

## Section 6

### Illustrative Materials

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#### 6.1 Fundamentals

- 6.1.1 For our purposes, *illustrative material* applies to photographs, maps, drawings, etc. Specialty types of graphic materials (e.g., graphic novels and cartoons) are discussed in *Formats*, §14, Plays, Cartoons, and Graphic Novels.
- 6.1.2 The preferred method for conveying information from illustrations (e.g., maps, Venn diagrams, bar charts, etc.) is by using tactile materials. *Guidelines and Standards for Tactile Graphics, 2010* should be followed when producing graphics.
- 6.1.3 **A Braille Reader's Perspective.** Graphics should be reproduced when possible, especially if the student needs to understand the conventions used in the illustration as part of professional training.

One way of testing a picture description is to see if someone unfamiliar with the book can answer the question, perform the task described, or get the joke without having seen the print book. If a sighted person cannot understand a tactile graphic in a subject with which he is familiar, a similarly knowledgeable braille reader will not understand it either.



## 6.2

## Format

- ### 6.2.1

### Example 6-1: Photograph with Caption



### *The Earliest Known Photograph of Abraham Lincoln*

This is a rare view of a beardless Abraham Lincoln. The photograph was taken around 1846 or 1847 by Nicholas Shepherd. Mr. Lincoln would have been 46 or 47 years old in this Daguerreotype.

Figure 1 displays a 5x10 grid of small plots, each showing a spatial distribution of points. The first 10 columns represent the initial state, and the next 40 columns show the system's evolution. The plots are arranged in 5 rows, each representing a different parameter value. The plots show a transition from a uniform state to a patterned state, with the pattern becoming more complex as the parameter value increases.

- c. When an illustration has a source citation, place it immediately following the caption using 7-5 margins. If a







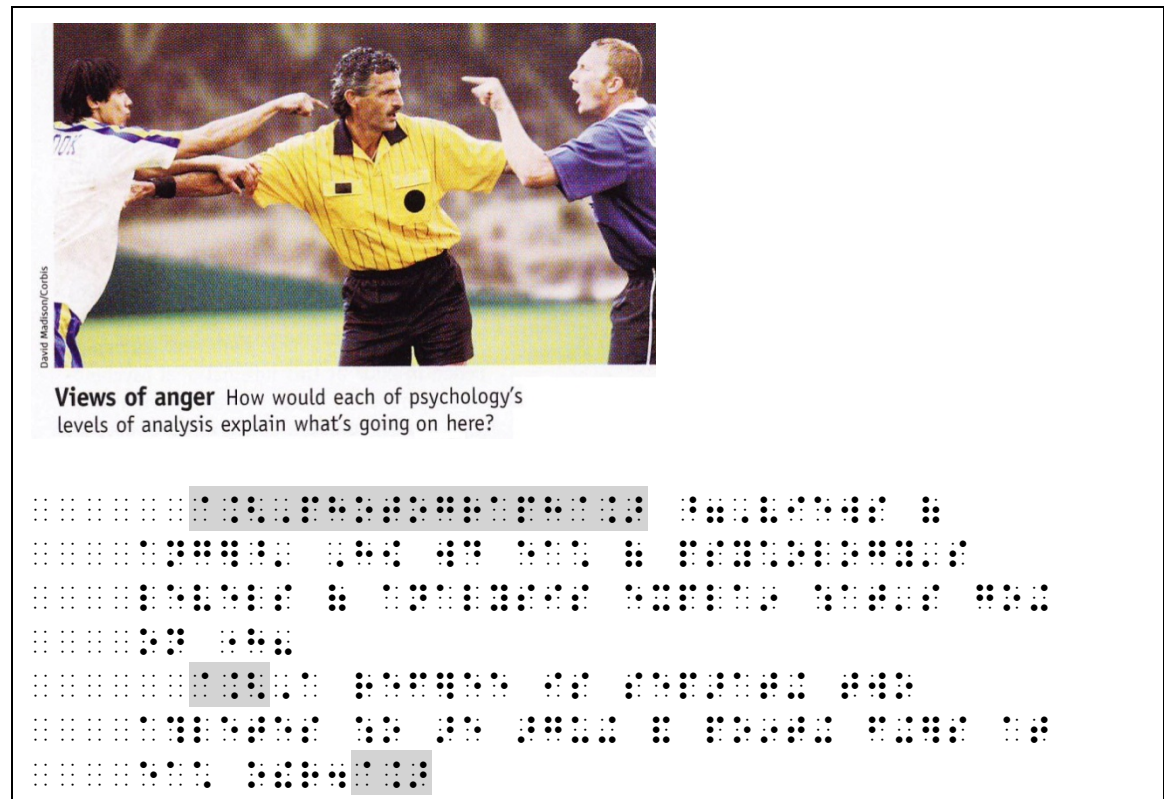
illustration at its new location, stating the page number of its original position in print.

## 6.3 Descriptions

### 6.3.1

Some images may require a description, which is enclosed in transcriber's note indicators following the caption. Use appropriate vocabulary for the grade level and subject matter.

### Example 6-3: Illustration with Description and Caption



### 6.3.2

The National Center for Accessible Media (NCAM) conducted research and posted information for writing descriptions for STEM (Science, Technology, Engineering, and Math) images. *Effective Practices for Description of Science Content within Digital Talking Books* is geared towards digital talking books, however there are many applicable points for writing descriptions in transcriber's notes.

The key points pertaining to braille production in the STEM Description Guidelines are:

**Brevity:** Use as few words as possible.



**Data:** Focus on the data and not on extraneous visual elements.

**Clarity:** The reader should be able to understand the description in one reading.

**Drill-Down Organization:** Start with a brief description, followed by more specific information. This allows the reader to get the initial concept and read further if desired.

**Tables:** Some content is better converted to tables than being provided in a narrative description.

**Processes:** Some processes presented visually can be converted to nested lists.

**Narrative Description:** Many illustrations are best described in a linear, narrative format. When writing narrative descriptions, follow the first four guidelines: brevity, data, clarity, and drill-down organization.

The following website provides more detail about each of these points.

<http://diagramcenter.org/table-of-contents-2.html#toc>

## **6.4 Omitted Illustrations**

6.4.1 Some illustrations, such as those inserted in print for visual appeal, may be omitted. The relationship of the illustration to the text is what is important. Consult the requesting agency. Include a statement on the Transcriber's Notes page when all illustrations of a particular type (e.g., photographs without captions) are omitted.

6.4.2 Insert a transcriber's note at each point of omission when only some of the images are not included. This is especially important when some numbered illustrations are not included. Sample:

Figure 6.4 TNDiagram is omitted.TN

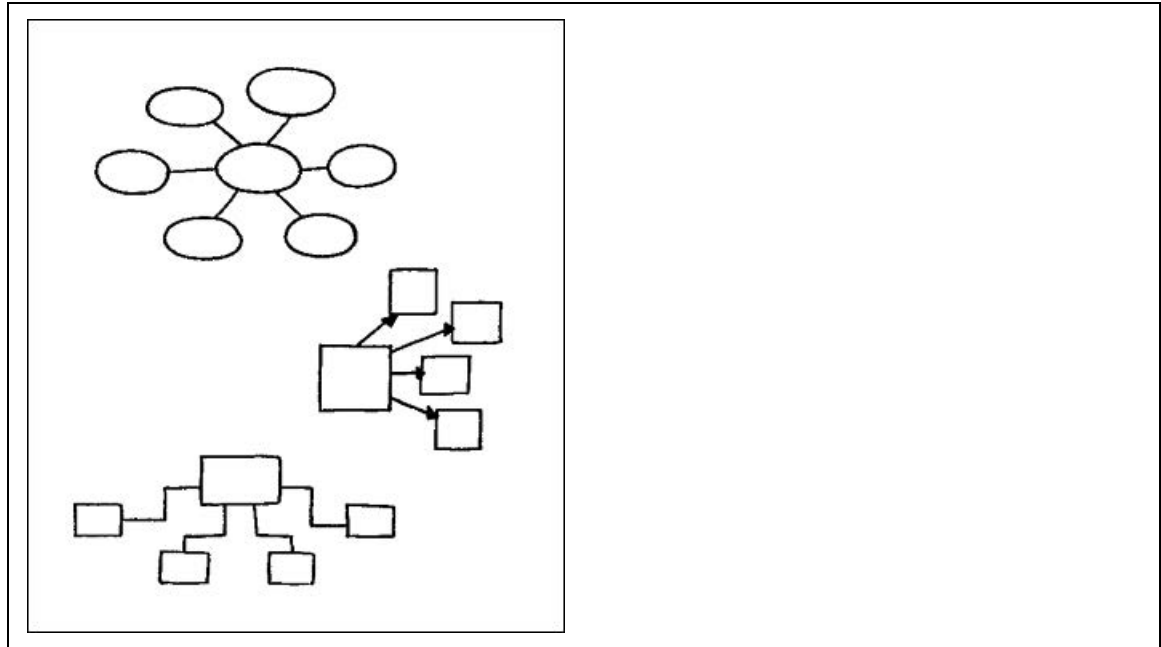
## **6.5 Concept Maps, Graphic Organizers, Idea Webs**

6.5.1 Concept maps have a central idea with rays branching out to subordinate ideas. Whenever possible, concept maps are done as a tactile graphic. When a request is made for a text-based format, use a nested list (1-5, 3-5; 1-7, 3-7, 5-7;



etc.) to indicate the individual elements of the web. The central idea of the concept map is the first level in the nested list. Other elements are listed in the appropriate level in a logical order, e.g., top to bottom, right to left, etc. A careful reading of the concept map may dictate another placement order. Use three dot 5s to indicate blank elements. Explain this usage in a transcriber's note.

**Example 6-4: Samples of Concept Map Outlines (Print Only)**



(See [Sample 6-2: Concept Map](#) on page 6-14.)

## **6.6 Flowcharts**

6.6.1 A flowchart is a diagram showing the step-by-step progression through a procedure or system, using connecting lines and symbols. Flowcharts frequently have Yes or No paths to follow. See the *Flowchart Design for Applicable Braille Codes*, available from <http://www.brailleauthority.org/cbc/flowchart.html>, to assist with these situations. Note that the indicators and shapes shown in the 1991 version of this document are out of date, but helpful guidance and examples are given for the layout of a flowchart.



## **6.7 Forms**

6.7.1 Print forms are illustrations of pre-printed documents. Some are informative, others have blanks to be filled in or choices to be made.

6.7.2 When a form is omitted:

- a. Omit forms that are included only for visual interest and are not necessary for understanding of the content.
- b. Use a transcriber's note to identify the form and briefly describe it.

6.7.3 When a form is produced:

- a. Give a brief description of the form first.
- b. Do not reproduce print forms spatially.
- c. Enclose the form in box lines if appropriate. Avoid boxes within boxes unless it is essential for understanding the layout of the form.
- d. Use a 1-3 list or 1-5, 3-5 nested list to present the items in the form.
- e. Use an underscore to represent a blank.

(See [Sample 6-3: Print Form](#) on page 6-16.)

- f. When the lines imply the length of an answer, use an embedded transcriber's note to let the reader know how many write-on-lines appear in print.
- g. Use script indicators to represent "written" responses indicating sample replies.

(See [Sample 6-4: Print Form with Sample Responses](#) on page 6-18.)

## **6.8 Genealogical and Ancestral Charts**

### **6.8.1 Descendant Charts**

- a. Transcribe descendants' genealogical charts using a nested list format (1-5, 3-5; 1-7, 3-7, 5-7; etc.).
- b. Begin descendant charts with the ancestors, and descend to the most current generation.
- c. Follow print for symbols used for marriage or other types of relationships (e.g., twins). **Note:** if line symbols are used, the line terminator may be required.

(See [Sample 6-5: Genealogical Chart](#) on page 6-20.)



## 6.8.2 **Ascending Ancestral and Pedigree Charts**

- a. Transcribe ancestral and pedigree charts as lists, using 1-3 margins. Begin with the most current item or person and move backward through the generations. Assign a number to each name or item in the chart, beginning with the most current. List them sequentially, moving back through each generation, in the same direction as the chart. Sequential numeric identification allows the ascending parentage to be followed without using a tactile graphic.
- b. Follow each item with any information specific to the item or individual, e.g., dates of birth/death, etc. Immediately follow this information with the two numbers from the list that represents the parent(s). Use a comma to separate the two numbers. Use three dot 5s to represent the missing connection if only one parent is listed.
- c. Insert a transcriber's note about the parentage numbers.  
Sample:

Each individual in the list is given an identifying number. The numbers following an individual's name are the identifying numbers for the parents. Three dot 5s rather than a number are used for a missing parent.

(See [Sample 6-6: Ancestral Tree](#) on page 6-22 and [Sample 6-7: Pedigree Chart](#) on page 6-24.)

## 6.9 **Organizational Charts**

- 6.9.1 For our purposes, an organizational chart is a diagram of the structure and/or personnel of an organization. The principal parts or functions are represented by blocks connected by lines to show hierarchical rank or interrelationships. Transcribe such material using a nested list format (1-5, 3-5; 1-7, 3-7, 5-7; etc.). (See [Sample 6-8: Organizational Chart](#) on page 6-26.)

## 6.10 **Timelines**

- 6.10.1 Timelines have many visual layouts, from very simple lists to more complex graphics. Treat timelines as lists and transcribe them in chronological order regardless of the order found in print.



- a. Use a 1-3 list format for a simple timeline.
- b. Transcribe the date first, followed by the event, on the same line.
- c. Include the first and last date shown, with or without an associated event.
- d. Omit all other dates without associated events.
- e. Insert captions for images that apply to a specific date at appropriate locations.
- f. For a complex timeline use a nested list (1-5, 3-5; 1-7, 3-7, 5-7; etc.).

6.10.2 **Timeline with Bars.** Insert the range of years when bars are used to indicate a span of time. Usually it is necessary to provide an estimate of the dates. Include a transcriber's note to let the reader know all dates are approximate. Place the note on the Transcriber's Notes page when these types of timelines are used throughout the volume. (See [Sample 6-9: Timeline with Bars](#) on page 6-27.)

6.10.3 **Timelines with Multiple Events in the Same Year.** Use a nested list format when a date has more than one event. Place the date at the left margin (cell 1). Use 3-5 margins for each following event. (See [Sample 6-10: Timeline with Multiple Events](#) on page 6-28.)

6.10.4 **Multipage Timelines.** (**Note:** this refers to timelines that appear on more than two consecutive pages.) Insert the timeline at the most appropriate location on the first page it appears. Precede the timeline with a transcriber's note to indicate the range of pages. Sample:

Timeline is across the bottom of pages 44–47.

6.10.5 **Simple Shared Date Timelines.** Use list format (1-3) for timelines that have a shared date and individual events. (See [Sample 6-11: Simple Shared Date Timeline](#) on page 6-29.)

6.10.6 **Complex Shared Date Timelines.** Use a nested list format (1-5, 3-5; 1-7, 3-7, 5-7; etc.) when print shows several major topics with the timeline. Another option may be to list the events after a cell-5 heading. (See [Sample 6-12: Complex Shared Timeline](#) on page 6-30.)



## **6.11 When a Tactile Graphic Is Not Produced**

- 6.11.1 Although a tactile graphic is preferred, the following guidelines may be used when requested by an agency, if the time frame of the needed material is too short, or if there are multiple samples of the same type of graphic and only one graphic is produced as a sample.
- 6.11.2 It is necessary to present information in an appropriate format when images are not produced as tactile graphics and the content of the diagram is not included in the surrounding text. These options include lists, tables, and descriptions. Refer to the STEM guidelines.  
<http://diagramcenter.org/table-of-contents-2.html#toc>
- 6.11.3 A transcriber's note provides information about how the information is presented. (See [Sample 6-13: Bar Graph](#) on page 6-32 and [Sample 6-14: Venn Diagram](#) on page 6-34.)

## **6.12 Screenshots**

- 6.12.1 Screenshots of web pages are used often as a teaching tool in textbooks. The format used to transcribe screenshots depends on the focus of the illustration.
- Enclose all screenshots in a box.
  - Use transcriber's notes to indicate location and color cues as necessary.
- 6.12.2 **Informative Screenshots.** Group content in sections when screenshots are informative, i.e., used to teach Internet research skills.
- Retain headings and separations.
  - Transcribe all information necessary for understanding in a logical order.
  - Ignore color.
- 6.12.3 **Descriptive Screenshots.** These screenshots are used to teach website design.
- A tactile graphic is frequently the best option if the purpose of the screenshot is to show the page design.



- b. A complete and detailed description of the screenshot is provided when a tactile graphic is not possible. Include the following:
  - (1) Divide the web page into sections, e.g., navigation panel on the left, the tool bar on the top, the content area, the footer, etc.
  - (2) Describe text placement as needed.
  - (3) Indicate hyperlinks, which are a word, phrase, or image that can be clicked on to jump to a different location.

(See [Sample 6-15: Screenshot](#) on page 6-36.)

## **6.13 Slide Presentations**

6.13.1 Slide presentations created in Microsoft PowerPoint, Corel Presentations, Keynote, etc., are often requested in braille, especially in a school environment.

- a. Each slide number is treated as the print page number.
- b. As text on slides may be informally structured, it is necessary to determine a format for best readability. Most text is formatted using headings, indented/blocked paragraphs, and lists.
- c. Enclose any transcriber-generated descriptions in transcriber's note indicators.
- d. If speaker's notes are included, use 7-5 margins. Begin a note with the identifier "Note," enclosed in transcriber's note indicators. Continue the note on the same line.

(See [Sample 6-16: Slide Presentation](#) on page 6-38.)



## 6.14 Samples

[Sample 6-1: Figure with Source Information](#), page 6-13

[Sample 6-2: Concept Map](#), page 6-14

[Sample 6-3: Print Form](#), page 6-16

[Sample 6-4: Print Form with Sample Responses](#), page 6-18

[Sample 6-5: Genealogical Chart](#), page 6-20

[Sample 6-6: Ancestral Tree](#), page 6-22

[Sample 6-7: Pedigree Chart](#), page 6-24

[Sample 6-8: Organizational Chart](#), page 6-26

[Sample 6-9: Timeline with Bars](#), page 6-27

[Sample 6-10: Timeline with Multiple Events](#), page 6-28

[Sample 6-11: Simple Shared Date Timeline](#), page 6-29

[Sample 6-12: Complex Shared Timeline](#), page 6-30

[Sample 6-13: Bar Graph](#), page 6-32

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[Sample 6-15: Screenshot](#), page 6-36

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## Sample 6-1: Figure with Source Information

**Figure 7-1**

### **Diving's early history.**

In the mid 1600s the extremely inventive Italian scientist Giovanni Borelli was the first to visualize a diver as a free-swimming frogman, complete with swim fins.

Courtesy of Historical Diving Society, USA

Copyrighted Image

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## Sample 6-2: Concept Map



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## Sample 6-3: Print Form

Five Wishes Wallet Card

<p>Important Notice to Medical Personnel: I have a Five Wishes Advance Directive.</p> <p>Signature _____</p> <p>Please consult this document and/or my Health Care Agent in an emergency. My Agent is:</p> <p>Name _____</p> <p>Address _____ City/State/Zip _____</p> <p>Phone _____</p>	<p>My primary care physician is:</p> <p>Name _____</p> <p>Address _____ City/State/Zip _____</p> <p>Phone _____</p> <p>My document is located at:</p> <p>_____</p> <p>_____</p> <p>_____</p>
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## Sample 6-4: Print Form with Sample Responses

# Order Form

To order something from a catalog or a magazine, you can use an **order form**. Be sure to include all the information about the item and where to send it.

Code Number		Book Title	
C 8 3 1		The Woman Who Outshone the Sun	
(PLEASE PRINT CLEARLY)			
Send To <u>Marcos Salazar</u>		School <u>Washington Jr. High</u>	
Address <u>248 Greenwood</u>			
City <u>San Antonio</u>		State <u>TX</u>	ZIP <u>78219</u>
Teacher <u>Mrs. Lee</u>		Grade <u>6</u>	Room <u>8</u>
<i>Home Reading Club</i>	Date <u>March 6, 2001</u>	Amount	\$ <u>6.95</u>
		Sales Tax	\$ <u>.50</u>
		TOTAL	\$ <u>7.45</u>
P.O. Box 5812 McHenry, IL 65051			







### Sample 6-5: Genealogical Chart

### Abbreviated Genealogy of James I

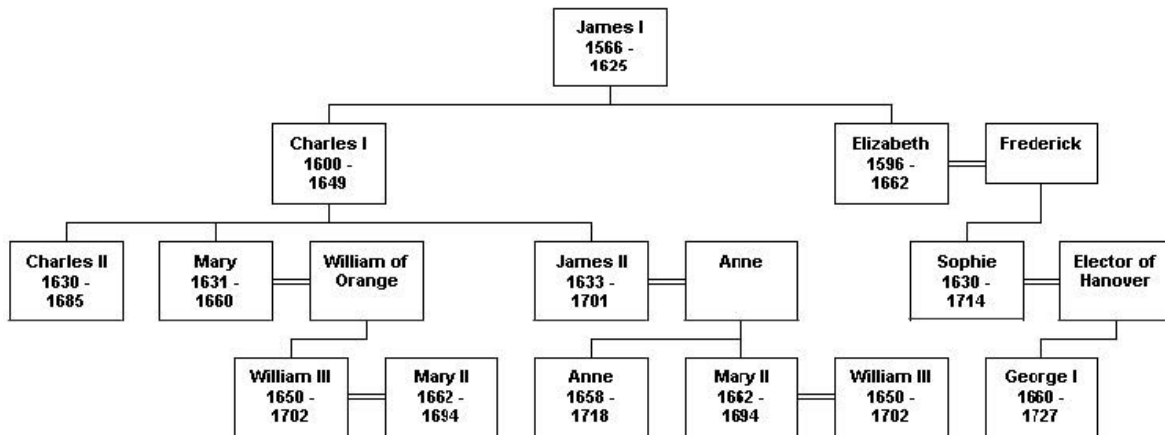


Figure 1 displays a 23x23 grid of 525,000 cells, representing the spatial distribution of 23 species. The grid is labeled with numbers 1 to 23 on both the top and left sides. Each cell contains a small cluster of dots, indicating the presence of a species. The distribution is highly heterogeneous, with some species concentrated in specific areas (e.g., species 1 in the top-left, species 23 in the bottom-right) and others more widely distributed. The grid is divided into 23 rows and 23 columns, with each cell representing a 100m x 100m area.

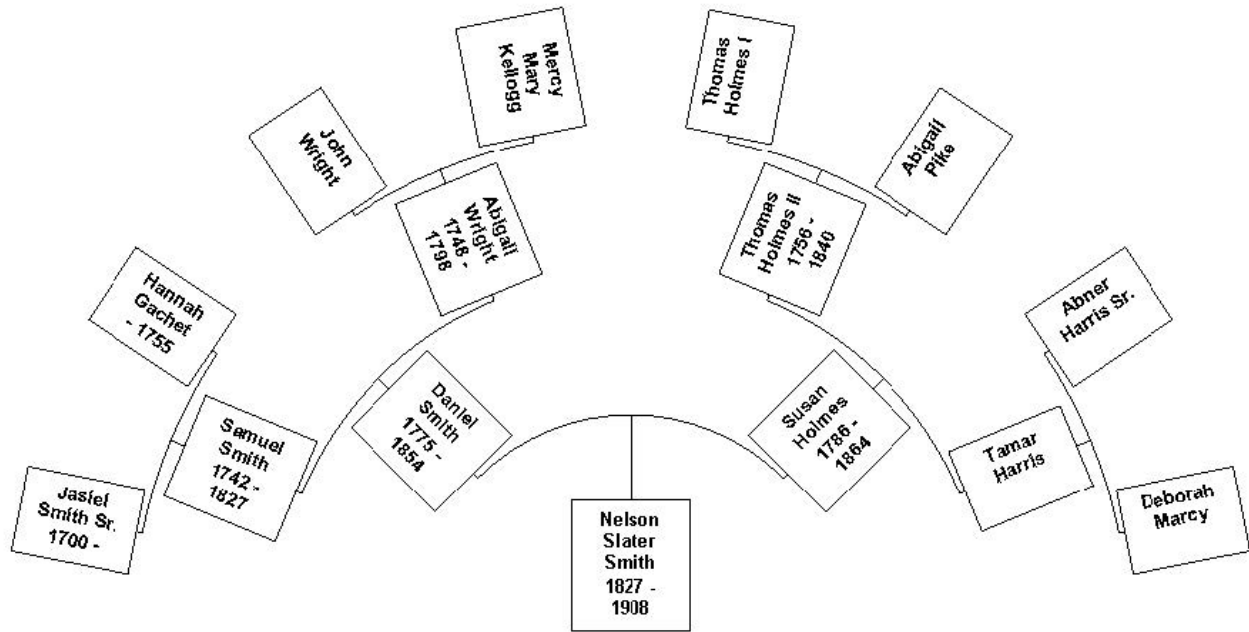
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## Sample 6-6: Ancestral Tree





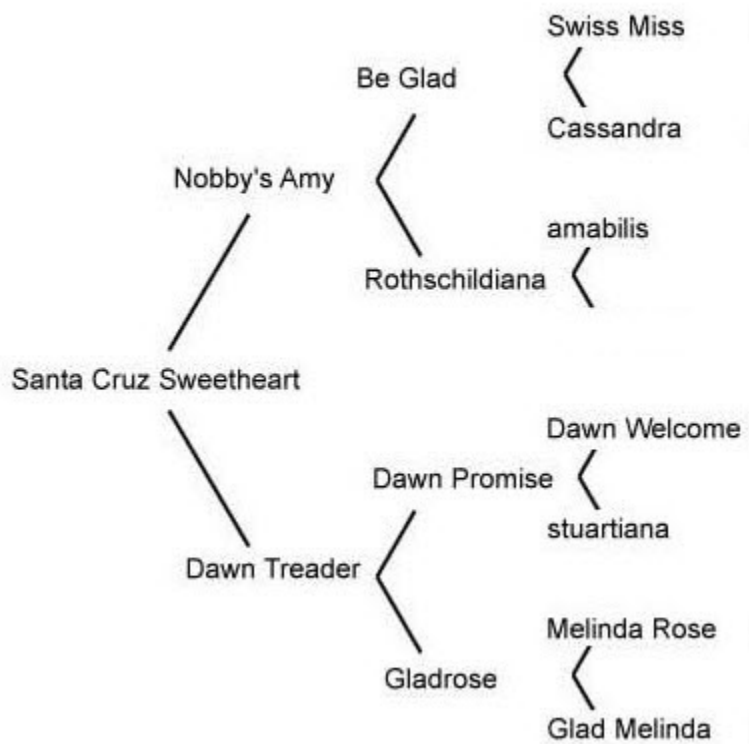
3 .....  
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## Sample 6-7: Pedigree Chart

Pedigree of Santa Cruz Sweetheart Orchid



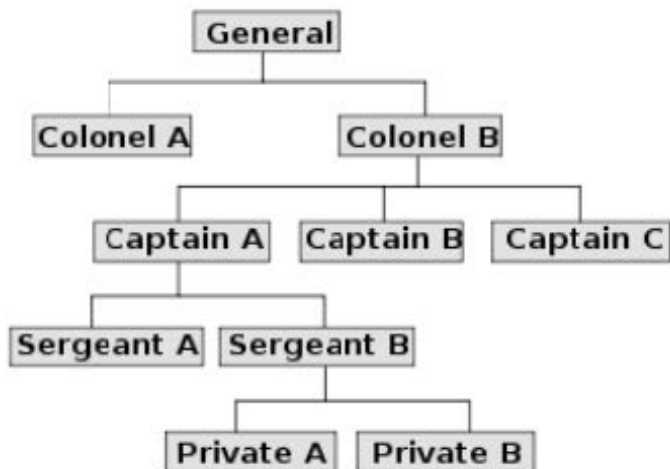


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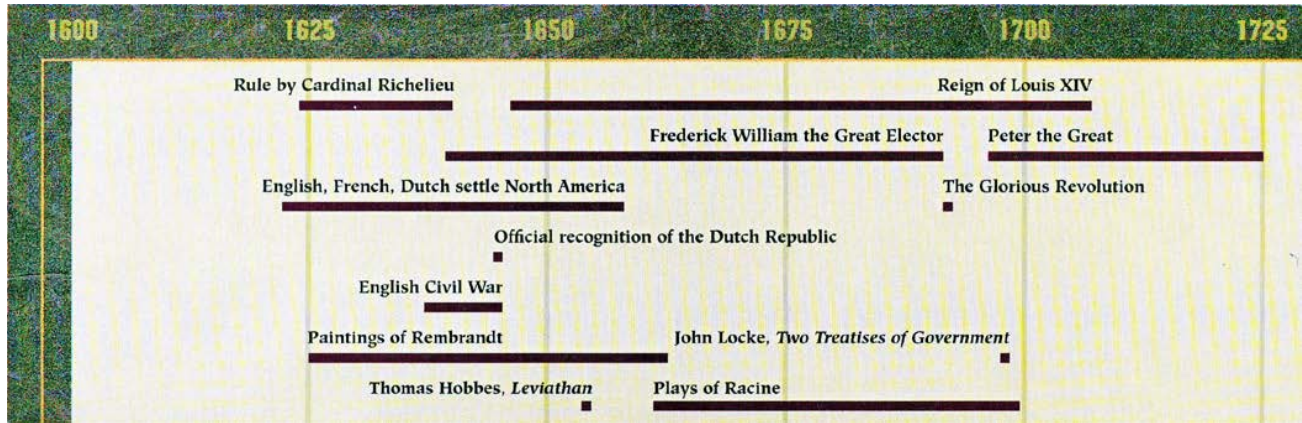
### Sample 6-8: Organizational Chart



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## Sample 6-9: Timeline with Bars



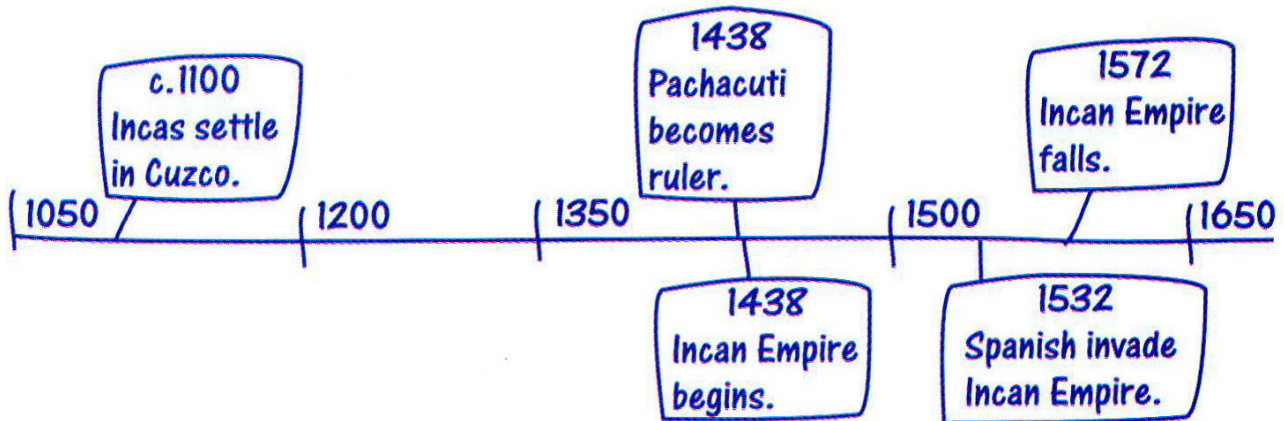
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## Sample 6-10: Timeline with Multiple Events

### History of the Inca

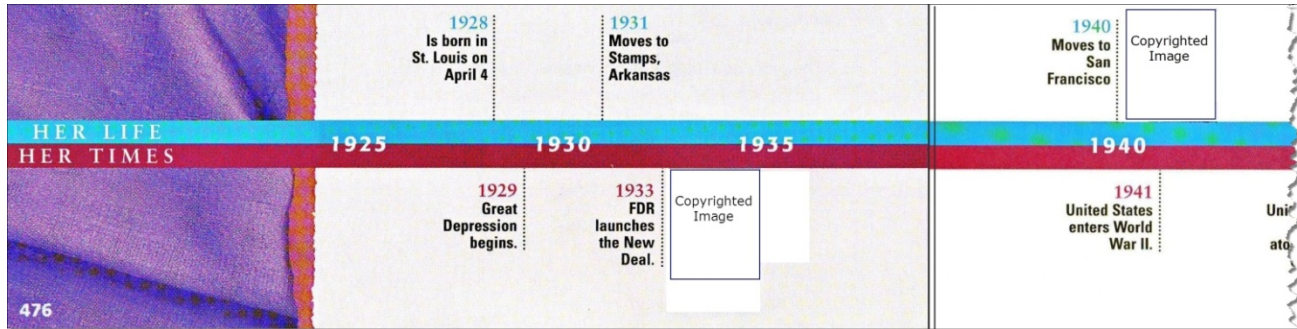


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- 10

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## Sample 6-11: Simple Shared Date Timeline

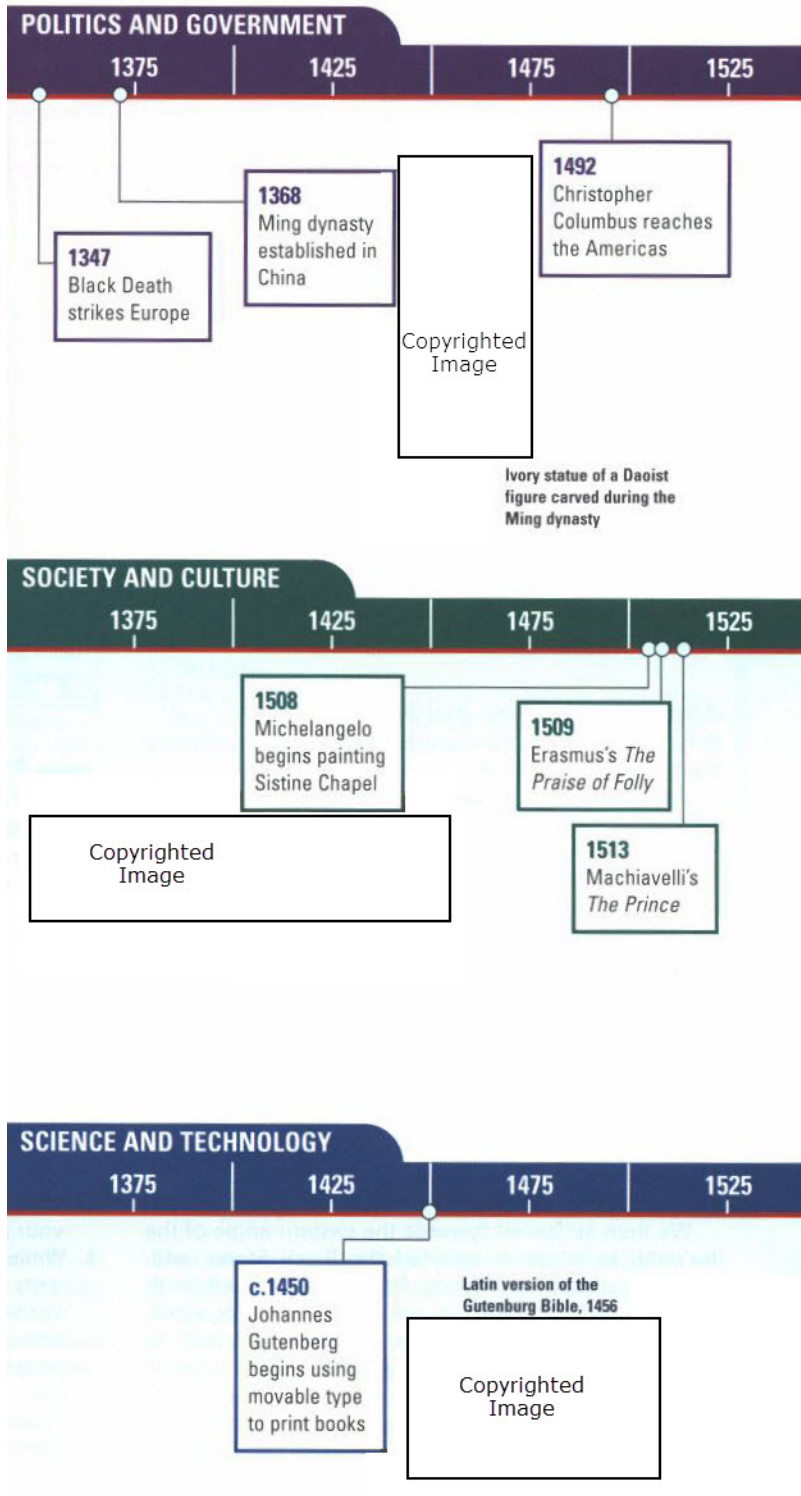


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## Sample 6-12: Complex Shared Timeline





### Option 1: Nested List

- 1 ..... : .....
- 2 ..... : ..... : ..... : ..... : .....
- 3 ..... : ..... : ..... : ..... : .....
- 4 ..... : ..... : ..... : ..... : ..... : .....
- 5 ..... : ..... : ..... : ..... : ..... : ..... : .....
- 6 ..... : ..... : ..... : ..... : .....
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- 11 ..... : ..... : ..... : ..... : .....
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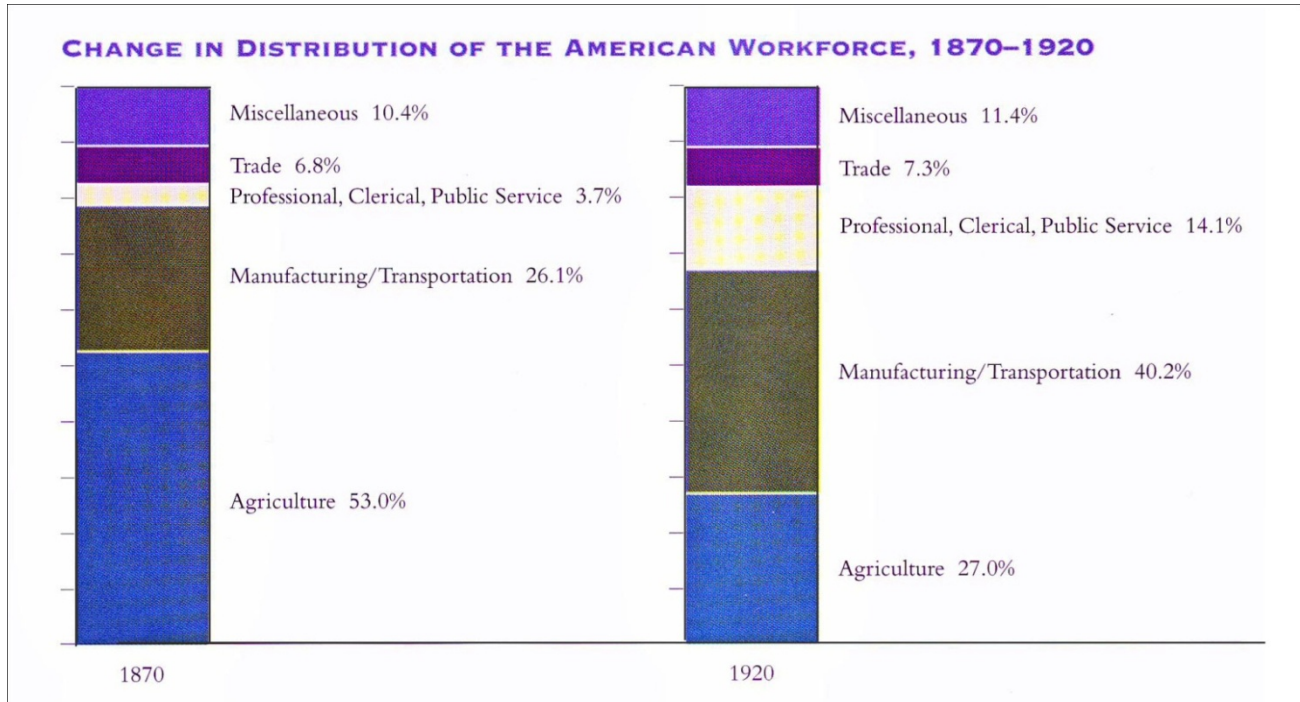
### Option 2: Heading with List

- 1 ..... : .....
- 2 ..... : ..... : ..... : ..... : .....
- 3 ..... : ..... : ..... : ..... : .....
- 4 ..... : ..... : ..... : ..... : ..... : .....
- 5 ..... : ..... : ..... : ..... : ..... : ..... : .....
- 6 ..... : ..... : ..... : ..... : .....
- 7 ..... : .....
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- 10 ..... : ..... : .....
- 11 ..... : .....
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- 13 ..... : .....
- 14 ..... : .....
- 15 ..... : .....

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## Sample 6-13: Bar Graph



### Option 1: List Format

- 1
- 2
- 3
- 4
- 5
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- 7
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- 10
- 11
- 12
- 13
- 14
- 15



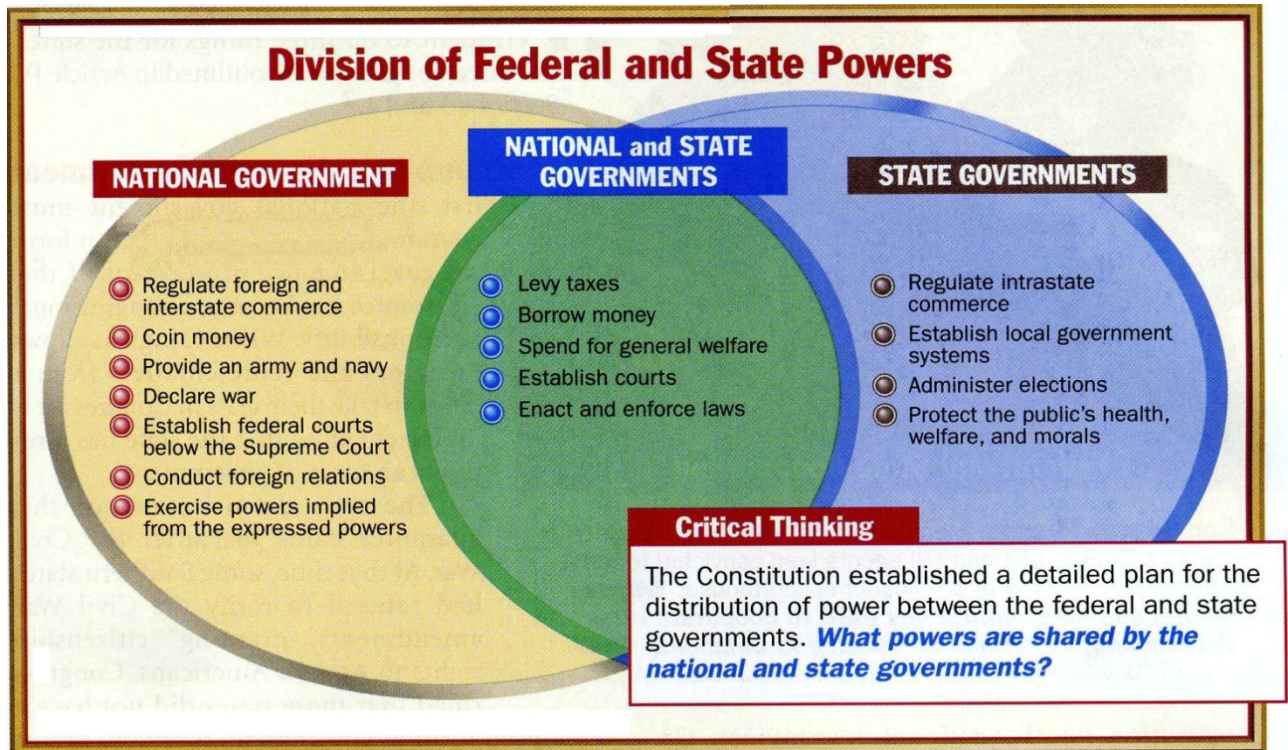
## Option 2: Table Format

1	The first row of the table contains the following data:									
2	The second row of the table contains the following data:									
3	The third row of the table contains the following data:									
4	The fourth row of the table contains the following data:									
5	The fifth row of the table contains the following data:									
6	The sixth row of the table contains the following data:									
7	The seventh row of the table contains the following data:									
8	The eighth row of the table contains the following data:									
9	The ninth row of the table contains the following data:									
10	The tenth row of the table contains the following data:									
11	The eleventh row of the table contains the following data:									
12	The twelfth row of the table contains the following data:									
13	The thirteenth row of the table contains the following data:									
14	The fourteenth row of the table contains the following data:									
15	The fifteenth row of the table contains the following data:									
16	The sixteenth row of the table contains the following data:									

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## Sample 6-14: Venn Diagram





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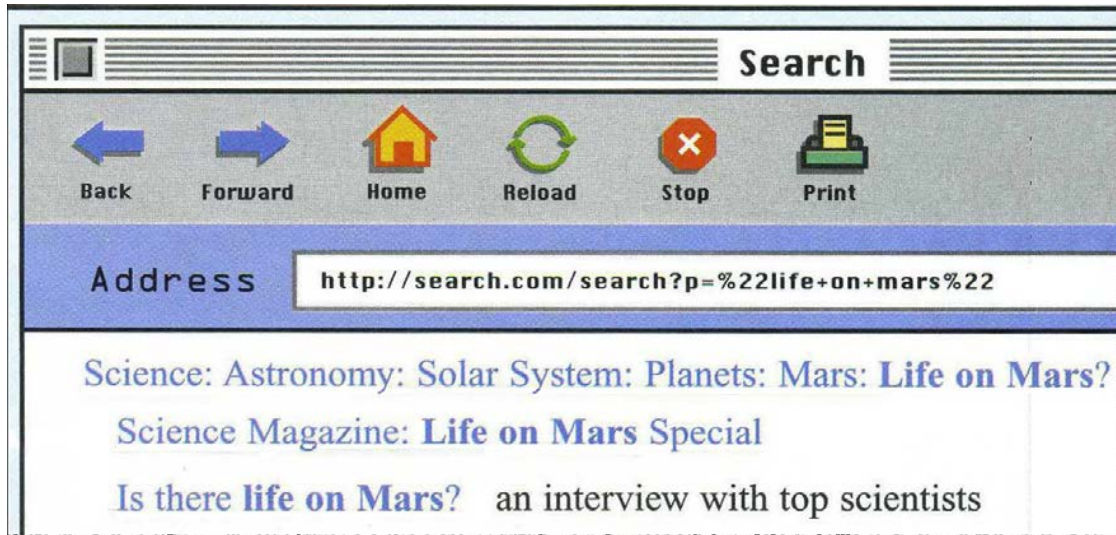
—New Braille Page—

1 .....  
 2 .....  
 3 .....  
 4 .....  
 5 .....

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## Sample 6-15: Screenshot



### Screenshot for Information Only

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## Screenshot for Web Page Layout

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## Sample 6-16: Slide Presentation

### Screen Reader

Screen Reader

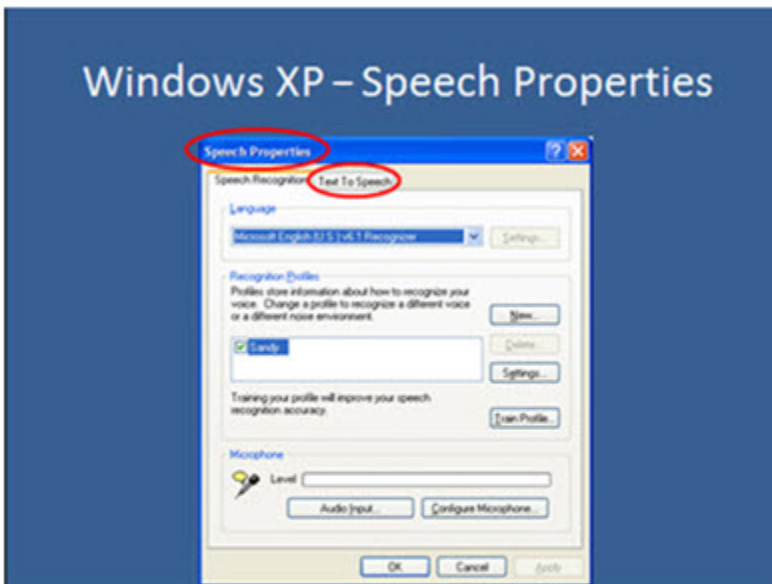
- reads elements on a computer screen
- is necessary to navigate and operate a computer
- uses text to speech to read text on the screen

TTS is a text reader

Text Reader  $\neq$  Screen Reader

The computer's ability as a text reader is often confused with a screen reader. A screen reader will read all the elements on a computer screen and is necessary to navigate and operate a computer. A screen reader uses the text to speech engine to speak text. Text to speech is a text reader and a text reader by itself cannot navigate and operate a computer. It is important to understand that text reader is not a screen reader.

3



Text to speech settings for computers with Windows operating systems can be found in the control panel.

If you are using Windows XP, choose Speech Properties. Then choose the text to speech tab

4



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