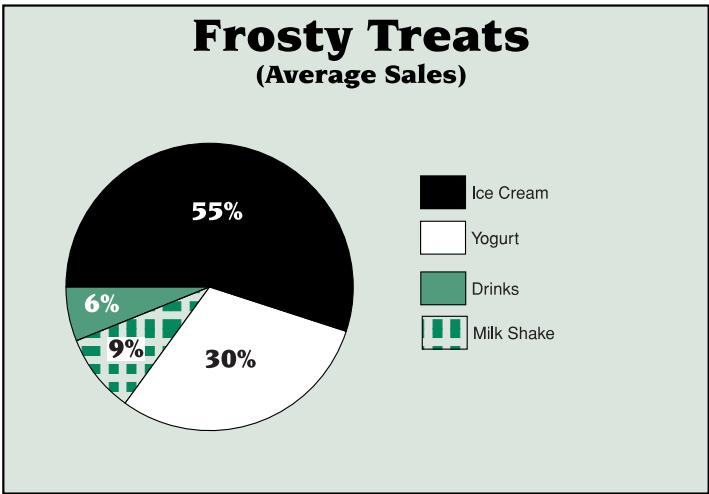
*Check out these
workplace graphics*



In the workplace, information is frequently distributed through charts and graphs. A bar graph can easily illustrate if sales are increasing or decreasing.

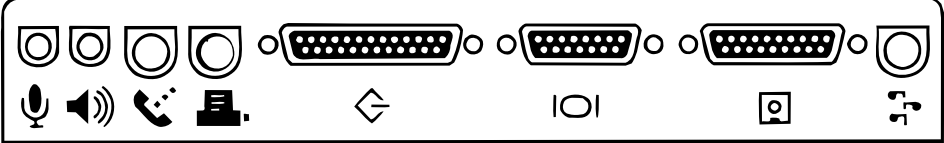










The following pie graph shows that a little more than one half of *Frosty Treats* sales are in ice cream. (What a surprise!)



Being able to communicate information quickly and clearly is important to maintaining an efficient workplace. Since you are an important part of your workplace, it is important that you understand how graphics communicate.

Often diagrams are helpful to conduct tasks that you are assigned at work. Let’s say your supervisor asked you to connect a new computer for the work room. You have never touched a computer in your life! Don’t worry . . . EdWIN is here along with a handy diagram to help you with this challenge.

Rear view of computer								Key
a.	b.	c.	d.	e.	f.	g.	h.	
								 Microphone  Speaker  Modem  Printer  SCSI Cable  Monitor  Disk Drive  Mouse

I may not know what all of the symbols mean nor what the parts do, but I can look at the diagram and match the symbols to connect the different parts of the computer. I bet you could too! Study the diagram using the key.

Understanding why graphics are important is a step toward mastering *Locating Information* Level 4.



EXERCISE - DEFINING GRAPHICS

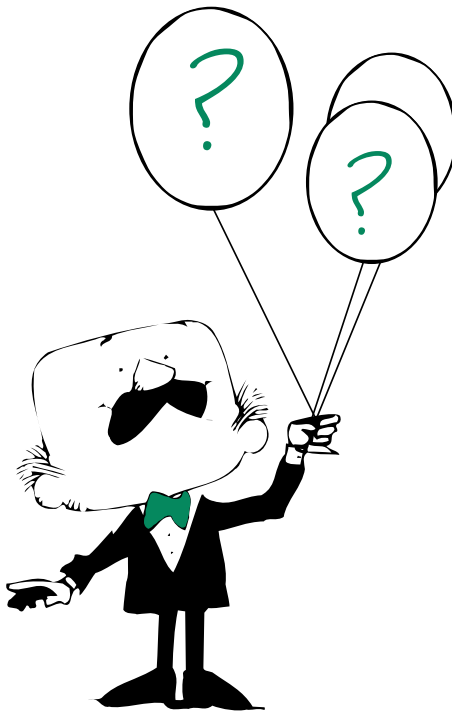
Instructions: *Respond to the following statements.*

1. In your own words, write the meaning of graphics.

2. List five graphics used in your workplace and tell why you think they are useful.

Type of Graphic	Why It's Useful
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>
<hr/>	<hr/>

Pop Quiz: Name three places
graphics are found in everyday
life.



Note: In a self-directed course like this one, it is important that you spend time reviewing answers to the exercises. If you were unable to answer some questions before looking up my responses, go back and try the questions again to see if you understood the answers when you read them. Repetition is one way you will learn to locate information.



SUGGESTED SOLUTIONS TO EXERCISE

1. In your own words, write the meaning of graphics.

Answer: Graphics are a visual way to communicate information.

or

Answer: Graphics are pictures that organize information for the reader.

2. List five graphics used in your workplace and tell why you think they are useful.

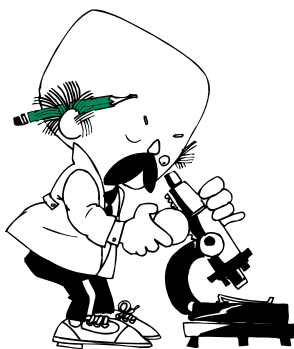
Type of Graphic	Why It's Useful
<i>Map/Floor Plan</i>	<i>Emergency procedure for building evacuation</i>
<i>Table/Schedules</i>	<i>Allows everyone to see who is responsible for what and when to do what</i>
<i>Flowcharts</i>	<i>Guide employees through processes so they know what steps to take and when to make decisions</i>
<i>Table/Telephone Lists</i>	<i>A table of frequently used phone numbers saves time</i>
<i>Bar Graphs/Time Lines</i>	<i>Used to help employees pace workloads to meet deadlines</i>
<i>Table/Time Sheet</i>	<i>Used to document the number of hours worked (so you can get paid!) and management can monitor investment of time in products and projects</i>
<i>Forms/Insurance Papers/Leave Requests/Workers' Compensation, etc.</i>	<i>Standard forms enable departments to collect information needed to provide company benefits</i>

Note: There are so many graphics used in the workplace I could never list all of the possible answers. But, hopefully you get the idea!

IDENTIFYING BASIC FORMATS (OR TYPES) OF GRAPHICS AND THEIR PRIMARY PURPOSE

In this lesson, we will learn to recognize the formats and purpose of different types of graphics and how to read each type.

Tip: Study these basics.



The basic types of graphics are:

- **Tables**
- **Diagrams and Charts**
- **Graphs**
- **Maps and Floor Plans**
- **Forms**
- **Instruments and Dials**

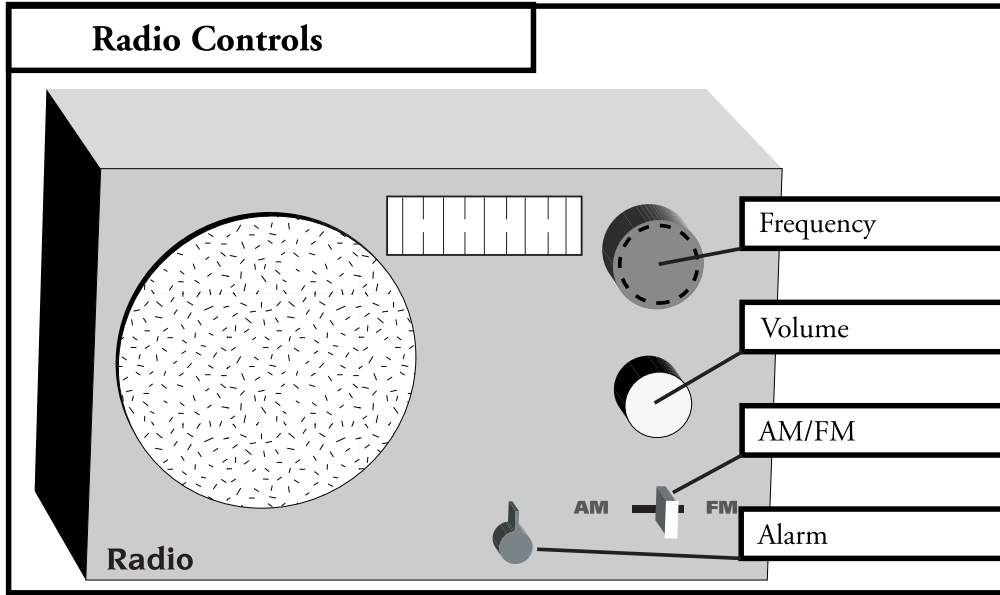
We will break down Lesson 4 into several parts for easier understanding. They will be as follows:

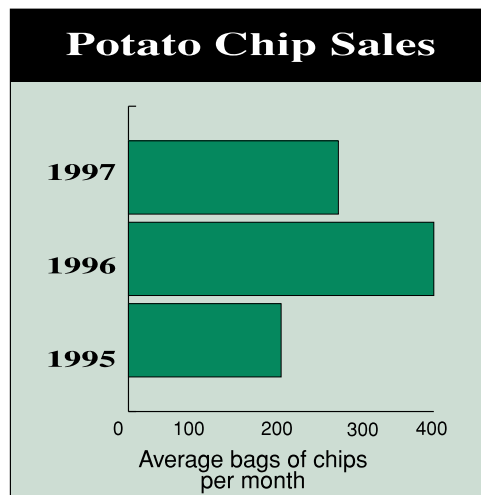
- Reading Maps, Charts, and Instruments
- Reading Graphs and Tables
- Reading Forms

Let's see how many graphics you can identify before we start... kind of a pretest to warm up.

EXERCISE - IDENTIFYING GRAPHICS

Instructions: *Write the format or type of graphic pictured.*





b. Type or format _____



LESSON 3

WIN CAREER SOLUTIONS

**WIN INSTITUTE OF EDUCATION
AND
LINCOLN MEMORIAL UNIVERSITY**
 Application for Graduate Studies and Advanced Graduate Studies

Application and fee must be returned to WIN Institute of Education, 1000 Brentwood Way, Kingston, TN 37763 - or fax to 423-717-9461

Please Print in Black Ink or Type

Name _____ Last _____ First _____ Middle/Initial _____ SSN _____

Mailing Address _____ Street _____ Sec. Male _____ Female _____

City _____ State _____ ZIP _____

Telephone Number () _____ Work _____ Home _____

Date of Birth _____ Place of Birth _____ City _____ State _____

When do you plan to enter Lincoln Memorial University?

Full Semester _____ Spring Semester _____ Summer Semester _____

Autumn _____ Jan _____ June _____

_____ Master of Education _____ Educational Specialist _____ Special Student

If Ed.S or Master's, proposed area of emphasis (circle one):

EA&S _____ C&I _____ C&G _____ Undecided _____

_____ Certification _____ Non-certification _____

Monies or Payment: (Full Payment Required)

☐ Charge ☐ VISA ☐ MasterCard

Card # _____ Exp Date ____/____

Cardholder Name _____

Cardholder Signature _____

☐ Check Check # _____

Make checks payable to WIN

☐ Purchase Order P.O. # _____

Paying Party Name _____

Street Address _____ City/State/Zip _____

The Application for Graduate and Advanced Graduate Studies allows students to enroll in Ed.S. course work. Before the completion of nine (9) semester hours of Ed.S. coursework, the student must make application for admission to the Ed.S. degree program by completing the Application for Degree Candidacy. Contact the LMU Graduate Office, Cumberland Gap Parkway, Harrogate, TN 37762 for additional information.

List all colleges or universities attended. The applicant must request that two official transcripts of the master's degree program and any coursework beyond the master's degree be sent directly to LMU at the above address.

Name of Institution	Location	Dates Attended	Major Area	Degree

I hereby certify that the information given on this application is complete and accurate.

Signature _____

Print Name _____

Date _____

Approved: _____

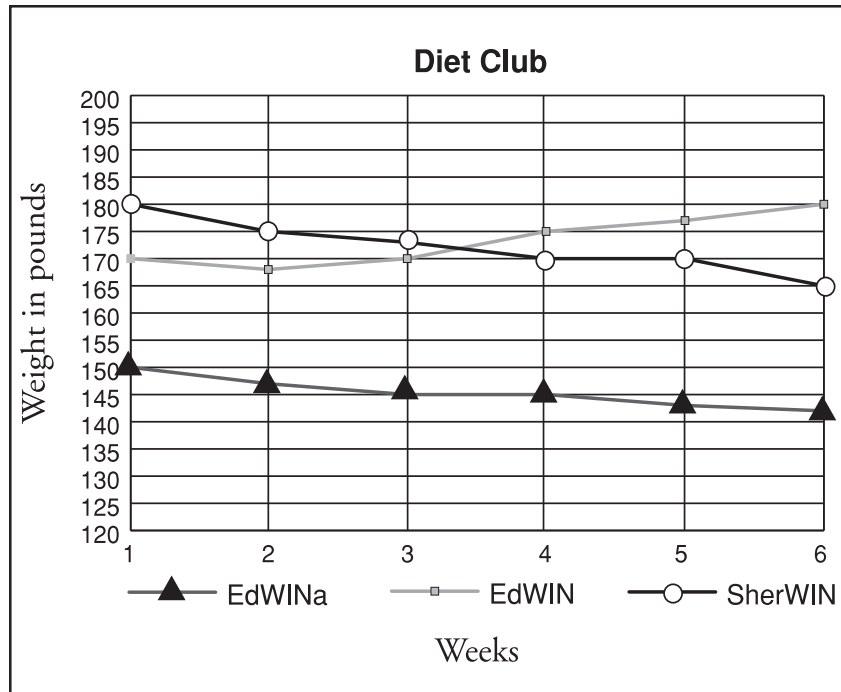
c. Type or format _____

EFFECTS OF COLDS AND FLU		
Symptoms	Cold	Flu
Fever	Rare	Characteristic
Headache	Rare	3-4 Days Prominent
Aches & Pains	Slight	Usual - Often severe
Fatigue	Quite Mild	Up to 2-3 weeks
Extreme Exhaustion	Never	Prominent
Stuffy Nose	Common	Sometimes
Sneezing	Common	Sometimes
Sore Throat	Common	Sometimes
Chest Discomfort/ Cough	Mild - Moderate	Common - Can be severe

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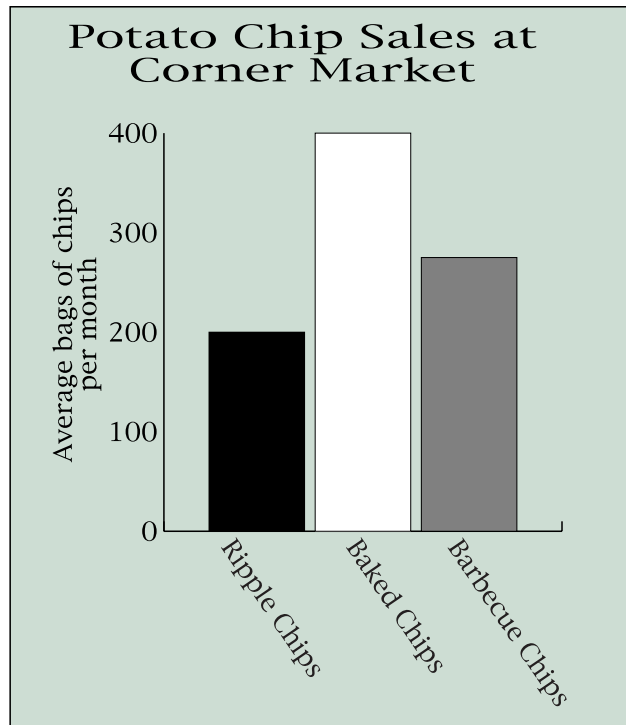
d. Type or format _____



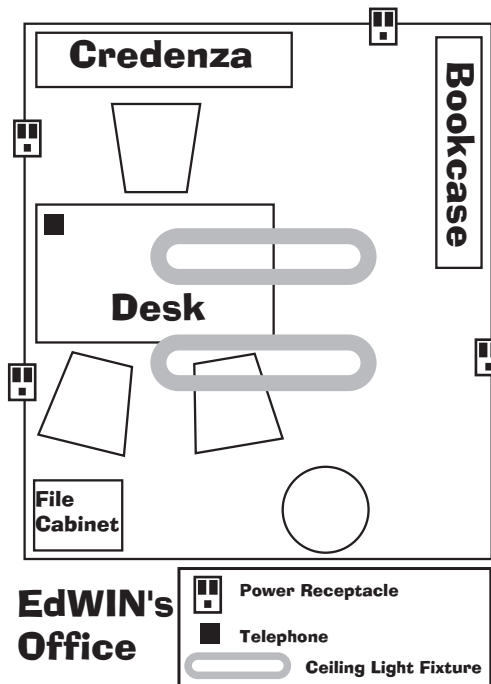
e. Type or format _____



f. Type or format _____

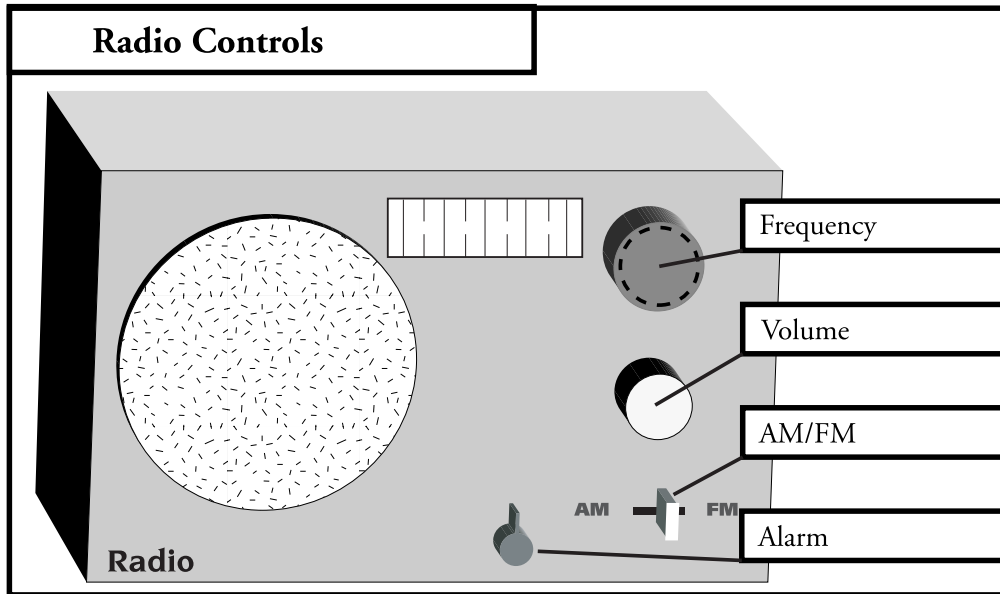


g. Type or format _____

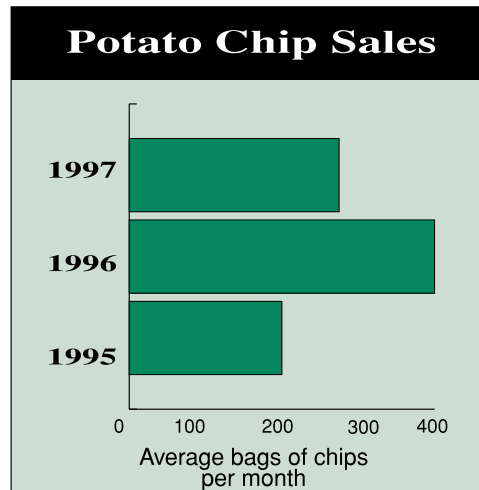


h. Type or format _____

ANSWERS TO EXERCISE



a. Type or format *diagram*



b. Type or format *horizontal bar graph*

**WIN INSTITUTE OF EDUCATION
AND
LINCOLN MEMORIAL UNIVERSITY**
Application for Graduate Studies and Advanced Graduate Studies

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Please Print in Black Ink or Type

Name _____ SSN _____
Last First Middle/Initial

Mailing Address _____
Street

City _____ State _____ Zip _____
City State Zip

Telephone Number () _____ () _____
Work Home

Date of Birth _____ Place of Birth _____
City State

When do you plan to enter Lincoln Memorial University?

☐ Fall Semester ☐ Spring Semester ☐ Summer Semester
Aug Dec Jan June

☐ Master of Education ☐ Educational Specialist ☐ Special Student

If Ed.S or Master's, proposed area of emphasis (circle one):

☐ EA&S ☐ C&I ☐ C&G ☐ Undecided
Certification Non-certification

☐ Charge ☐ VISA ☐ MasterCard
Minimum or Pre-empt: (Full Payment Required)

Card # _____ Exp Date ____/____

Cardholder Name _____

Cardholder Signature _____

☐ Check ☐ Check # _____
Make checks payable to VIN

☐ Purchase Order P.O. # _____

Paying Party Name _____

Street Address _____ City/State/Zip _____

The Application for Graduate and Advanced Graduate Studies allows students to enroll in Ed.S course work. Before the completion of nine (9) semester hours of Ed.S coursework, the student must make application for admission to the Ed.S degree program by completing the Application for Degree Candidacy. Contact the LMU Graduate Office, Cumberland Gap Parkway, Harrogate, TN 37762 for additional information.

List all colleges or universities attended. The applicant must request that two official transcripts of the master's degree program and any coursework beyond the master's degree be sent directly to LMU at the above address.

Name of Institution	Location	Dates Attended	Major Area	Degree

I hereby certify that the information given on this application is complete and accurate.

On-line Use
 Approved: _____ Signature _____ Date _____

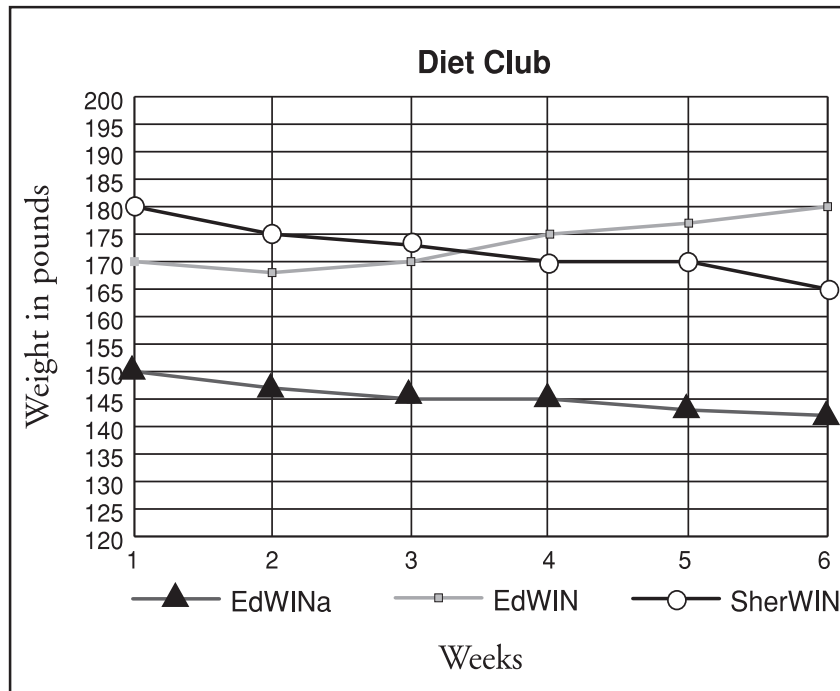
c. Type or format *form*

EFFECTS OF COLDS AND FLU		
Symptoms	Cold	Flu
Fever	Rare	Characteristic
Headache	Rare	3-4 Days Prominent
Aches & Pains	Slight	Usual - Often severe
Fatigue	Quite Mild	Up to 2-3 weeks
Extreme Exhaustion	Never	Prominent
Stuffy Nose	Common	Sometimes
Sneezing	Common	Sometimes
Sore Throat	Common	Sometimes
Chest Discomfort/ Cough	Mild - Moderate	Common - Can be severe

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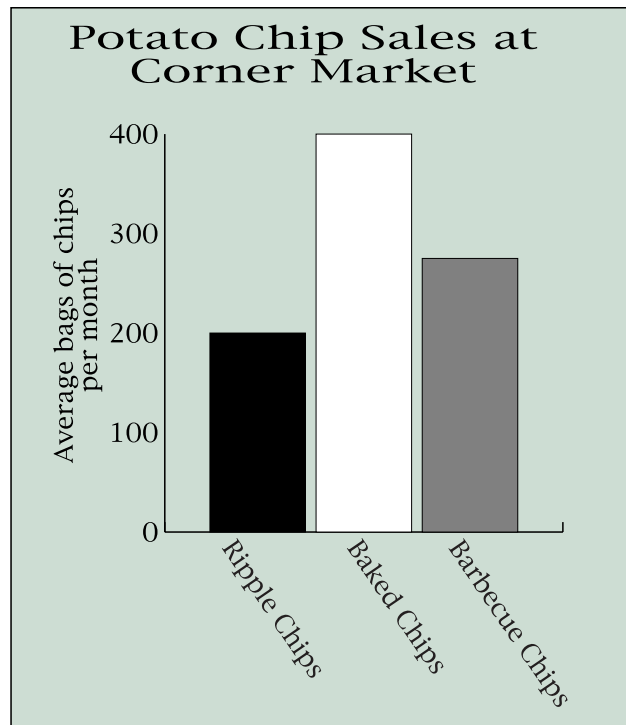
d. Type or format *table*



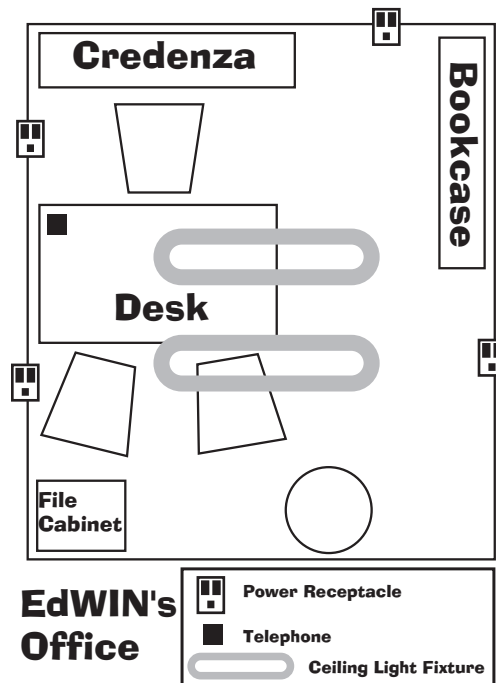
e. Type or format *line graph*



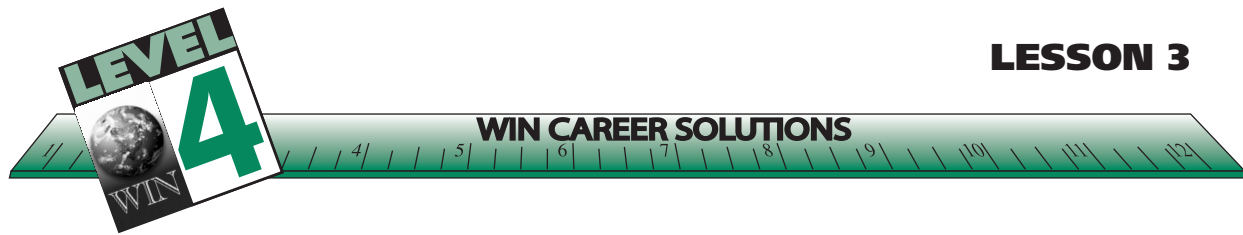
f. Type or format *dials (instruments)*



g. Type or format *vertical bar graph*



h. Type or format *floor plan or layout*

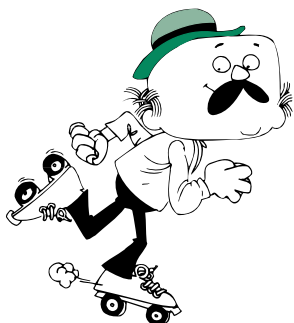


How did you do? Don't be discouraged if you did not recognize all of them. That's what you are going to learn in Lesson 3. Now, for those of you who "aced" the pretest, don't skip Lesson 3. There is a lot of useful information provided about the graphics you can already recognize. You should move through it quickly though.

BASIC STRATEGIES FOR READING GRAPHICS

There are a number of basic steps you should take when you begin to use graphics to locate needed information. In other words, don't get the cart before the horse!! Always take just a few minutes to go through these steps. After you have worked with graphics for a little while, these steps will become second nature to you, and you will automatically do this without even thinking about it. Believe me, the minimal amount of time you spend on these steps will save you a lot of backtracking later in your work.

Tip: Don't skip these steps!



The basic steps for reading graphics are as follows:

- 1. Preview to determine format.**
- 2. Read the title and subtitle of the graphic.**
- 3. Read any labels, captions, or keys that are included.**
- 4. Try to determine the purpose of the graphic.**
- 5. If the graphic is integrated into text, read the text before and after the graphic.**

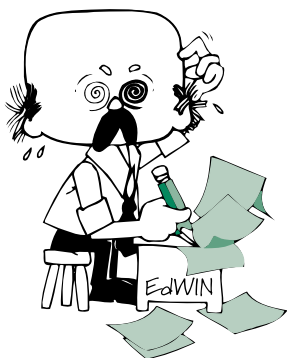
READING MAPS, CHARTS, AND INSTRUMENTS

MAPS

Maps can be simple or complex and can contain many different symbols and icons. Most people have read a road map, or at least attempted to do so! They can get pretty confusing, especially if you are not familiar with the symbols. Most people, too, have drawn a simple map giving directions to their home or office. If you have done so, then you probably incorporated a few symbols into it, such as railroads, churches, or other landmarks to guide the reader.

Edwin: First, go right, then left, stop at the light, go right, then three lefts. Look for a cow field...

Traveler: Can you draw me a map?

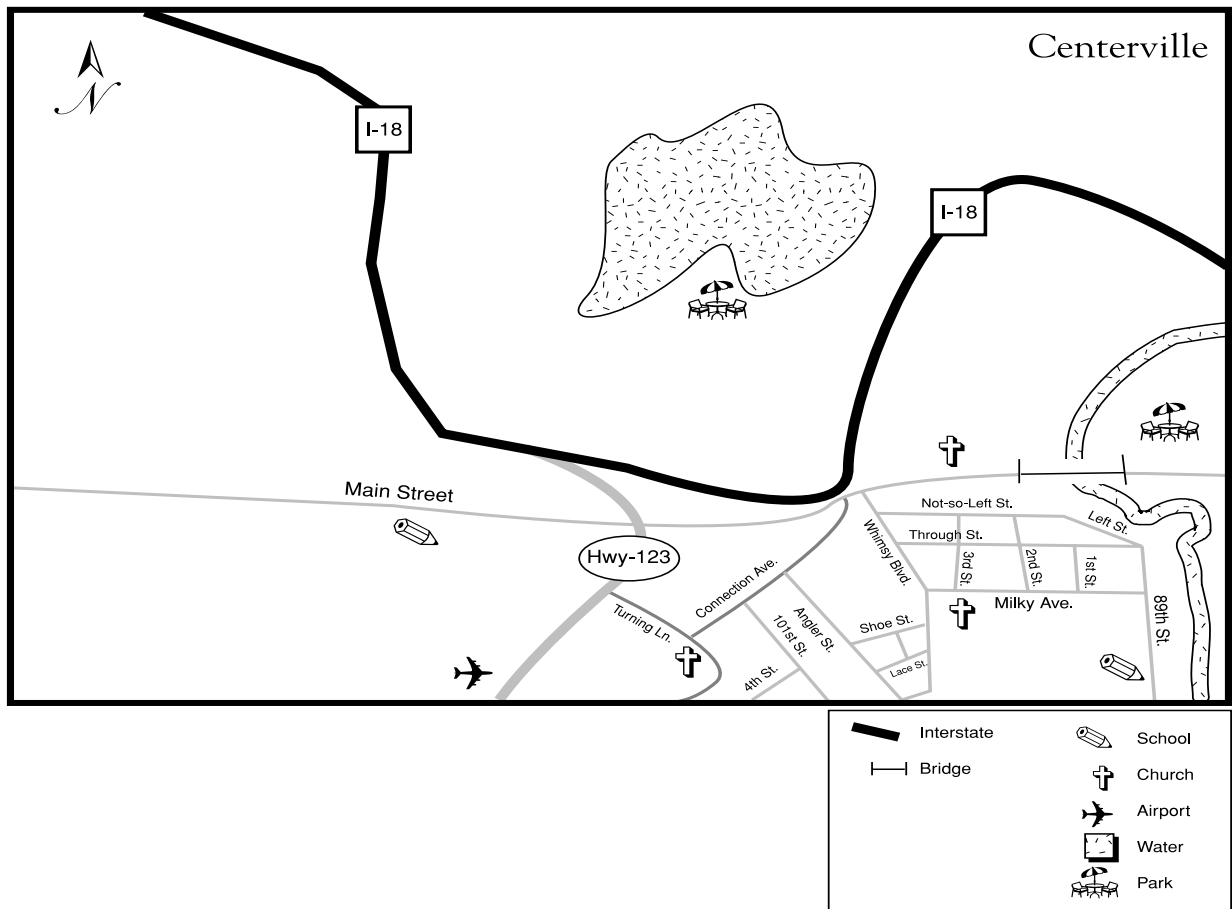


A very important aspect to reading maps is understanding the key. This is a detailed chart showing what the symbols and icons mean. Pictures of churches, railroads, schools, etc., will be marked on the map along with road names and other important information to aid you. State highway symbols, interstate highways, streets, lanes, etc., will also have a specific icon or symbol. Colors are also used to designate types of roads and highways. Airports, state parks, campsites, roadside parks, rest areas, etc., will all have a specific icon. Mileage will be shown in scale, and the scale will be given. Remember, a scale is a representation of a larger measurement drawn to a smaller size, i.e., one inch equals one mile. Lakes and rivers will be marked, along with bridges. A direction indicator will also be included, usually in the upper right hand corner showing north, south, east, and west. In other words, just about everything on a map will be included with a corresponding symbol or icon. Always familiarize yourself with the key to these symbols before trying to read a map. This will undoubtedly avoid much confusion in trying to decipher it!

Once you have learned to read the map, then all you will have to worry about is being able to refold it!! Sorry, I can't help you there... you're on your own!!

Look at this example and pull out several bits of information from it. Locate any schools, airports, rivers, bridges, etc., that may be included. Make your way across the map using at least two different routes.

Example of a map:



Did you find the bridge? (Right-hand side — crossing the water)

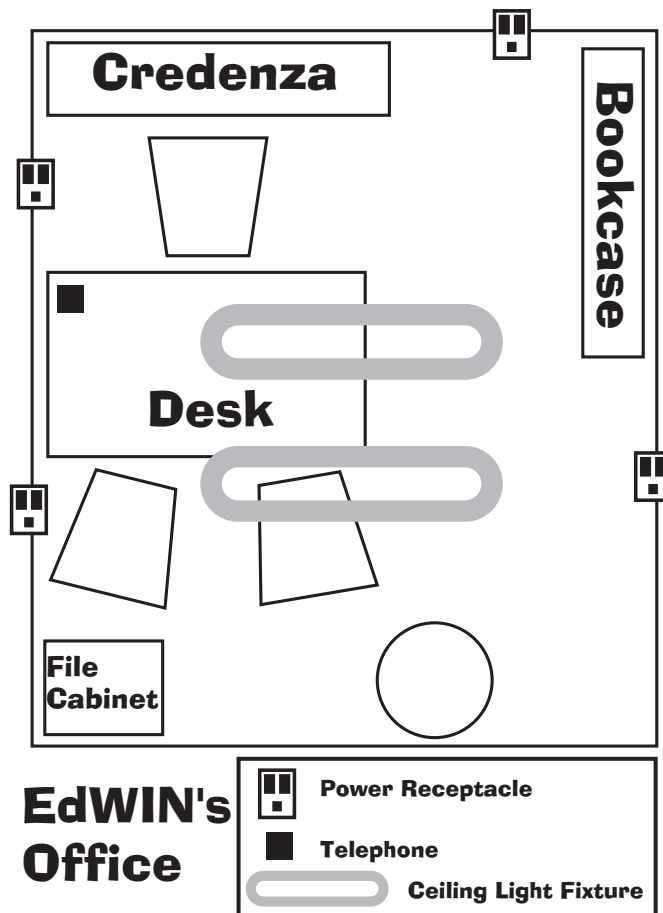
You might want to grab a road map stuffed in the glove compartment of your car and examine it closely for more practice.

READING MAPS, CHARTS, AND INSTRUMENTS

FLOOR PLANS

Floor plans are similar to maps, except that they usually will use abbreviations as well as symbols to illustrate scale drawings of room layouts. Most floor plans are relatively self-explanatory, but if they include a key giving you the abbreviations and symbols used, study it before examining the drawing. Layouts may or may not be to scale, but illustrate room arrangement.

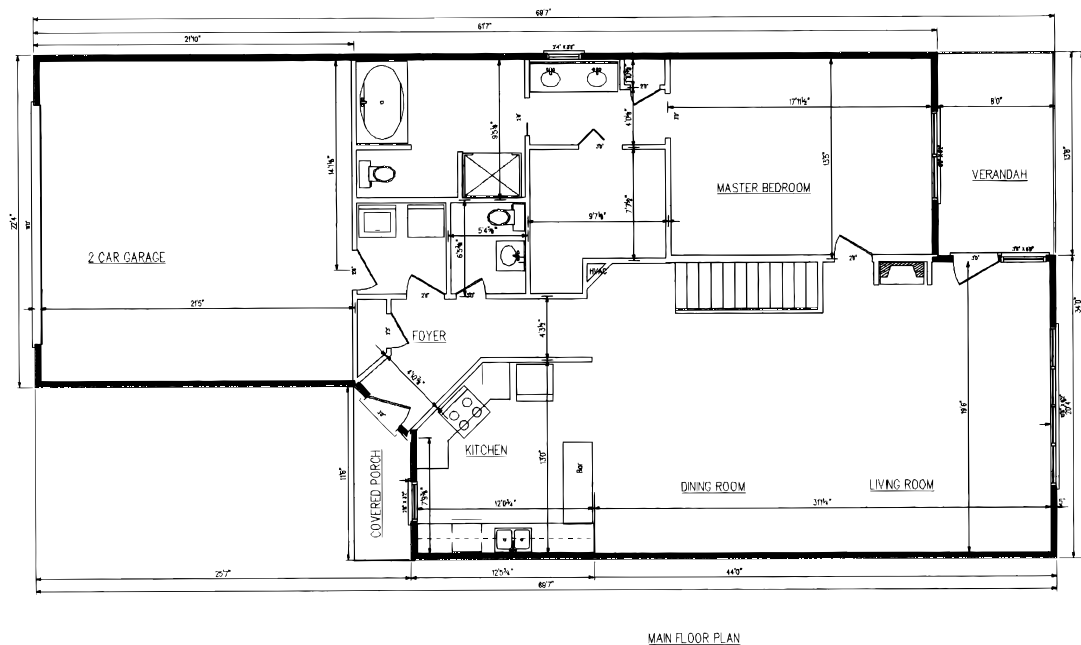
Example of a layout:



READING MAPS, CHARTS, AND INSTRUMENTS BLUEPRINTS

Blueprints, on the other hand, can get very complicated and use icons, symbols, and abbreviations. If you have ever purchased a set of blueprints to give to a contractor for building a house, you know just how difficult they look. Plumbing, wiring, insulation, fixtures, electrical outlets, dimensions, and everything else the contractor needs to know are included in the drawings.

Example of a blueprint:

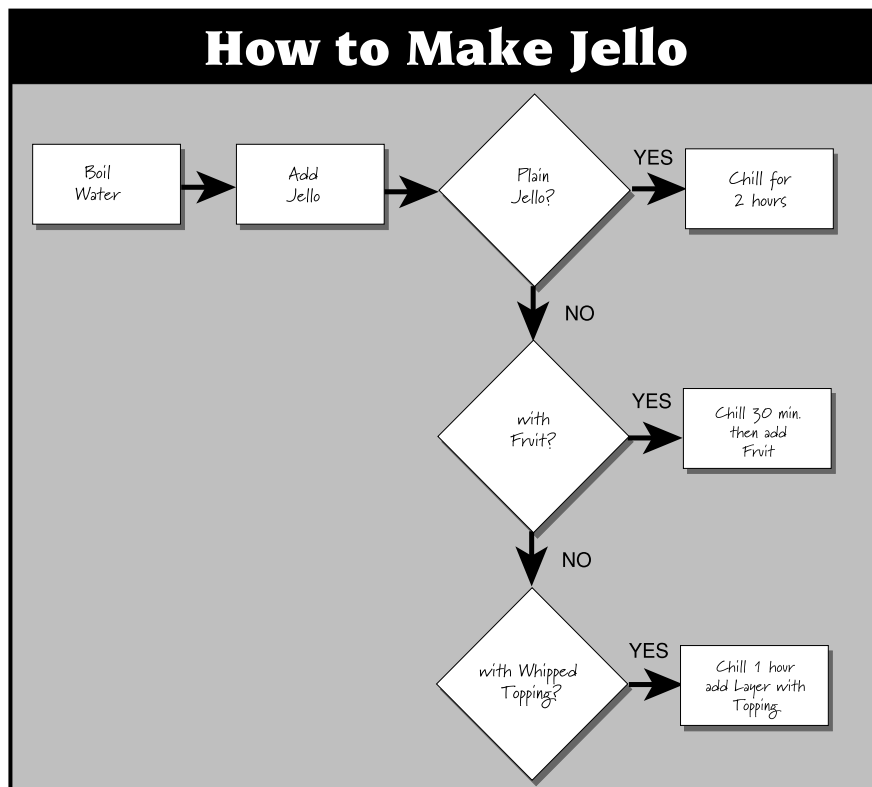


READING MAPS, CHARTS, AND INSTRUMENTS

CHARTS

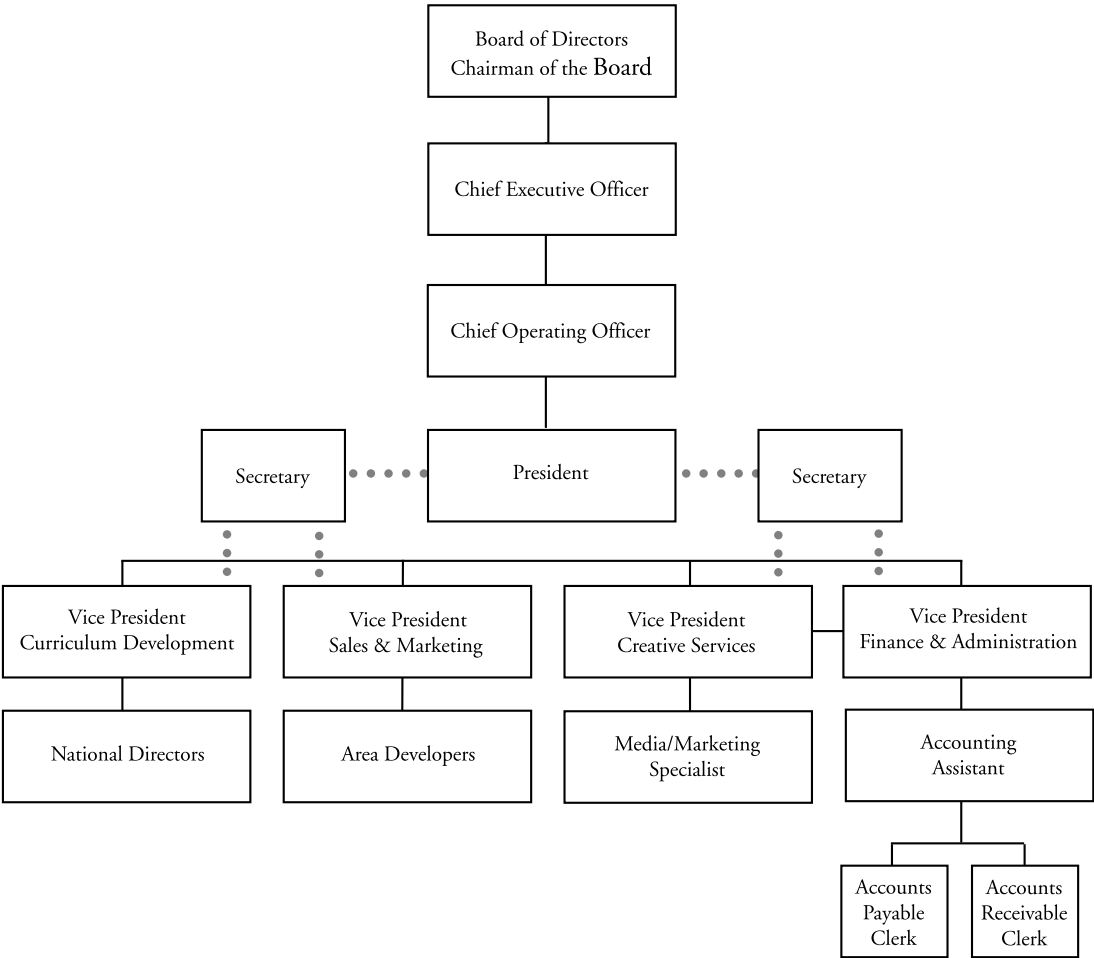
Flowcharts are representative drawings that show steps involved to reach a conclusion to a particular task. Different symbols indicate what to do. For instance, in the following flowchart a “rectangle” requires action while a “diamond” requires a decision. Notice how the arrows guide the flow of the process.

Example of a flowchart:



Charts also can represent a hierarchy and their relationship, such as an organizational chart of a business that begins with the president or CEO, and works its way through to upper, middle, and lower management and beyond.

Example of an organizational chart:



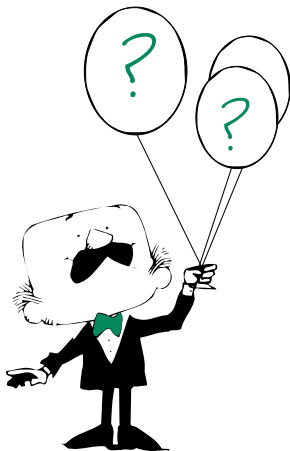
READING MAPS, CHARTS, AND INSTRUMENTS

INSTRUMENTS

This is a graphic that you have used many times in everyday life. Every time you look at a clock, a bathroom scale, an oven setting, or a thermometer you have read this type of graphic.

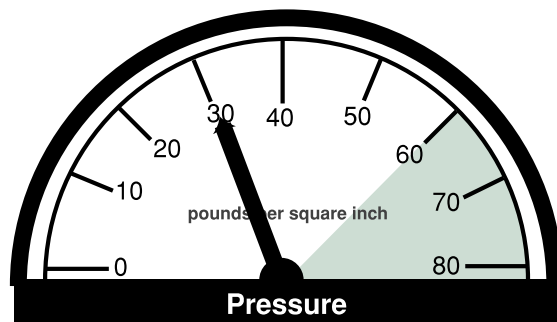
All of the graphics you have studied so far have been in either a paper or computer format. Instrument gauges and dials also provide information, but the information is raw data presented in its original form. For example, when you step on a scale, the information you collect does not need to be sorted or analyzed. However, if you recorded your weight over a six month period and charted weight changes, then you have manipulated the raw data to locate specific information.

Pop Quiz: What is a
flowchart?



Instrument gauges and dials are usually designed in two basic configurations: analog and digital. If your alarm clock has a dial and needles (or hands) that point to the time, then it is in an analog format. If it displays the time in numbers, then it is a digital clock. Both of these formats are common in the workplace. Reading the drawing of your clock may be easy, but have you ever tried to read the electric meter outside of your house? Wow, it's all Greek to me, but my electric company man comes to read it every month without any trouble. Why? Because he has had specific training to learn exactly how to read that instrument. If you work with instruments, you too will receive specific instruction on the types of instruments and dials you will need to know. Your job will be to know what information can be supplied by each gauge or dial and how to extract that information. Here are a couple of examples for you to look over.

Examples of dials and a gauge:



**READING GRAPHS AND TABLES***GRAPHS*

Graphs can be represented in several ways. There are vertical bar graphs, horizontal bar graphs, pie graphs, and line graphs. Graphs organize a great deal of information by showing sets of information so you can see the relationship between the sets.

The steps for reading graphs are similar to the basic steps for reading all graphics in general with a few differences. Familiarize yourself with these steps as you would with the strategies for reading any graphic until these steps become automatic.

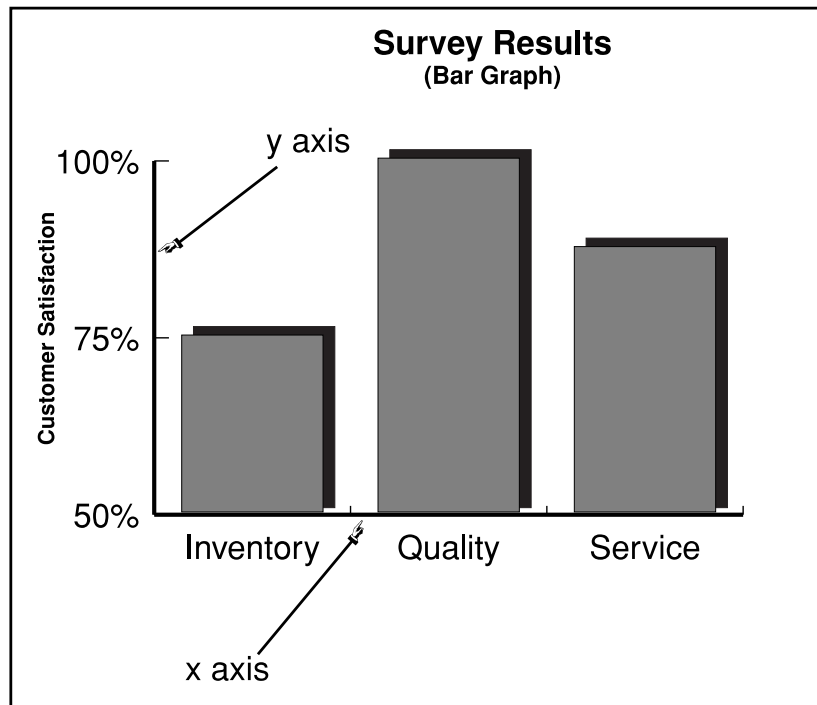
Tip: Don't skip the basics.



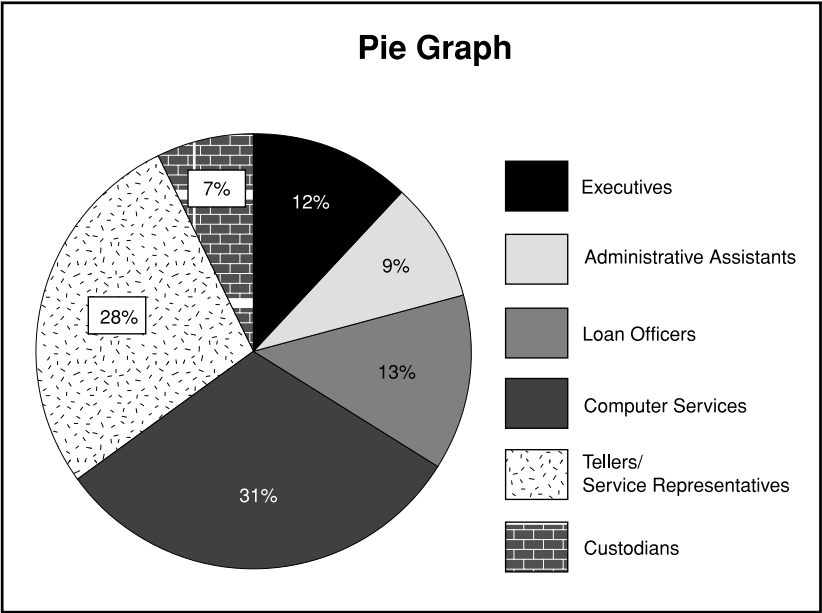
The basic steps for reading graphs are as follows:

1. Read the title or caption and identify the basic format (line graph, bar graph, etc.)
2. Study the labels and headings to determine the types of information being compared or contrasted.
3. Determine the units being used to compare the data, i.e. years, pounds, tons, units, etc.
4. Look for general trends or changes. For example, a line graph might indicate a steady drop or increase over a period of years.
5. If the graph is part of a document, read the text that comes before and after the graph.
6. Ask how the information from the graph relates to your particular job and how the information should be used by you or your co-workers.

Study the following graphs. Note the labeling along the horizontal and vertical sides of the bar graph. These are referred to as the X and Y axes, respectively. The X and Y axes can be configured numerically, shown in text, or a combination of both. In this example the X axis is expressed by text (Inventory, Quality, and Service); the Y axis is configured numerically (50%, 75%, and 100%), but it also uses text (Customer Satisfaction) to label the bar graph. Without reading the labels, you could not know what the bars represent.



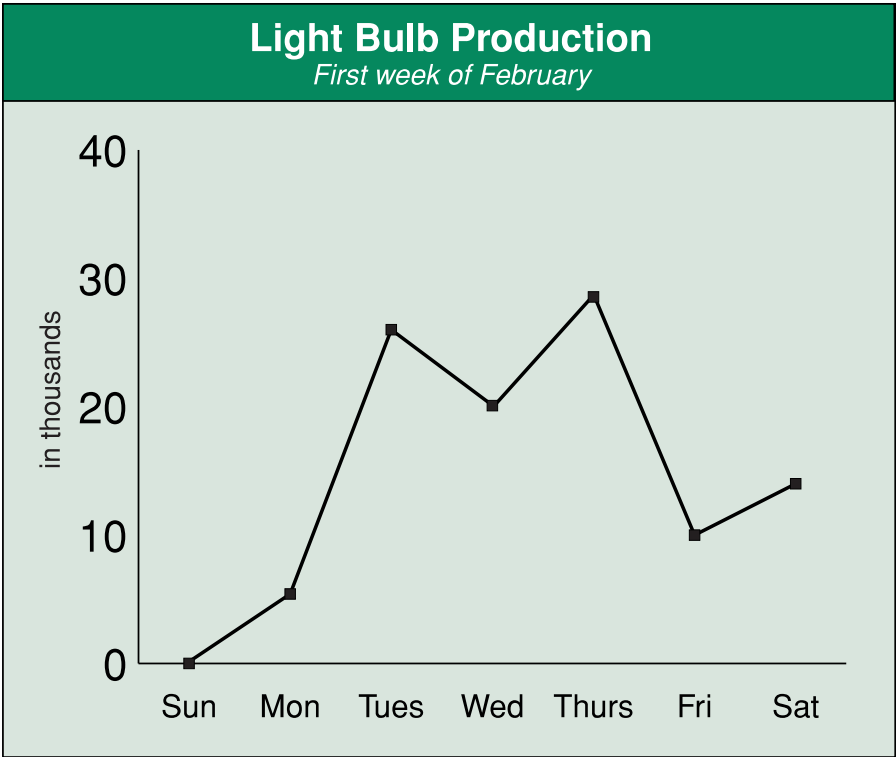
The pie graph looks slightly different but it shows clearly the information represented. Notice that the pie graph equals 100%. Pie graphs will always equal one whole. This graph illustrates the personnel at the Holding Company Bank.



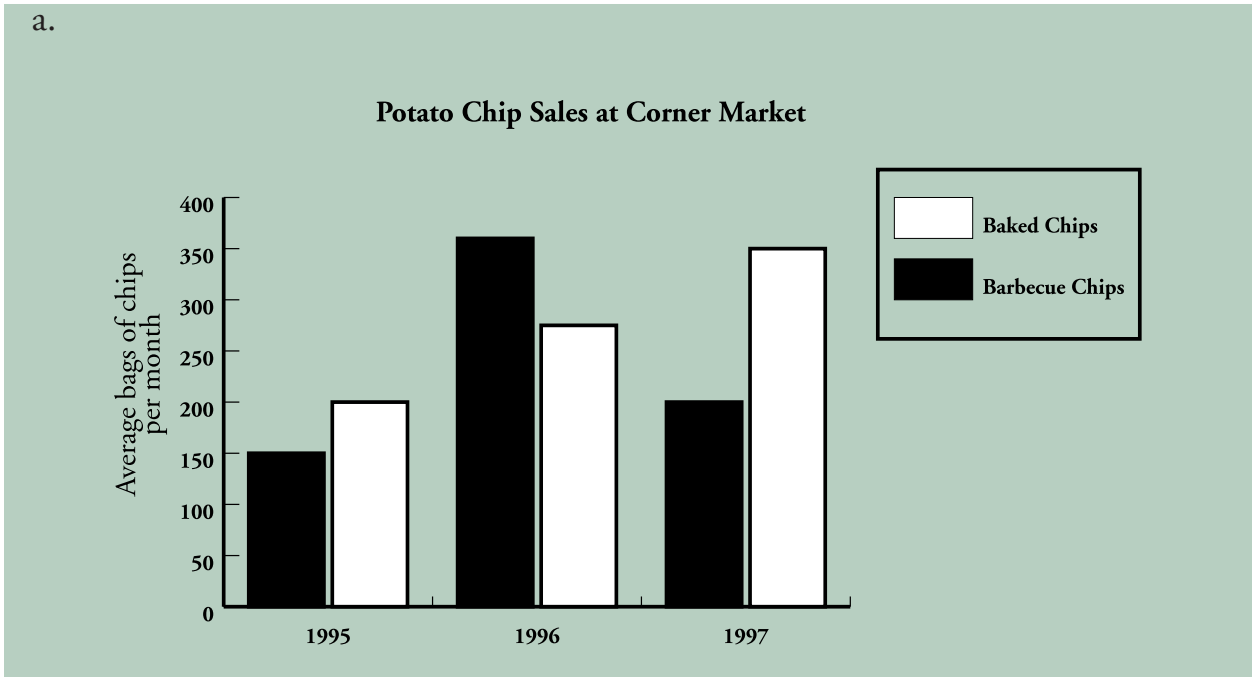
More people work in computer services than any other department at this bank.

When examining graphs, always try to notice trends, changes, or patterns. Line graphs illustrate this clearly. Study this example for a clearer understanding of trends and patterns. Notice that the production of light bulbs on Monday, Wednesday, and Friday were lower than Tuesday and Thursday. Saturday and Sunday are typical minimal work force days, so let’s exclude them from this observation. If you were to continue the line graph through the next few weeks, would the same trend appear? Maybe so, as some say that Tuesday and Thursday are the most productive days of the week... Tuesday, because everyone has had a chance to get past “blue” Monday, and then Thursday because everyone is anticipating the upcoming weekend. So you can see how graphs can show patterns and trends.

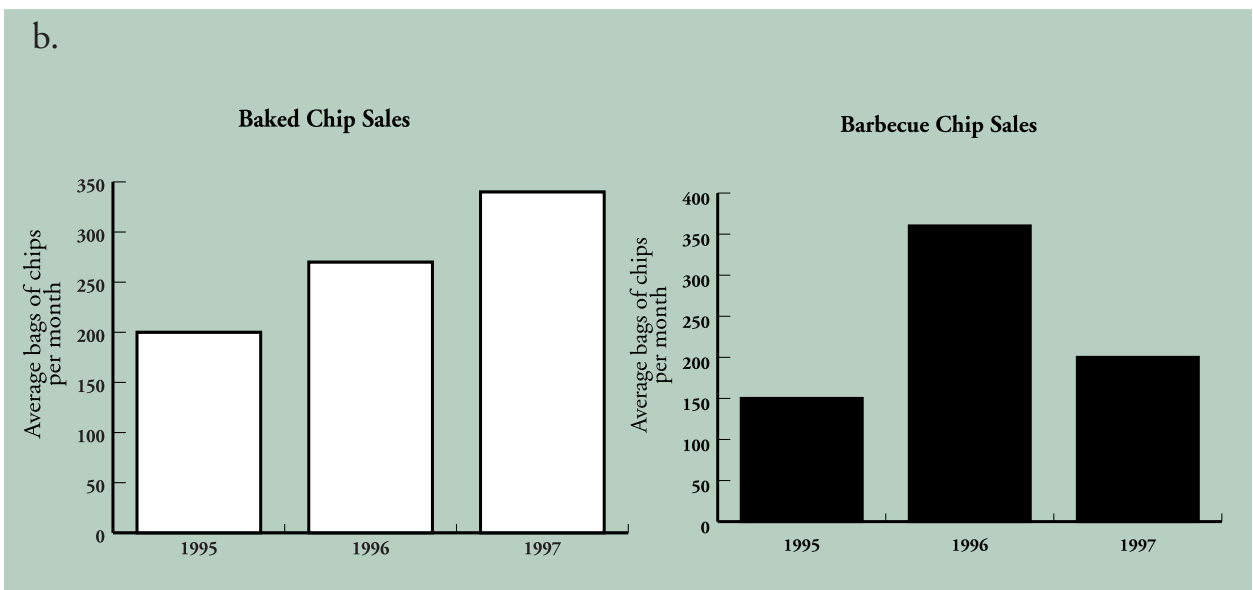
Example of a line graph:



Graphs can also appear in multiple configurations or be combined to show comparisons. Look at the following examples.



This bar graph clearly shows the comparison of sales between Baked Chips and Barbecue Chips. This same information could be provided in two bar graphs side by side. Which one is easier to compare sales, a or b?



READING GRAPHS AND TABLES

TABLES

Tables are used to show comparisons or how information is related. Tables organize information in rows and columns and are often used to condense large amounts of statistical data into a readable, manageable form. The rows in a table read horizontally across the page and the columns read vertically. Once again, we see the X and Y axes used. This is true of any table, regardless of what type of information it contains.

The columns will have headings above them and the rows will be labeled or numbered. Headings can be numeric or text also. To find specific information on the table, simply go to the first column . . . move across → the X axis until you find the heading or information that you are looking for, follow down that column . . . moving down ↓ the Y axis until you near the row of information you are trying to find. This is the tricky part! Identify the row heading you are interested in and follow across the row until you come to where the column and row meet. Did I make it clear at all? (Yeah, EdWIN, clear as mud!!) OK, OK, so we need a graphic here. Look at the next example to see what I mean.



LESSON 3

WIN CAREER SOLUTIONS

Try this: How many yards of carpet did Steven sell on June 29?

Find the heading of the column that is “29-Jun” then look for the row labeled ‘Steven’.

TOP SALES ASSOCIATES

Sales Associate	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	29-Jun	30-Jun	1-Jul	2-Jul	3-Jul
Kelley	640 yds	589 yds	662 yds	462 yds	813 yds	743 yds	593 yds	375 yds	777 yds	514 yds
Josh	480 yds	525 yds	476 yds	688 yds	630 yds	599 yds	401 yds	445 yds	487 yds	586 yds
Samantha	359 yds	594 yds	647 yds	325 yds	549 yds	577 yds	714 yds	700 yds	625 yds	590 yds
Steven	591 yds	500 yds	687 yds	481 yds	394 yds	673 yds	688 yds	491 yds	505 yds	602 yds
Quincy	667 yds	591 yds	626 yds	590 yds	525 yds	624 yds	300 yds	369 yds	529 yds	400 yds

Follow across that row and down the 29-Jun column until your lines meet. You should see that Steven sold 673 yds of carpet on June 29.

Did you see it? If not, try again.

Sometimes a straight edge is helpful in this process.

TOP SALES ASSOCIATES

Sales Associate	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	29-Jun	30-Jun	1-Jul	2-Jul	3-Jul
Kelley	640 yds	589 yds	662 yds	462 yds	813 yds	743 yds	593 yds	375 yds	777 yds	514 yds
Josh	480 yds	525 yds	476 yds	688 yds	630 yds	599 yds	401 yds	445 yds	487 yds	586 yds
Samantha	359 yds	594 yds	647 yds	325 yds	549 yds	577 yds	714 yds	700 yds	625 yds	590 yds
Steven	591 yds	500 yds	687 yds	481 yds	394 yds	673 yds	688 yds	491 yds	505 yds	602 yds
Quincy	667 yds	591 yds	626 yds	590 yds	525 yds	624 yds	300 yds	369 yds	529 yds	400 yds



LESSON 3

WIN CAREER SOLUTIONS

Practice several times until you are comfortable with this procedure. I will tell you the Sales Associate and the date; see if you can find the number of yards that associate sold before you read the answer. The answers are upside down at the bottom of this page. Don't peek!

How many yards did Josh sell on June 25?_____

How many yards did Samantha sell on July 2?_____

How many yards did Quincy sell on July 1?_____

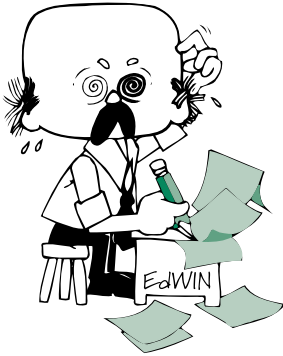
How many yards did Kelley sell on June 22?_____

TOP SALES ASSOCIATES

Sales Associate	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	29-Jun	30-Jun	1-Jul	2-Jul	3-Jul
Kelley	640 yds	589 yds	662 yds	462 yds	813 yds	743 yds	593 yds	375 yds	777 yds	514 yds
Josh	480 yds	525 yds	476 yds	688 yds	630 yds	599 yds	401 yds	445 yds	487 yds	586 yds
Samantha	359 yds	594 yds	647 yds	325 yds	549 yds	577 yds	714 yds	700 yds	625 yds	590 yds
Steven	591 yds	500 yds	687 yds	481 yds	394 yds	673 yds	688 yds	491 yds	505 yds	602 yds

Answers: 688, 889, 625, 369, 640

READING FORMS



Forms are probably the most common type of graphic with which you are familiar. However, no matter how many times you may have filled out some particular type of form, it is not uncommon to find that you have inadvertently filled out something incorrectly. Don't you feel silly when you put your first name down out of habit and then you notice they wanted your last name in that space? How many times have you done this... come on now, admit it... you've done it, haven't you? Well, so have we all at one time or another, so don't feel too silly.

Forms are an important part of information gathering in almost every aspect of life. It is one of the best ways to gather specific information needed. For example, if you wanted to enroll in school, how would the administrators know your name, what courses you wanted to take, where to bill your tuition, etc., if they had no means of acquiring this specific information. What do they do? They give you a form to fill out, of course!

If your job was to take orders and compile the information to send to the procurement department, how would they know what you needed if you didn't fill out a form correctly? Look at the following examples. There are as many different types of forms as there is information to gather.

Examples of forms:

Application for Employment

Just Down the Road College

OFFICE USE ONLY

Name: _____

Street Address _____

City _____ State _____ ZIP Code _____

Home Telephone _____ Work Telephone _____

Social Security No.

Previous Employment: _____

Education: _____

Position applied for _____

What is your availability to work?

☐ full-time
☐ part-time
☐ day shift
☐ night shift

Would you like to be considered for temporary employment?

☐ Yes
☐ No

Have you been employed by this company before?

☐ Yes
☐ No If so, give dates _____

MESSAGE

FOR _____

DATE _____ TIME _____

M _____

OF _____

PHONE _____

AREA CODE

NUMBER

EXT.

☐ FAX
☐ MOBILE

AREA CODE

NUMBER

EXT.

TELEPHONED		PLEASE CALL	
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RETURNED YOUR CALL	

MESSAGE

Look at the following form.

TACO ORDER

<input type="checkbox"/> Here	<input type="checkbox"/> Soft
<input type="checkbox"/> To go	<input type="checkbox"/> Hard

Toppings:

- ☐ Hot Sauce
- ☐ Sour Cream
- ☐ Jalapeño Peppers
- ☐ Black Olives

TACOS!

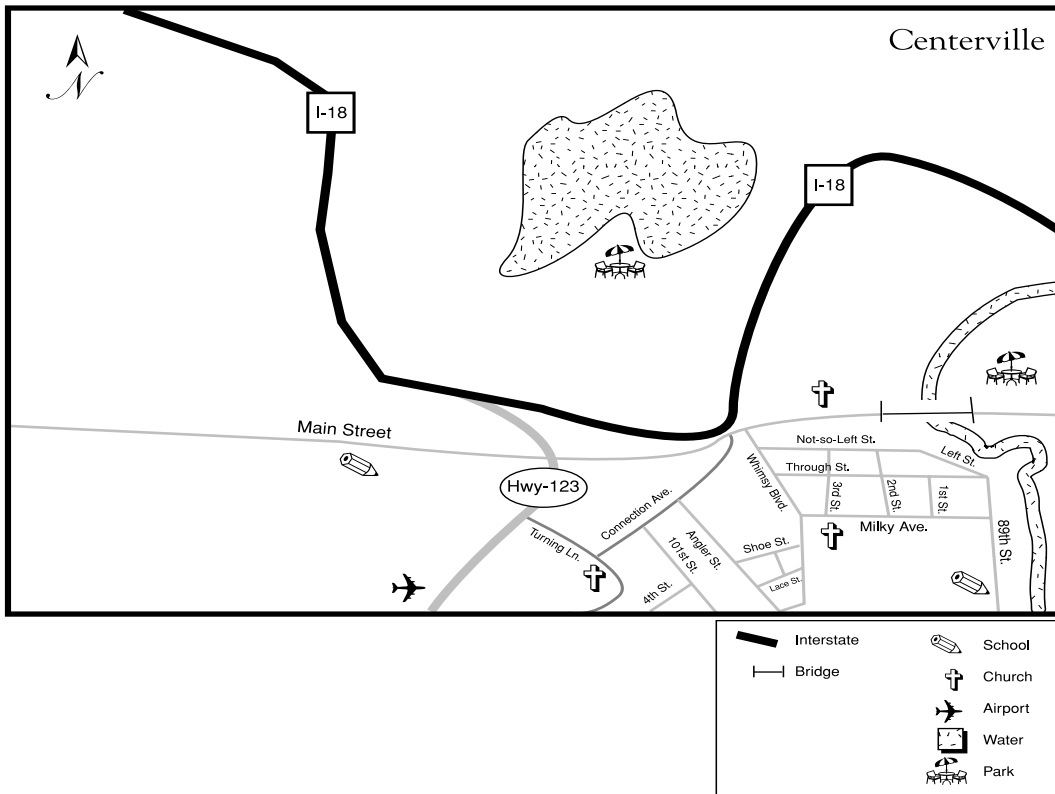
Looks simple, doesn't it? Sure, but what if you filled this out incorrectly? You would have one aggravated customer on your hands when he opens his order, mouth watering in anticipation of a plain taco, and instead he finds one with hot sauce & jalapeño peppers! And, he hates hot stuff! Oops, something went wrong! (You duck, as the taco comes sailing by your head!)

Most forms are pretty straight forward, albeit sometimes very long, so paying attention closely is your best defense against mistakes.

It's time to practice identifying basic formats of graphics and their primary purpose.

EXERCISE - IDENTIFYING GRAPHICS

Instructions: *Identify each type of graphic and describe its purpose.*



1. Type

2. Purpose

MESSAGE

FOR _____

DATE _____ **TIME** _____

M _____

OF _____

PHONE _____

AREA CODE
NUMBER
EXT.

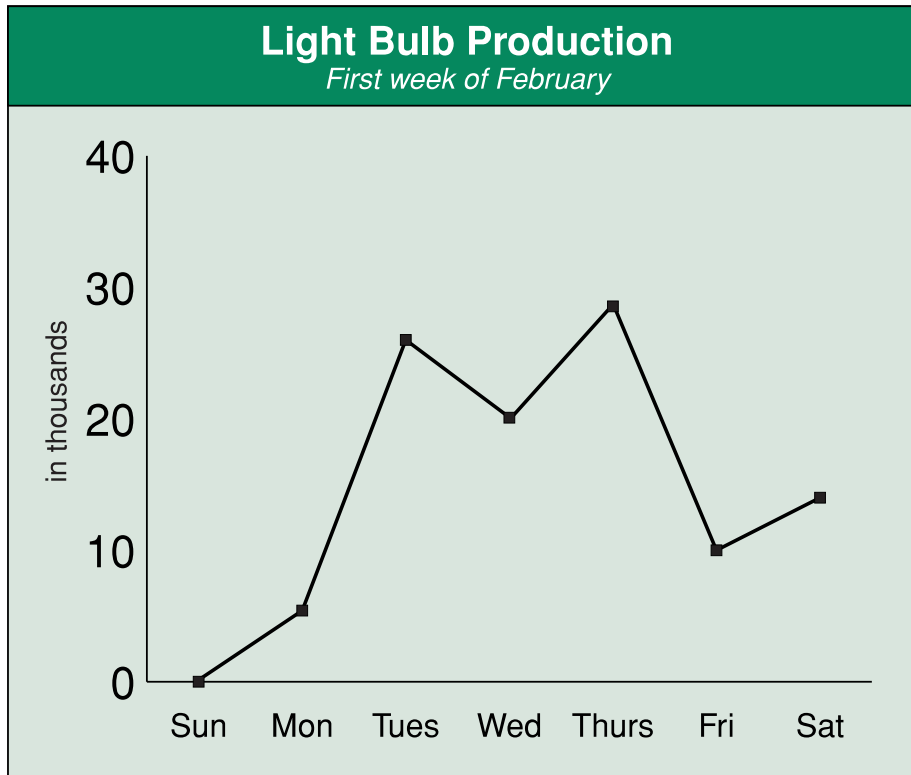
☐ **FAX** ☐ **MOBILE** _____

AREA CODE
NUMBER
EXT.

TELEPHONED		PLEASE CALL	
CAME TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		RETURNED YOUR CALL	

MESSAGE

3. Type
4. Purpose



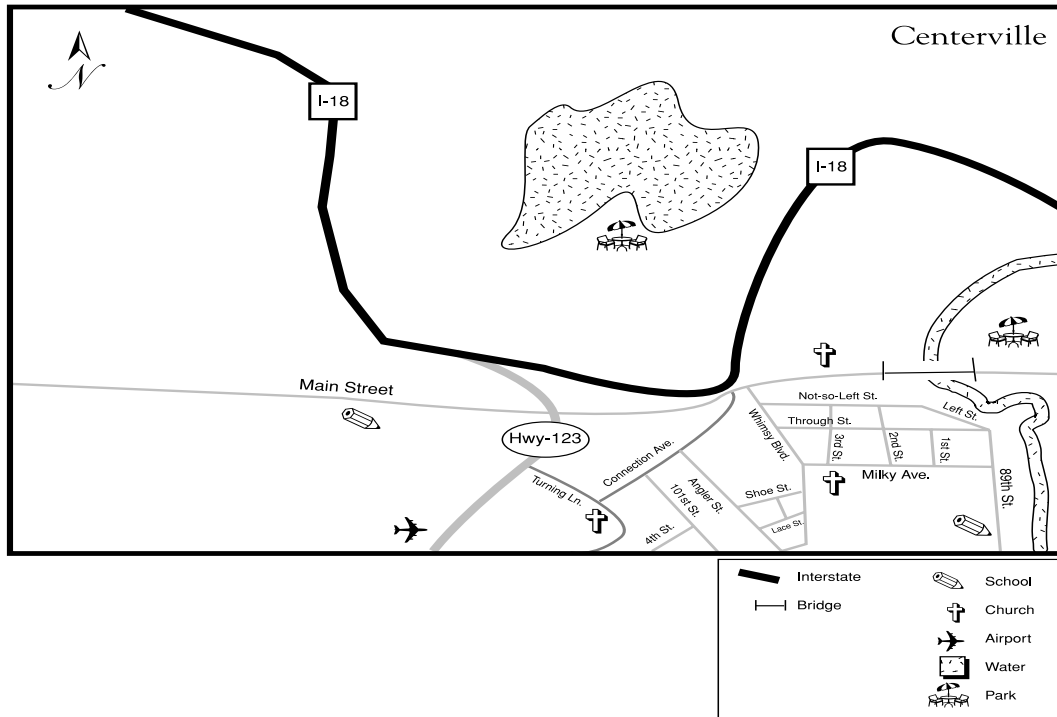
5. Type

6. Purpose



7. Type

8. Purpose



1. Type

Answer: map

2. Purpose

Answer: The purpose of the map is to describe a location in Centerville.

MESSAGE

FOR _____

DATE _____ TIME _____

M _____

OF _____

PHONE _____

AREA CODE
NUMBER
EXT.

☐ FAX ☐ MOBILE _____

AREA CODE
NUMBER
EXT.

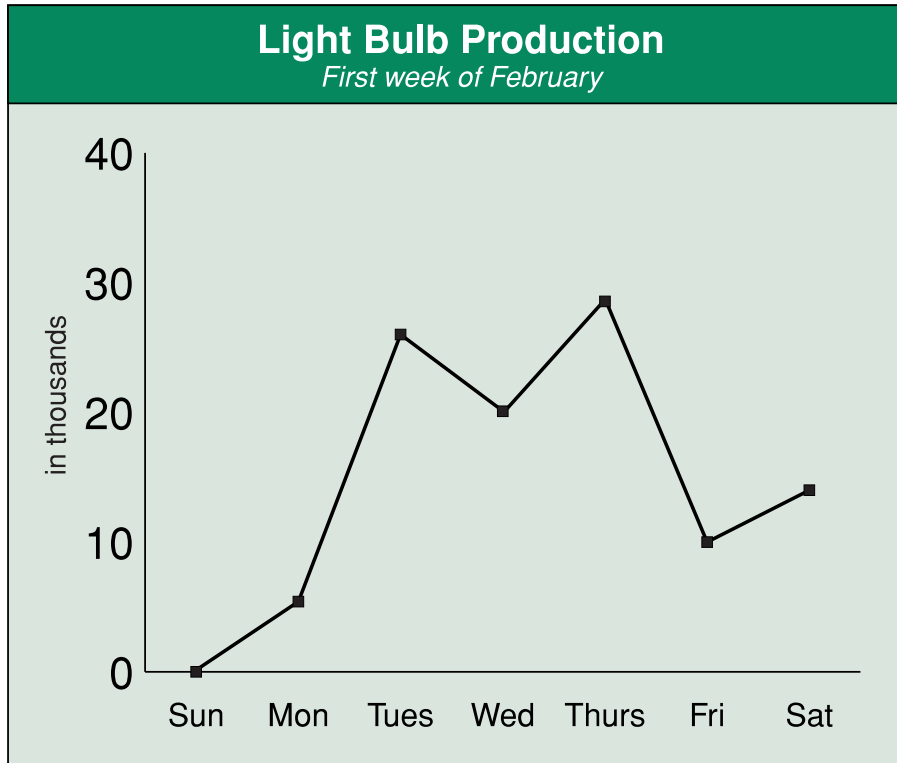
TELEPHONED	PLEASE CALL	
CAME TO SEE YOU	WILL CALL AGAIN	
WANTS TO SEE YOU	RETURNED YOUR CALL	

MESSAGE

3. Type

Answer: form
4. Purpose

Answer: The purpose of this form is to assist someone in taking messages.



5. Type

Answer: line graph

6. Purpose

Answer: The purpose is to show the number of light bulbs being produced each day during this week in February.



7. Type

Answer: digital dial

8. Purpose

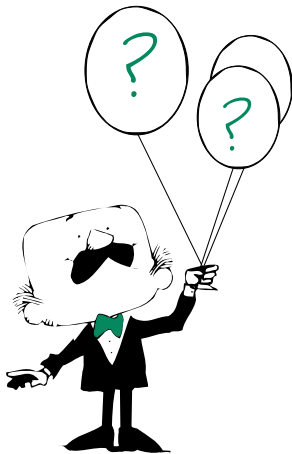
Answer: The purpose is to display the time.

If you are having difficulty identifying graphics in these exercises, you may need to review *Locating Information* Level 3 or reread Lesson 3 before you move on.

EXTRACTING DATA AND EXPLAINING THE SIGNIFICANCE

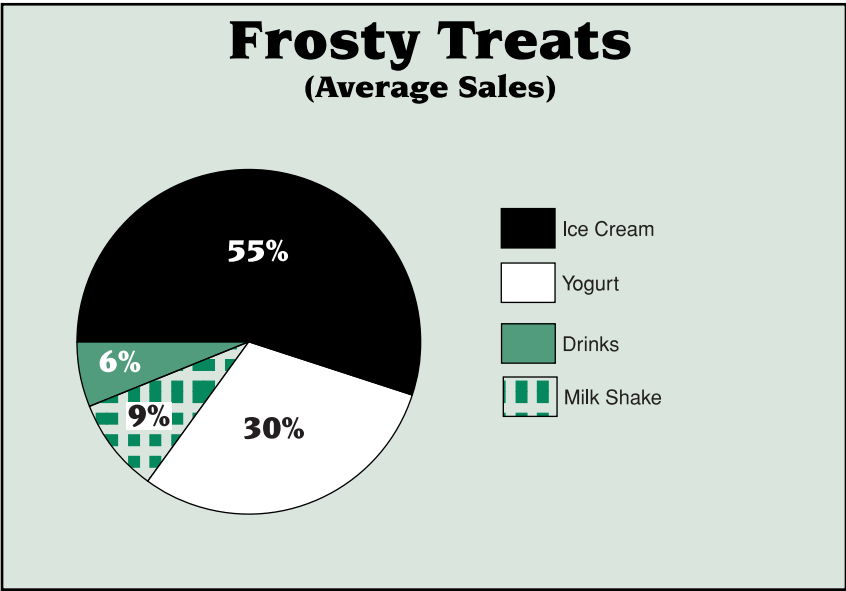
In this lesson we will combine objectives four and five as they require the same skills to accomplish. You will learn by doing rather than reading. If you do not know an answer, turn to the page and look it up. Think about why that is the answer. Then try again with the next graphic.

Pop Quiz: A pie graph equals
_____ percent.



EXERCISE - EXTRACTING AND INSERTING DATA

Instructions: *Answer the following questions using the graphic given.*



1. According to the pie graph, what percentage of sales does yogurt represent?

2. According to the pie graph, what percentage of sales do drinks represent?

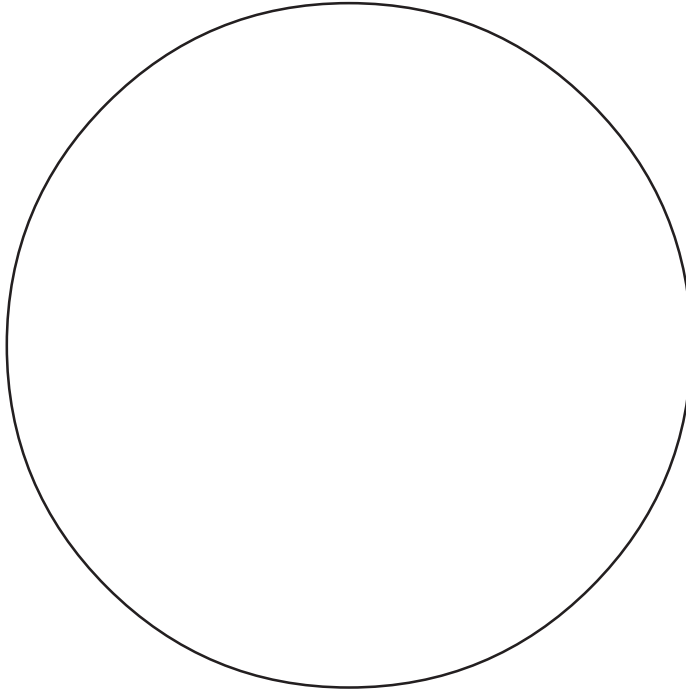
3. According to the pie graph, what percentage of sales does ice cream represent?



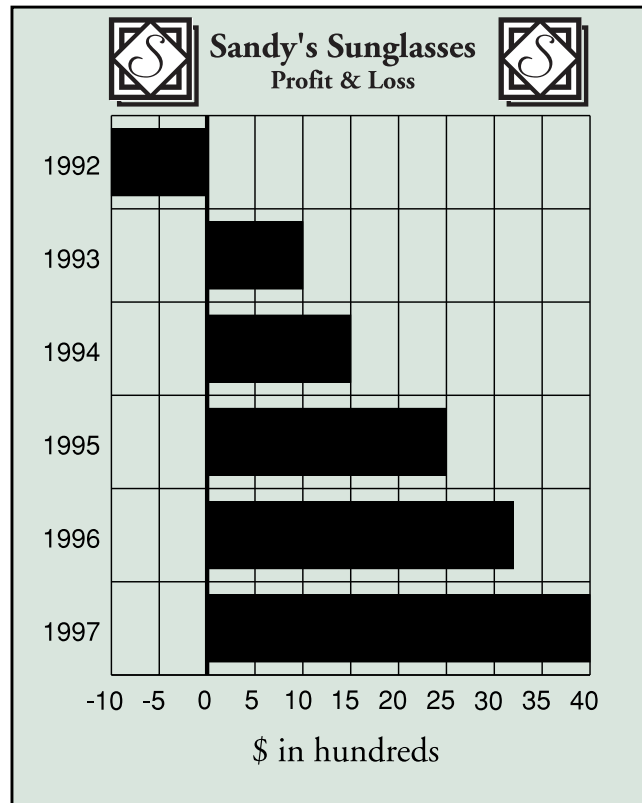
LESSON 4

WIN CAREER SOLUTIONS

4. Your boss wants a breakdown of beverages. Ice tea sales make up 1%, soft drinks make up 3%, and other is 2%. Using the previous graph to show the percentage of sales from Frosty Treats, include the beverage breakdown. (Remember, pie graphs always equal 100%.)



5. What could be one purpose of this graph? Explain its significance.

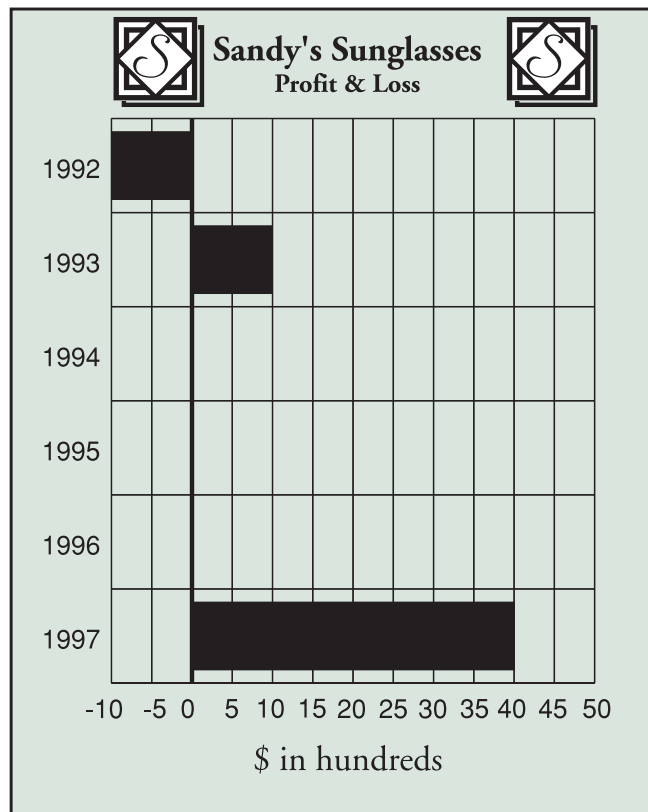


6. What were the profits of Sandy's Sunglasses in the year 1996?

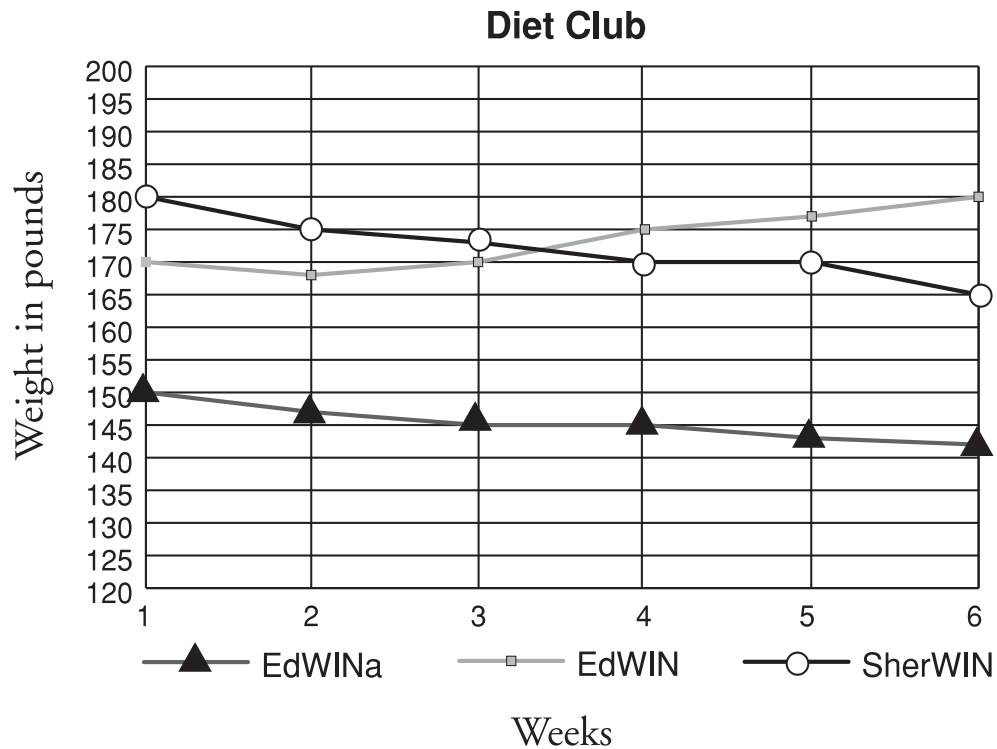
7. What were the profits of Sandy's Sunglasses in the year 1994?

8. What were the profits of Sandy's Sunglasses in the year 1992?

9. What is the significance of the 1992 figure?



10. What if the profits for 1994 were \$4,200, in 1995 they were \$3,900, and in 1996 they were \$4,900? How would you add this information to the graph? (Add information to the graph above.)



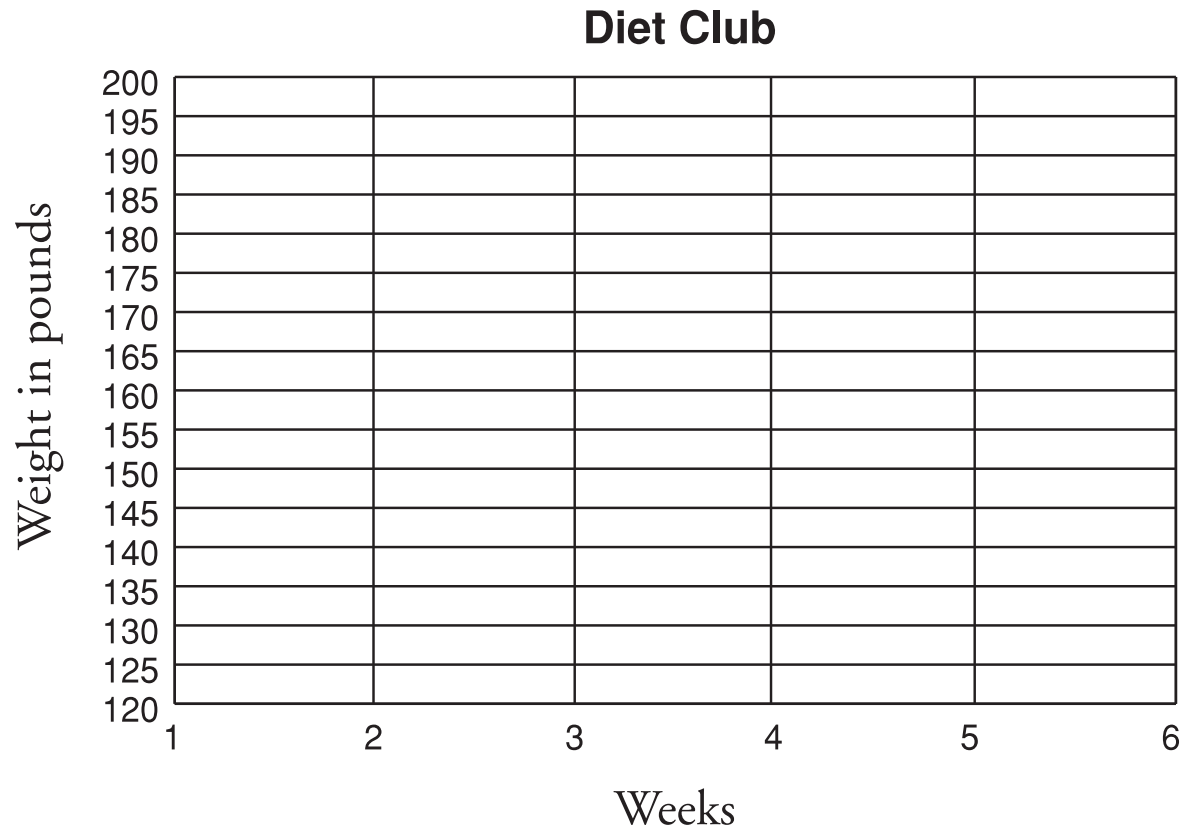
11. What is the weight of SherWIN after 6 weeks of dieting?

12. What is EdWIN's weight after 4 weeks at the Diet Club?

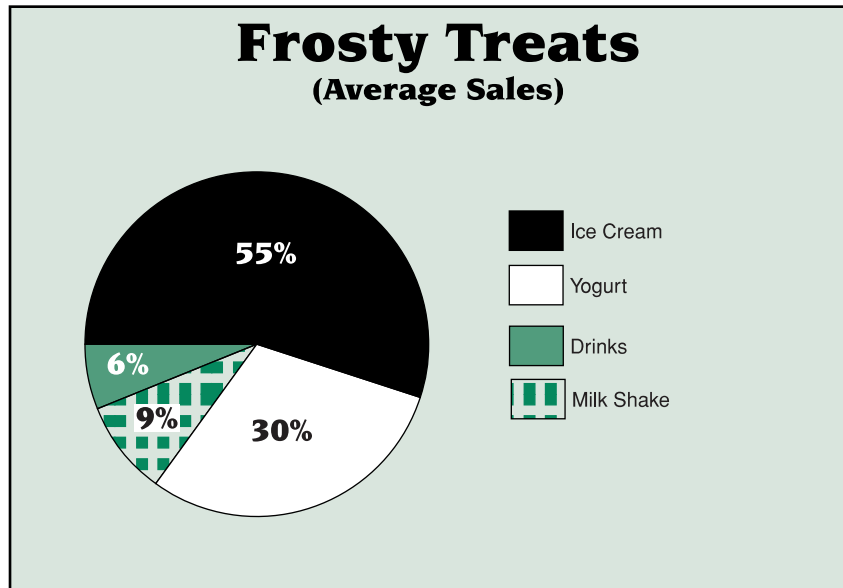
13. What does EdWINa weigh on week one?

14. What is the purpose of this graph?

15. We want to add Casey to this graph. He weighed 195 lb on week one, 190 lb on the 2nd week, 187 lb the 3rd and 4th weeks, 185 by week 5, and 180 on week 6. How would you add this to the graph?



ANSWERS TO EXERCISE



1. According to the pie graph, what percentage of sales does yogurt represent?

Answer: The white area of the graph indicates 30%.

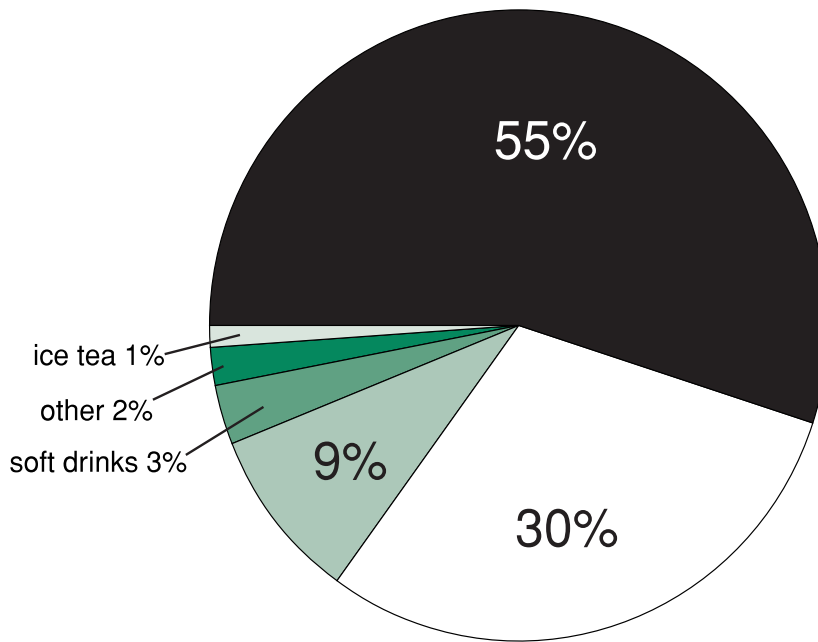
2. According to the pie graph, what percentage of sales do drinks represent?

Answer: 6%

3. According to the pie graph, what percentage of sales does ice cream represent?

Answer: 55%

4. Your boss wants a breakdown of drinks. Ice tea sales make up 1%, soft drinks make up 3%, and other is 2%. Using the previous graph to show the percentage of sales from Frosty Treats, include the beverage breakdown. (Remember, pie graphs always equal 100%.)

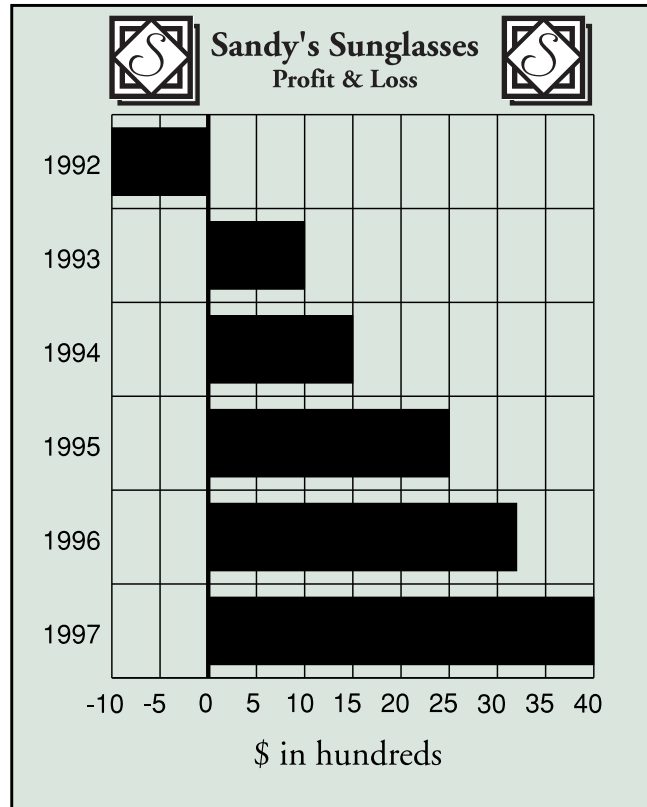


Answer: 6% of the pie represents drink sales. Subdivide this section by drink type using additional lines to indicate each portion.

5. What could be one purpose of this graph? Explain its significance.

Answers may vary.

- *The purpose may be to identify what product could be eliminated from the menu in an effort to cut costs.*
- *It may be to determine if there is a problem with any of the products so that recipe changes could be made.*
- *Maybe someone is trying to determine the least-sold menu item so that marketing knows what to emphasize in the next ad campaign.*



6. What were the profits of Sandy's Sunglasses in the year 1996?

Answer: approximately \$3,200

7. What were the profits of Sandy's Sunglasses in the year 1994?

Answer: \$1,500

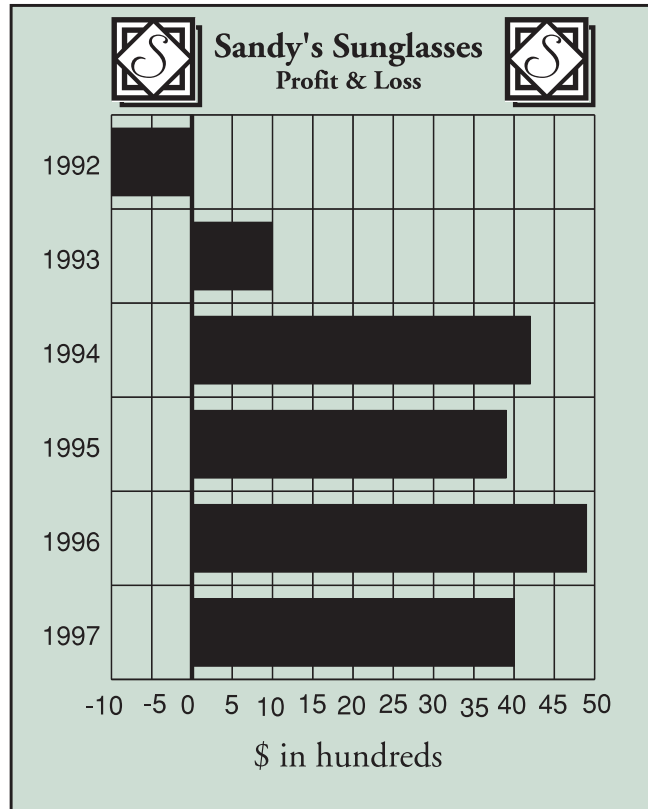
8. What were the profits of Sandy's Sunglasses in the year 1992?

Answer: -\$1,000 no profit but a loss

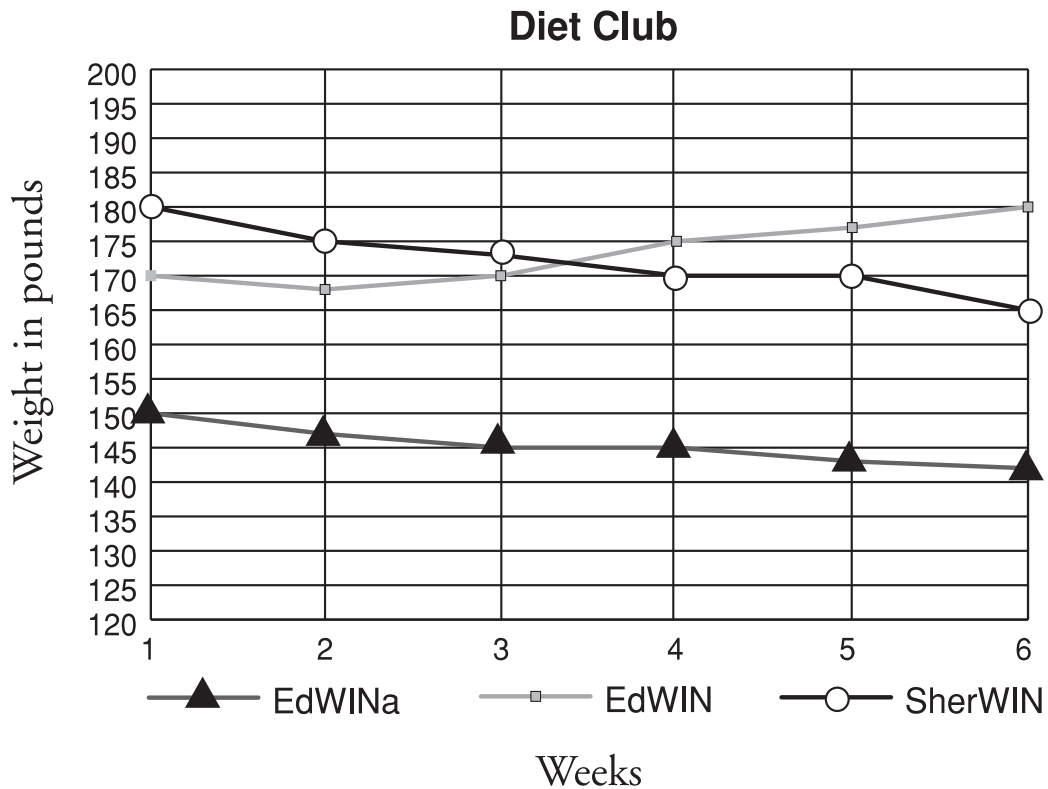
9. What is the significance of the 1992 figure?

Answer: Sandy's Sunglasses lost money in 1992.

WIN CAREER SOLUTIONS



10. What if the profits for 1994 were \$4,200, in 1995 they were \$3,900, and in 1996 they were \$4,900? How would you add this to the graph?



11. What is the weight of SherWIN after 6 weeks of dieting?

Answer: approximately 165 pounds

12. What is EdWIN's weight after 4 weeks at the Diet Club?

Answer: approximately 175 pounds

13. What does EdWINa weigh on week one?

Answer: 150 pounds

14. What is the purpose of this graph?

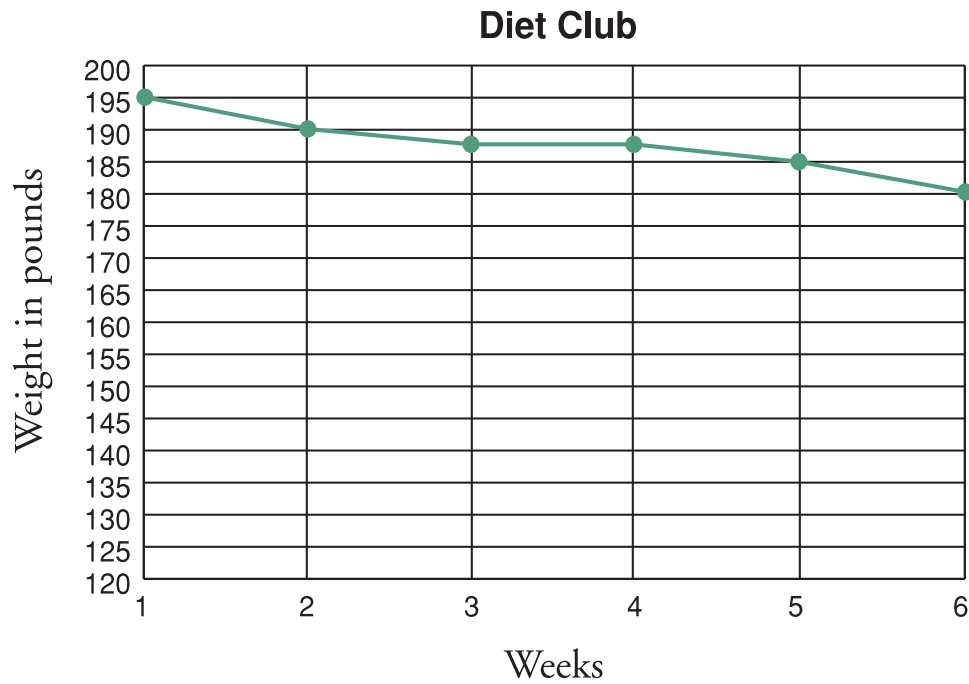
Answer: The purpose of the graph is to compare weight change of the dieters. EdWIN is not doing very well.



LESSON 4

WIN CAREER SOLUTIONS

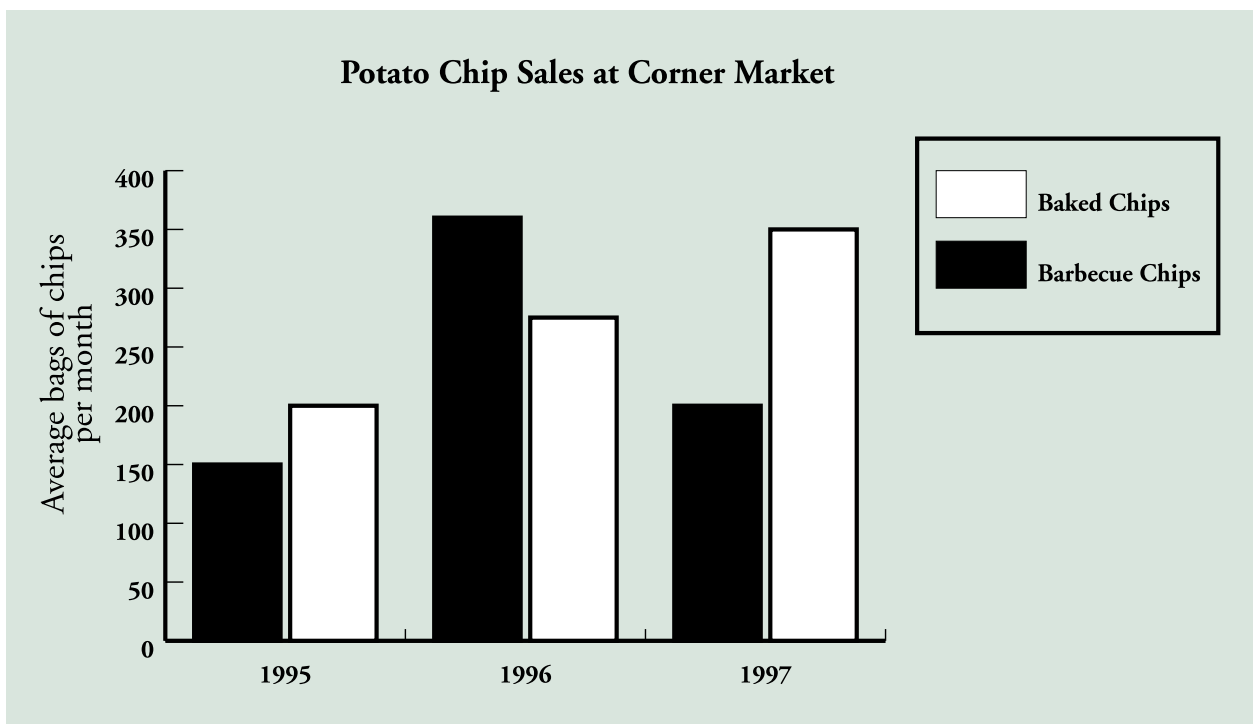
15. We want to add Casey to this graph. He weighed 195 lb on week one, 190 lb on the 2nd week, 187 lb the 3rd and 4th weeks, 185 by week 5, and 180 on week 6. How would you add this to the graph?



SUMMARIZING TRENDS AND COMPARING MAIN POINTS

We have already touched briefly upon these two objectives a little earlier, but now we will look into them more closely.

To summarize the main points of a graphic simply means to describe briefly the most important or main aspects that a graphic shows. Comparison is to note changes, trends, likes, and differences in the supplied data. Using the example, let's try to summarize and compare the data given in potato chip sales.



To summarize the graph, potato chip sales are good; an average of 550 - 650 bags of chips were sold every month for the last two years.

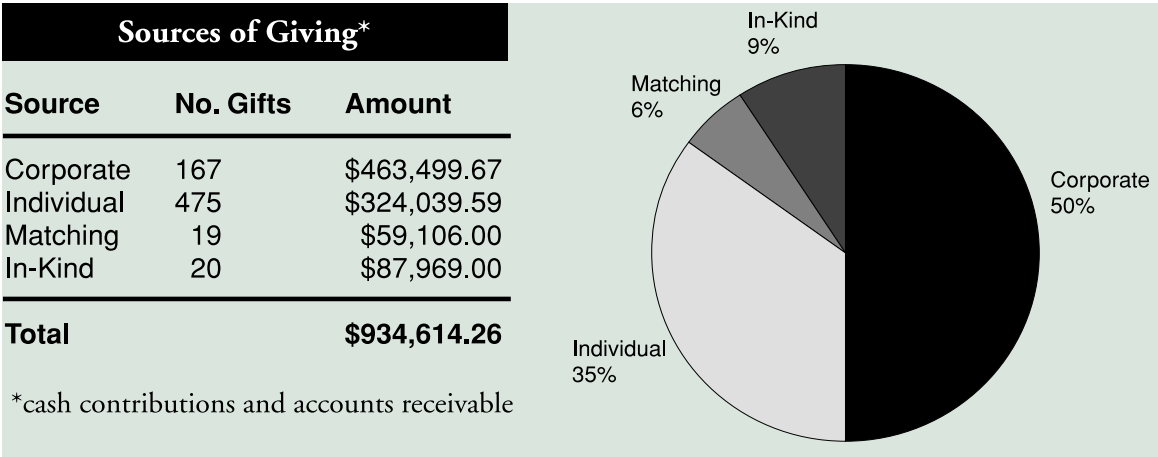
You might also notice that:



- Sales of Baked Chips have increased every year. This means you may need to anticipate stocking more product.
- Barbecue Chip sales are decreasing.

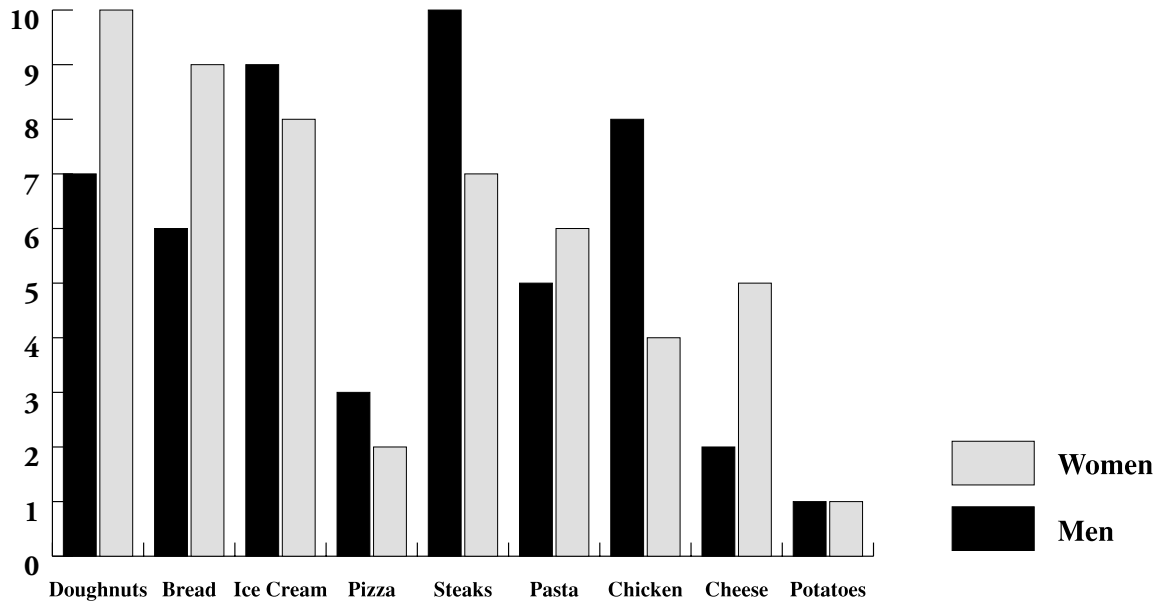
EXERCISE - SUMMARIZING GRAPHICS

Instructions: *Summarize the following graphics after you review each one.*



1. Summarize the main point of the graph.

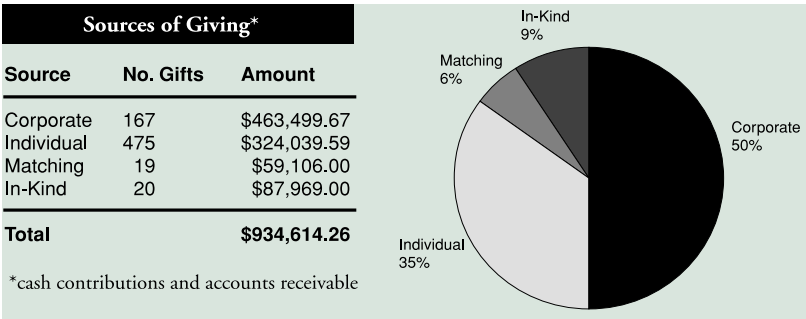
Favorite Foods of Overweight Men & Women



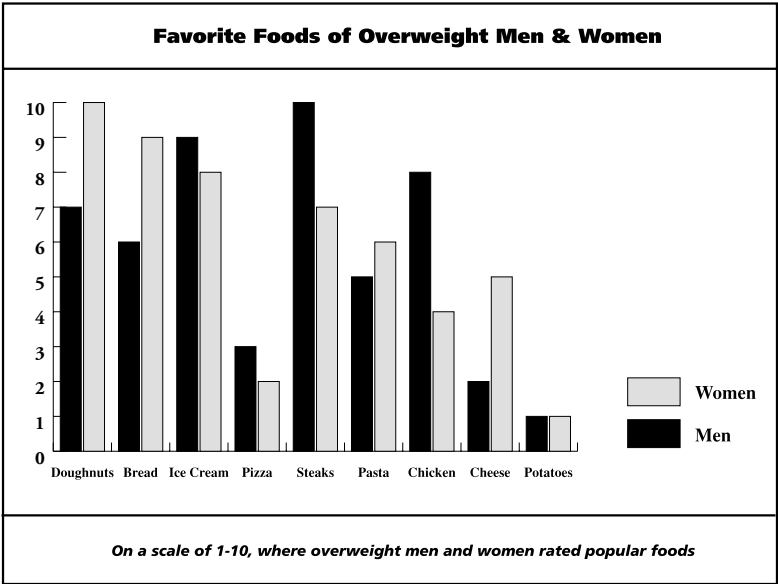
On a scale of 1-10, where overweight men and women rated popular foods

2. Summarize the main point of the graph.

ANSWERS TO EXERCISE



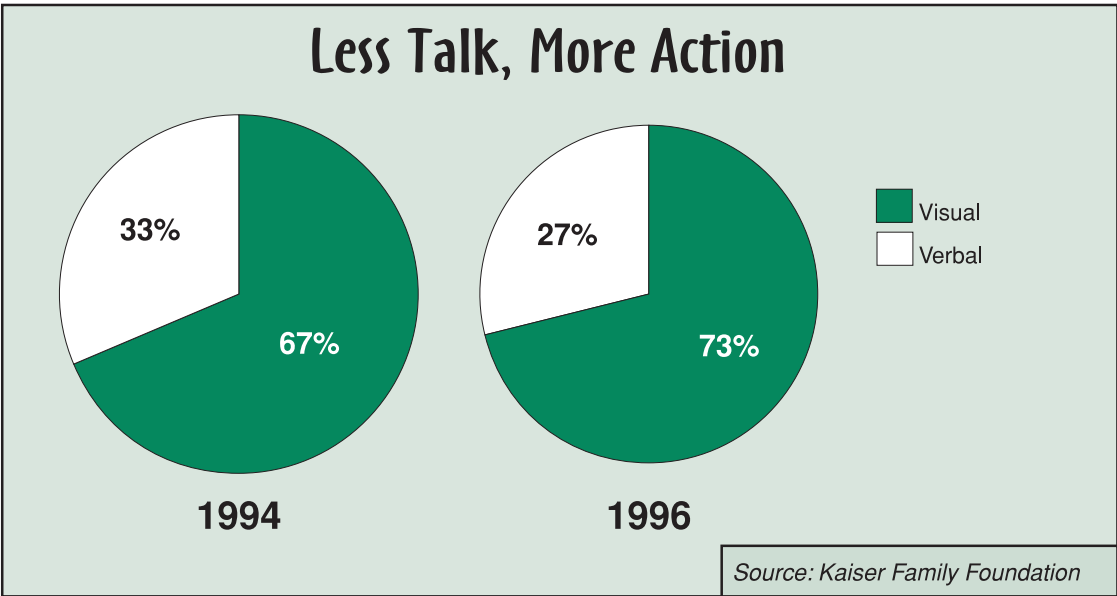
1. Summarize the main point of the graph.
Answer: The pie graph compares the different sources of cash gifts to the same organization.
2. Summarize the main point of the graph.



Answer: The bar graph compares the favorite foods of overweight people on a scale of 1 to 10.

DRAWING CONCLUSIONS FROM TWO SIMILAR GRAPHICS

Drawing a conclusion from two similar graphics is somewhat like comparison in that the point is to determine what the data means and what its significance is to the reader. This is a bit of an abstract idea, so let’s look again at the two pie graphs comparing visual and verbal time allotted on soap operas.





LESSON 6

Note that the two graphs are indicating visual time compared to verbal time, but they are supplying data from two different years.

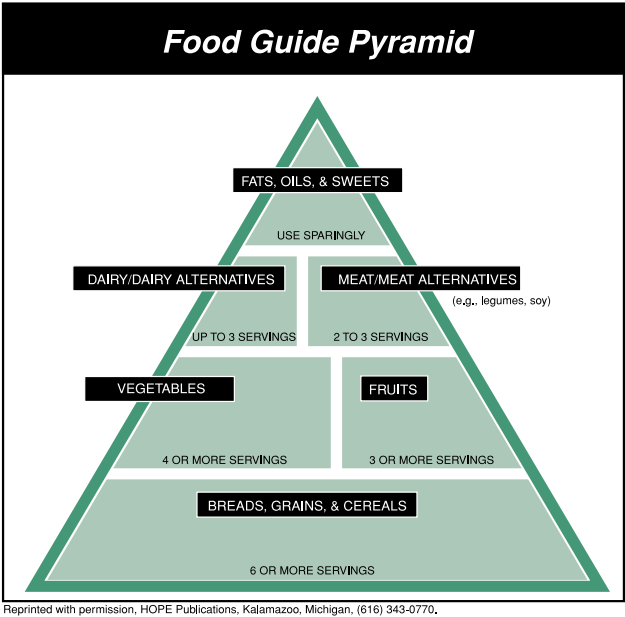
What could you conclude from this graphic?

Soap opera viewers prefer watching over listening.

Producers of “soaps” think viewers prefer less talk and more action.

EXERCISE - DRAWING CONCLUSIONS FROM TWO SIMILAR GRAPHICS

Instructions *Study the graphics and answer the questions that follow.*



	OFFICIAL 'ONE SERVING'	TYPICAL RESTAURANT SERVING
Bagel	2 oz	4 oz
Cinnamon roll	2 oz	8 oz
Chips	1 oz	2.5 oz
Cookies	1 oz (small)	2 oz (jumbo)
French fries	3 oz	6 oz
Ice cream	1 scoop	2 scoops
Meat	2 to 3 oz	4 to 20 oz
Milkshake	8 oz	20 oz
Muffins	2 oz	4 to 6 oz
Pancakes	2 to 3 medium	2 to 4 large
Pizza	1 or 2 slices	5 slices of medium pie
Popcorn	2 to 3 cups	7 to 16 cups
Salad dressing	2 Tbsp	4 Tbsp
Soft drink	8 oz	12 to 64 oz
Pasta with tomato sauce	.5 to 1 cup	3.5 cups

Reprinted with permission, HOPE Publications, Kalamazoo, Michigan, (616) 343-0770.
Source: U.S. Department of Agriculture; personal interviews

1. According to the two graphics, if a person eats a bagel at a typical restaurant, how many more servings of breads, grains and cereals does he need for the day?

2. Using maximum official 'one serving' portions, if a person orders a 12 oz steak, how many servings of meat/alternatives does he or she require?

a.

Grams of Fat Allowed Per Day				
Your Daily Calorie Intake	15%	20%	25%	30%
1200	20	27	33	40
1300	22	29	36	43
1400	23	31	39	47
1500*	25	33	42	50
1600	26	36	44	63
1700	28	38	47	57
1800	30	40	50	60
1900	31	42	53	63
2000	33	44	56	67
2100	35	47	58	70
2200**	36	49	61	73
2300	38	51	64	77
2400	40	53	67	80
2500	41	56	69	83
2600	43	58	73	87
2700	45	60	75	90
2800	46	62	77	93
2900	48	64	80	96
3000	50	68	83	100
Your personal fat budget: _____ Grams per day. *average woman (5'4") **average man (5'11")				

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b.

McDONALD'S MENU		
	Calories	Fat (Grams)
Burgers/Sandwiches		
Hamburger	255	9
Cheeseburger	305	13
Quarter Pounder	410	20
Quarter Pounder with Cheese	510	28
Big Mac	500	26
Fillet-O-Fish	370	18
McGrilled Chicken Sandwich	400	12
McChicken Sandwich	470	25
Chicken Fajita	190	8
Fries		
Small	220	12
Medium	320	17
Large	400	22

Reprinted with permission, HOPE Publications, Kalamazoo, Michigan, (616) 343-0770.

To determine about how many calories you need a day to maintain your weight, multiply your desired weight by 11 if you are sedentary, by 13 if you are moderately active, or by 15 if you are active.

Example: desired weight of 150 pounds x 11 = 1,650 calories needed a day

To determine how many grams of fat you need a day, see the accompanying chart. You will need to decide if you want 15%, 20%, 25%, or 30% of your daily calories to come from fat - the lower the better.

3. If my ideal weight is 160 lb and I am moderately active, what is my recommended daily calorie intake?

4. If I can choose to limit my daily calories from fat to 15%, how many grams of fat am I allowed for a 2,080 calorie diet?



LESSON 6

5. Use the information in figures a and b to calculate your recommended daily calorie intake.

ideal weight \times lifestyle # = calories

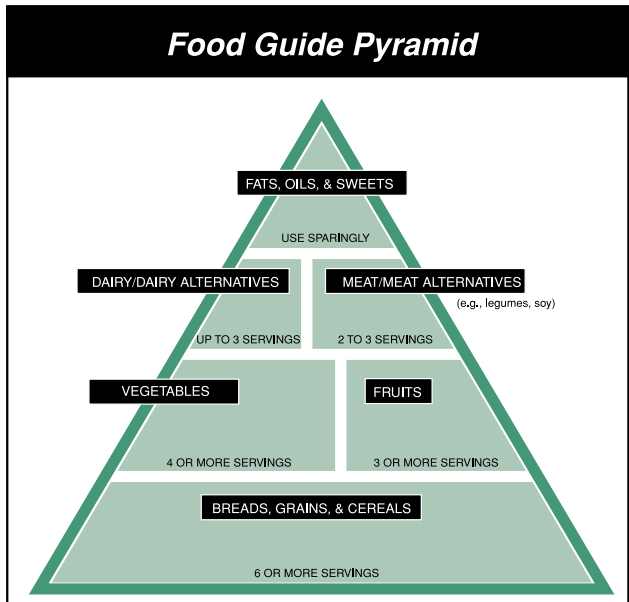
_____ \times _____ = _____

6. If I eat a McDonald's Quarter Pounder with Cheese and large fries, how many calories have I consumed?

7. How many grams of fat have I consumed?

8. Prior to my McDonald's meal, I had consumed 590 calories, but no fat grams (if that is possible!). What percentage of my diet was consumed through fat grams after the McDonald's meal?

ANSWERS TO EXERCISE



Reprinted with permission, HOPE Publications, Kalamazoo, Michigan, (616) 343-0770.

	OFFICIAL 'ONE SERVING'	TYPICAL RESTAURANT SERVING
Bagel	2 oz	4 oz
Cinnamon roll	2 oz	8 oz
Chips	1 oz	2.5 oz
Cookies	1 oz (small)	2 oz (jumbo)
French fries	3 oz	6 oz
Ice cream	1 scoop	2 scoops
Meat	2 to 3 oz	4 to 20 oz
Milkshake	8 oz	20 oz
Muffins	2 oz	4 to 6 oz
Pancakes	2 to 3 medium	2 to 4 large
Pizza	1 or 2 slices	5 slices of medium pie
Popcorn	2 to 3 cups	7 to 16 cups
Salad dressing	2 Tbsp	4 Tbsp
Soft drink	8 oz	12 to 64 oz
Pasta with tomato sauce	.5 to 1 cup	3.5 cups

Reprinted with permission, HOPE Publications, Kalamazoo, Michigan, (616) 343-0770.
Source: U.S. Department of Agriculture; personal interviews

1. According to the two graphics, if a person eats a bagel at a typical restaurant, how many more servings of breads, grains and cereals does he need for the day?

Answer: The first row of the table says a restaurant serving is twice the size of one official serving. The pyramid indicates 6 or more breads, grains, and cereals are recommended per day. So, after the bagel, 4 or more bread group foods are suggested.

2. Using maximum official ‘one serving’ portions, if a person orders a 12 oz steak, how many servings of meat/alternatives does he or she require?

Answer: A 3 oz maximum official serving means a 12 oz steak provides 4 servings (12 ÷ 3 = 4). The food guide suggests 2 to 3 meat servings a day. This person is going to gain weight unless he or she is exercising regularly!

a.

Grams of Fat Allowed Per Day				
Your Daily Calorie Intake	15%	20%	25%	30%
1200	20	27	33	40
1300	22	29	36	43
1400	23	31	39	47
1500*	25	33	42	50
1600	26	36	44	63
1700	28	38	47	57
1800	30	40	50	60
1900	31	42	53	63
2000	33	44	56	67
2100	35	47	58	70
2200**	36	49	61	73
2300	38	51	64	77
2400	40	53	67	80
2500	41	56	69	83
2600	43	58	73	87
2700	45	60	75	90
2800	46	62	77	93
2900	48	64	80	96
3000	50	68	83	100
Your personal fat budget: _____ Grams per day. *average woman (5'4") **average man (5'11")				

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b.

McDONALD'S MENU		
	Calories	Fat (Grams)
Burgers/Sandwiches		
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Quarter Pounder	410	20
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McGrilled Chicken Sandwich	400	12
McChicken Sandwich	470	25
Chicken Fajita	190	8
Fries		
Small	220	12
Medium	320	17
Large	400	22

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To determine about how many calories you need a day to maintain your weight, multiply your desired weight by 11 if you are sedentary, by 13 if you are moderately active, or by 15 if you are active.

Example: desired weight of 150 pounds x 11 = 1,650 calories needed a day

To determine how many grams of fat you need a day, see the accompanying chart. You will need to decide if you want 15%, 20%, 25%, or 30% of your daily calories to come from fat - the lower the better.



LESSON 6

3. If my ideal weight is 160 lb and I am moderately active, what is my recommended daily calorie intake?

Answer: $160 \times 13 = 2,080$

4. If I can choose to limit my daily calories from fat to 15%, how many grams of fat am I allowed for a 2,080 calorie diet?

Answer: Estimate 2,080 calories at 2,100 daily calorie intake. At 15%, **35** grams of fat would be allowed.

5. Use the information in figures a and b to calculate your recommended daily calorie intake.

Answer: Your ideal weight \times lifestyle(11, 13, or 15) = calories

_____ \times _____ = _____

Calculate your own recommendation.

6. If I eat a McDonald's Quarter Pounder with Cheese and large fries, how many calories have I consumed?

Answer: 910 calories

7. How many grams of fat have I consumed?

Answer: 50 grams of fat

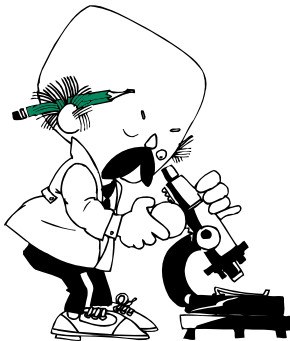
8. Prior to my McDonald's meal, I had consumed 590 calories, but no fat grams (if that is possible!). What percentage of my diet was consumed through fat grams after the McDonald's meal?

Answer: The McDonald's meal contained 50 fat grams. A 1500 calorie diet with 50 fat grams indicates **30%** of the diet came from fat.

Well, you have now completed this level of *Locating Information*. Congratulations!! See I told you it wasn't going to be a terrible chore. Now, if you feel confident enough, complete the Posttest. If you still feel a little doubtful, go back and review the information in Level 3. Take the Posttest until you make a good score. Personally, I think 95% is pretty good, but why not go for 100%? Good luck... I know you can do it.

Answers for the Posttest questions are provided at the end of the workbook... but don't peek! Your score will not be accurate and it will not reflect whether or not you have learned the information in this course thoroughly!!

Don't peek at the answers.



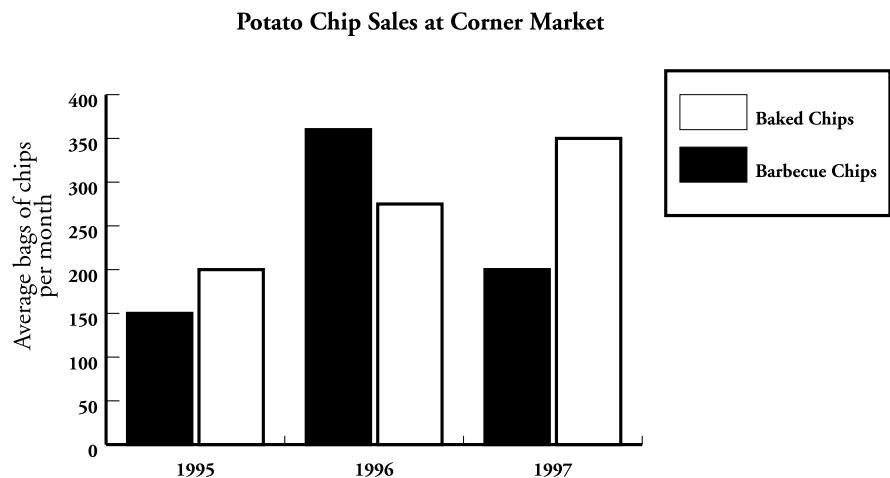
EXERCISE - POSTTEST

Instructions: *Answer the following questions.*

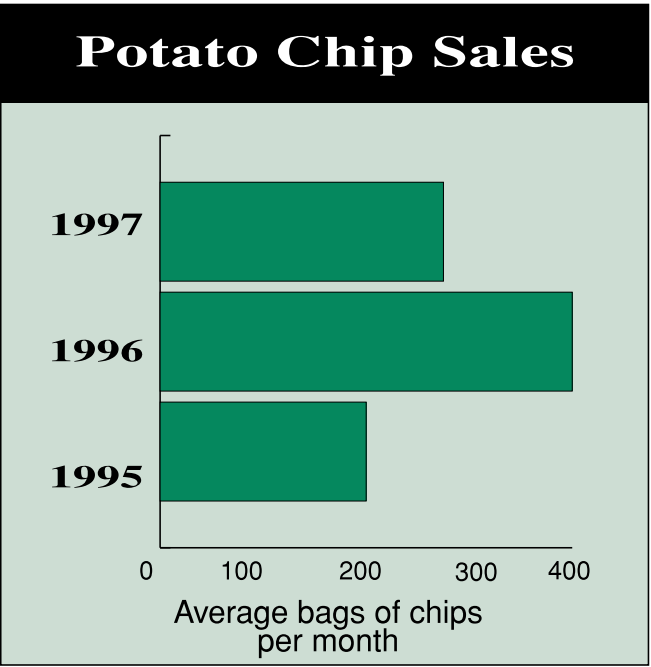
1. Define the term “graphics.”

2. What type of graphic would you use to chart the pattern of change in weight data over a period of time?

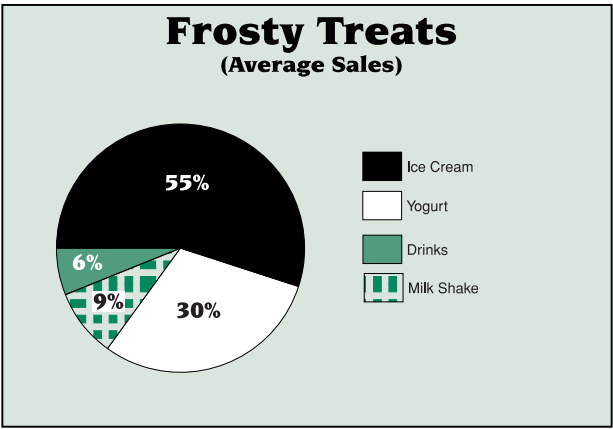
3. Look at the following graphic and identify its specific type. (Is it a chart, table, map, diagram, line graph, etc.?)



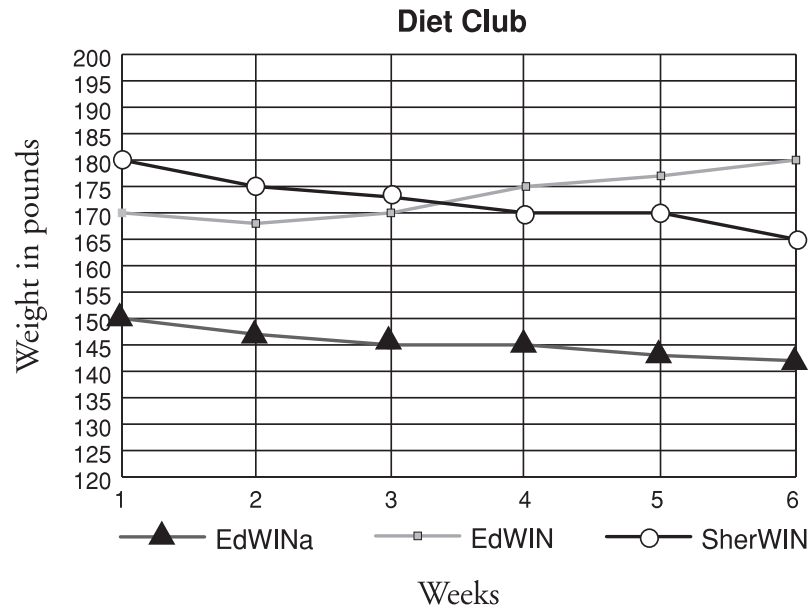
4. Look at the following graphic and identify its specific type.



5. Look at the following graphic and identify its specific type.



6. Look at the following graphic and identify its specific type.



7. Look at the following graphic and identify its specific type.

Application for Employment
Just Down the Road College

OFFICE USE ONLY
[] [] [] [] [] []
[] [] [] [] [] []

Name: _____

Street Address _____

City _____ State _____ ZIP Code _____

Home Telephone _____ Work Telephone _____

Social Security No. [] [] [] [] [] []

Previous Employment: _____

Education: _____

Position applied for _____

What is your availability to work? ☐ full-time ☐ part-time ☐ day shift ☐ night shift

Would you like to be considered for temporary employment? ☐ Yes ☐ No

Have you been employed by this company before? ☐ Yes ☐ No If so, give dates _____



8. Define key as used in reference to graphics.

9. Define a scale used on a map.

10. What are the basic steps that you should take every time you read a graphic?

11. What is the purpose of a flowchart?



12. Instruments and dials provide raw data in its original form. True or False?

13. Name the two types of readouts for instruments and dials.

14. Pie graphs can represent more or less than 100%. True or False?



Using the following table, answer the questions.

TOP SALES ASSOCIATES

Sales Associate	22-Jun	23-Jun	24-Jun	25-Jun	26-Jun	29-Jun	30-Jun	1-Jul	2-Jul	3-Jul
Kelley	640 yds	589 yds	662 yds	462 yds	813 yds	743 yds	593 yds	375 yds	777 yds	514 yds
Josh	480 yds	525 yds	476 yds	688 yds	630 yds	599 yds	401 yds	445 yds	487 yds	586 yds
Samantha	359 yds	594 yds	647 yds	325 yds	549 yds	577 yds	714 yds	700 yds	625 yds	590 yds
Steven	591 yds	500 yds	687 yds	481 yds	394 yds	673 yds	688 yds	491 yds	505 yds	602 yds
Quincy	667 yds	591 yds	626 yds	590 yds	525 yds	624 yds	300 yds	369 yds	529 yds	400 yds

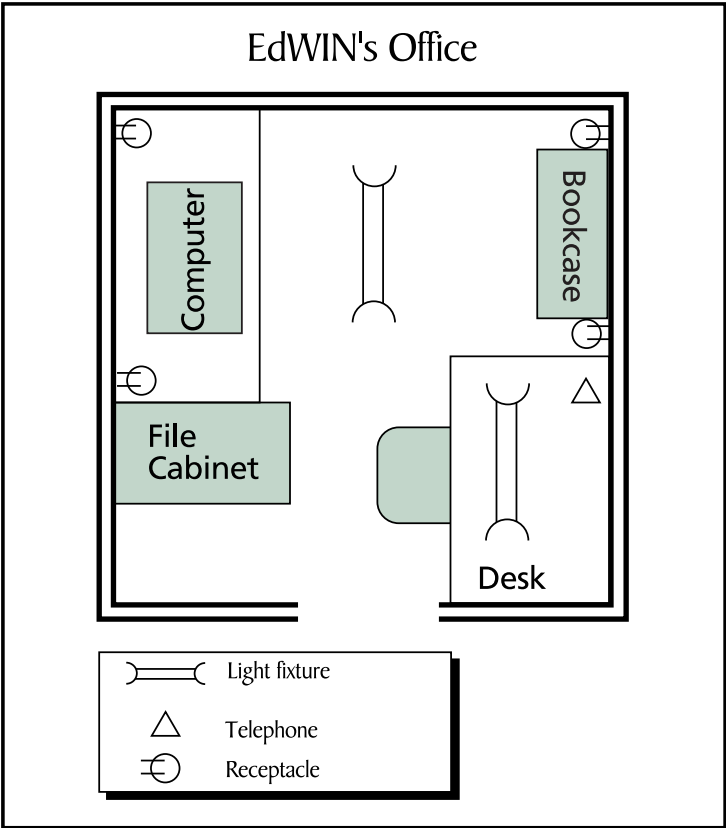
15. How many yards of carpet did Samantha sell on July 3?

16. How many yards of carpet did Josh sell on June 29?

17. How many yards of carpet did Quincy sell on June 22?

18. How many yards of carpet did Kelley sell on June 24?

Look at the sample floor plan and answer the following questions.



19. How many receptacles are there in this plan?

20. What does the triangle represent?

21. How many lights are there?

22. What are the scale dimensions for this space?

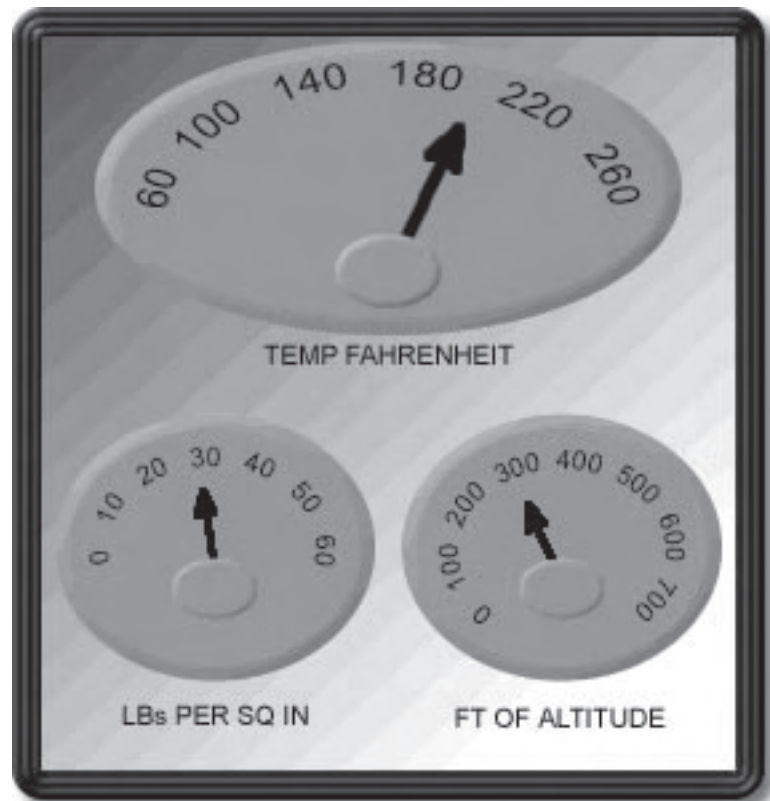


23. Name four uses of forms.

You're almost to the finish line!



Use the following graphic to answer the questions.



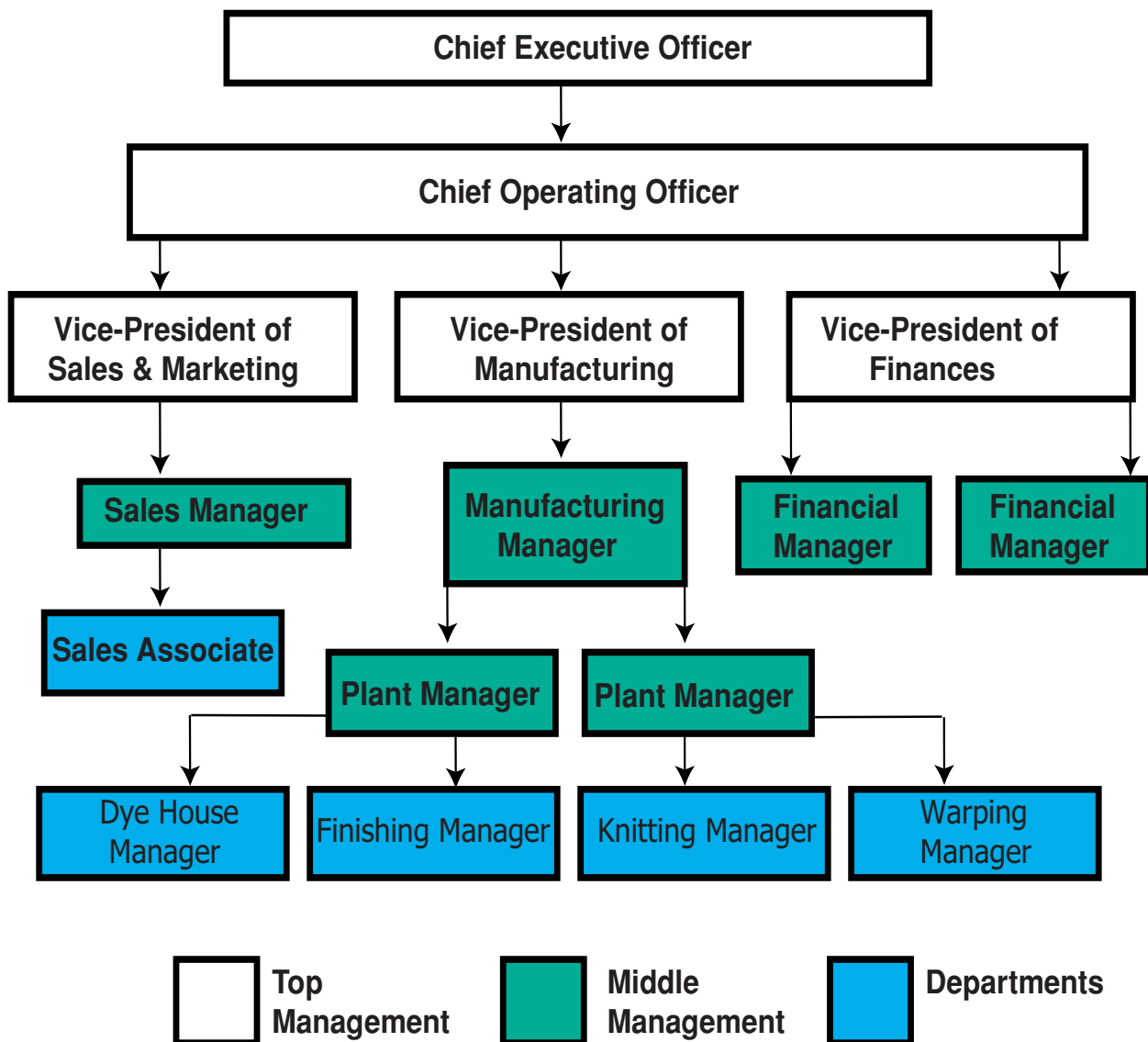
24. What type of format does this instrument use?

25. How many scales and pointers does this gauge have?

26. What do they represent?

27. What is the estimated temperature reading?

Using the following graphic, answer the questions.





28. What type of graphic is pictured on the?

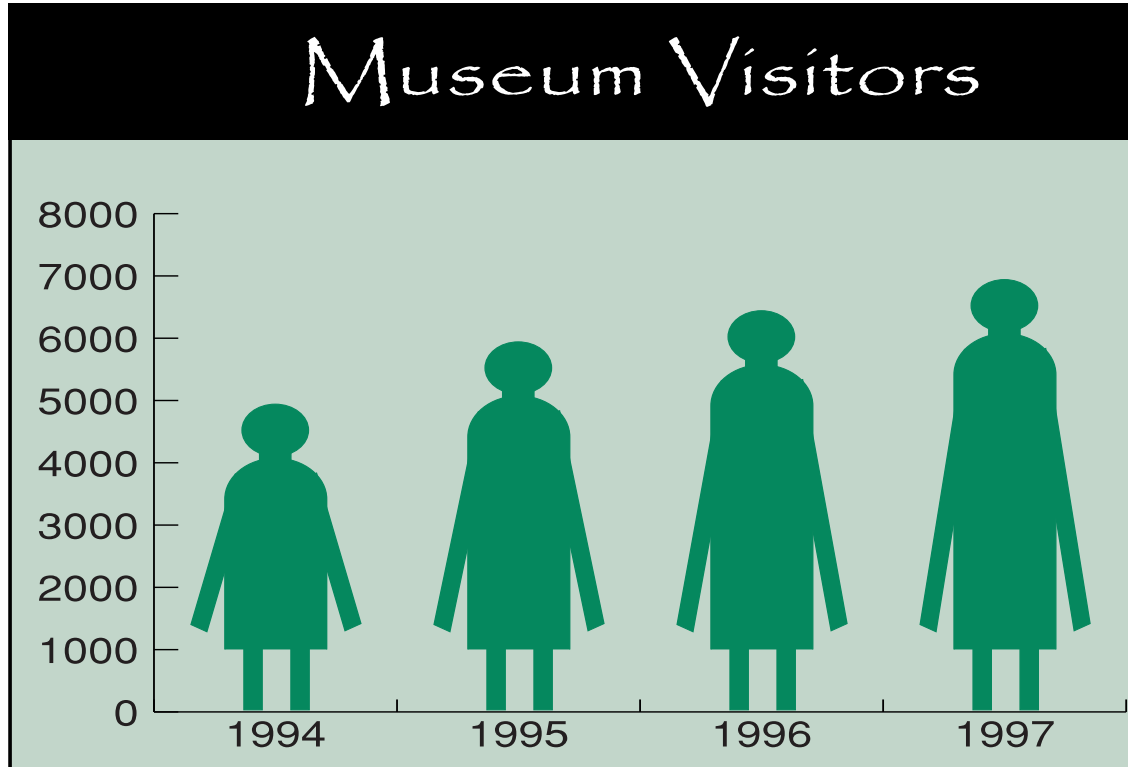
29. To whom does the Vice President of Finances answer directly?

30. To whom does the Plant Manager answer directly?

31. To whom do employees of the Plant Department answer directly?

32. Are the Sales Manager and Manufacturing Manager in top management, middle management, or departments of the company?

Extract or insert data as directed for the following graphics.



33. How many museum visitors were there in 1995?

34. The visitor total for the year 1993 was 8,000. Decide how you would show this?

35. What year did the museum experience the greatest number of visitors?

39. You really like the plant family “Lilaceae”. What type of plant is that according to the Blossoms and Blooms chart?

40. You want to buy a plant that is 6” tall. According to the chart below, which plant or plants are NOT available at the height of 6” or more?

Blossoms and Blooms				
Type	Height	Family	Cost of 3" pot	Cost of 6" pot
Begonia	4 inches	Begoniaceae	3.99	5.99
Geranium	6 inches	Geraniaceae	4.50	6.00
Morning Glory	8 inches	Convolvulaceae	5.00	8.00
Tulip	5 inches	Liliaceae	4.99	6.99
Gladiola	6 inches	Iridaceae	5.99	8.99



ANSWERS TO EXERCISE

1. Define the term “graphics.”

Answer: Graphics are any visual means of communicating information contained within a document.

2. What type of graphic would you use to chart the pattern of change in weight data over a period of time?

Answer: a graph, particularly line graphs show change well

3. Look at the following graphic and identify its type. (Is it a chart, table, map, diagram, line graph, etc.?)

Answer: vertical bar graph

4. Look at the following graphic and identify its specific type.

Answer: horizontal bar graph

5. Look at the following graphic and identify its specific type.

Answer: pie graph, also called a pie chart

6. Look at the following graphic and identify its specific type.

Answer: line graph

7. Look at the following graphic and identify its specific type.

Answer: form

8. Define key as used in reference to graphics.

Answer: A detailed chart showing what the symbols and icons represent in a graphic.

9. Define a scale used on a map.

Answer: A scale shows measurement of a smaller distance that represents a larger distance, such as, one inch equals one mile, etc.



10. What are the basic steps that you should take every time you read a graphic?

Answer:

- 1. Preview to determine format.*
- 2. Read the title and subtitle of the graphic.*
- 3. Read any labels, captions, or keys that are included.*
- 4. Try to determine the purpose of the graphic.*
- 5. If the graphic is integrated into the text, read the text before and after the graphic.*

11. What is the purpose of a flowchart?

Answer: A flowchart is a drawing that represents a process; arrows guide the flow and different symbols indicate start, decision, action, etc.

12. Instruments and dials provide raw data in its original form. True or False?

Answer: true

13. Name the two types of readouts for instruments and dials.

Answer: digital and analog

14. Pie graphs can represent more or less than 100%. True or False?

Answer: false

15. How many yards of carpet did Samantha sell on July 3?

Answer: 590

16. How many yards of carpet did Josh sell on June 29?

Answer: 599

17. How many yards of carpet did Quincy sell on June 22?

Answer: 667

18. How many yards of carpet did Kelley sell on June 24?

Answer: 662



19. How many receptacles are there in this plan?

Answer: 4

20. What does the triangle represent?

Answer: a telephone

21. How many lights are there?

Answer: 2

22. What are the scale dimensions for this space?

Answer: no scale is given

23. Name four uses of forms.

Suggested answers: (answers may vary)

- *job application*
- *insurance reimbursement*
- *medical information for hospital admission*
- *marriage license*
- *college entrance application*
- *message notes*
- *order forms*

24. What type of format does this instrument use?

Answer: analog

25. How many scales and pointers does this gauge have?

Answer: 3

26. What do they represent?

Answer: temperature, lb per sq in, ft of alt

27. What is the temperature reading?

Answer: approximately 200 degrees Fahrenheit

28. What type of graphic is pictured?

Answer: organizational chart



29. To whom does the Vice President of Finances answer directly?

Answer: Chief Operating Officer

30. To whom does the Plant Manager answer directly?

Answer: Manufacturing Manager

31. To whom do employees of the Plant Department answer directly?

Answer: Plant Manager

32. Are the Business Sales Manager and Manufacturing Manager in top management, middle management, or departments of the company?

Answer: middle management

33. How many museum visitors were there in 1995?

Answer: 6,000

34. The visitor total for the year 1993 was 8,000. Decide how you would show this?

Answer: insert a vertical bar before 1994, next to the number of visitors on the left, that reaches up to 8,000

35. What year did the museum experience the greatest number of visitors?

Answer: 1997 shows 7,000, but if 1993 is included, it would show the greatest number of visitors as 8,000

36. What is the cost of a 6” pot of Morning Glories?

Answer: \$8.00

37. According to the chart above, what is the least expensive plant that is 6” tall in a 3” pot?

Answer: Geranium

Blossoms and Blooms				
Type	Height	Family	Cost of 3" pot	Cost of 6" pot
Begonia	4 inches	Begoniaceae	3.99	5.99
Geranium	6 inches	Geraniaceae	4.50	6.00
Morning Glory	8 inches	Convolvulaceae	5.00	8.00
Tulip	5 inches	Liliaceae	4.99	6.99
Gladiola	6 inches	Iridaceae	5.99	8.99

38. Using the Blossoms and Blooms Table, make a summary statement regarding the data.

Answer: Answers will vary.

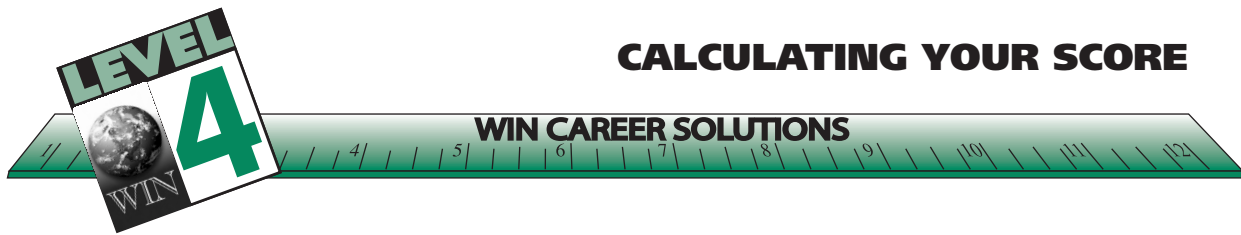
Summary: The Blossoms and Blooms table contains a brief description and prices of 5 varieties of plants.

39. You really like the plant family “Lilaceae”. What type of plant is that according to the Blossoms and Blooms chart?

Answer: Tulip

40. You want to buy a plant that is 6” tall. According to the chart, which plant or plants are NOT available at the height of 6” or more?

Answer: Begonias and Tulips



CALCULATING YOUR SCORE

Calculate your score counting the number of questions you answered correctly. If a problem asked you to list items or steps and you missed one or more, count the question as answered incorrectly. Divide the number of your correct answers by 40. Change the decimal answer to a percentage by moving the decimal two places to the right.

Example: If you got 35 out of the 40 questions correct

$$\begin{array}{r}
 .87 \\
 \hline
 40 \overline{) 35.0} \\
 \underline{32.0} \\
 30 \\
 \underline{28} \\
 2
 \end{array}$$

Number of correct answers

$$.87 = 87\%$$

Not bad, but I bet you can
to do better



SUMMARY

WIN CAREER SOLUTIONS

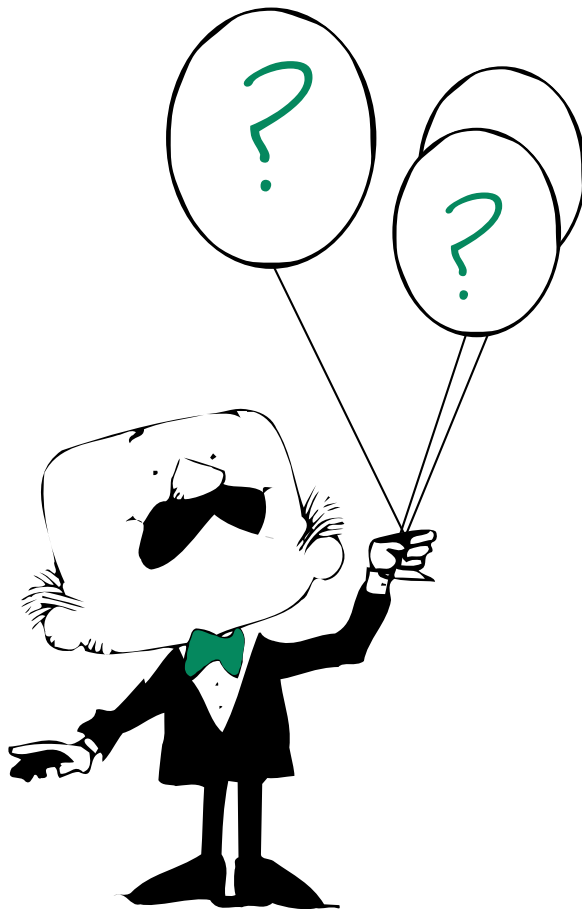


Well, how did you do on the Posttest? If you scored 95% or higher, you have a reasonable chance to pass Level 4 of the ACT WorkKeys® *Locating Information* assessment. Remember the basic steps for reading graphics, take your time and think about each question, and you will do fine. But, you may want to complete Level 5 with me before you take the assessment. Hope to see you there!

Now don't be discouraged if you scored below 95%. There is a lot of information to remember. Practice the exercises in this course – you can do it! Your enhanced work skills will pay off in the long run. So practice, practice. I'll be cheering for you all the way.

ANSWERS TO POP QUIZ QUESTIONS

1. Page 17 – Graphics are used in newspapers, magazines, brochures, television guides, telephone books, annual reports, company literature, operation manuals, tax forms, surveys, travel maps, and more.
2. Page 36 – A flowchart is a representative drawing showing a set of steps to reach a conclusion.
3. Page 58 – 100%



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