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# H

# yperStudio 3.0

## Tutorial

*Compliments of  
Johnson County Wastewater  
Overland Park, Kansas*





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# Preface

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Just as the Industrial revolution during the 20th century replaced agrarian ways, new models and tools must be adopted as the 21st century ushers in the “Age of Knowledge.” To be effective, teachers need to do more than merely lecture and must be able to provide more meaningful and fun instruction for their students. Our tutorial is designed to help! In less than two hours teachers and students will be able to become acquainted and feel comfortable with an easy to use authoring program called HyperStudio, a medium tailored for our new millenium.

## What is HyperStudio?

“HyperStudio allows anyone to create multimedia programs. The tools are simple enough for primary school kids... but they combine enough power and flexibility to make them suitable for adult users.

Whether you want to create simple projects... or a professional presentation for an adult audience, everything you need is at your fingertips.” -  
Computer Living, Australia

HyperStudio is versatile. It has already been established as a popular authoring software in the K-12 schools around the nation. In fact, it is used by more than one million K-12 students, as well as commercial developers. Roger Wagner, who had been previously teaching math and science at a San Diego school, founded the company in 1978, currently making it one of the oldest software companies in the country. Virtually any multimedia element whether its a graphic, movie, or sound, etc. can be added to a project in seconds. The application is cross-platform and with the latest upgrade to 3.0, a

HyperStudio stack can be viewed via a browser and plug-in over the Internet.

## Who may be interested in our tutorial?

- Teachers who are not acquainted with this program may want to review the tutorial to see why this is popular software program.
- Any student from the age of 10 onward, who is unfamiliar with HyperStudio may want to use this quick and easy way to become acquainted with the application and its potential.
- Teachers already familiar with HyperStudio may also want to review the mini-course as an example of how to incorporate HyperStudio into their curriculum. (Note: This tutorial is designed with special consideration for both Science and English as a Second Language instruction, as well as multiple learning styles.)

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### **How can you use the mini-course?**

The mini-course is flexible. It's divided into two units so that you can adapt it to your needs. The first unit is strictly a tutorial illustrating the most elementary aspects in order to help you create your first couple of stacks. Unit 2 is more advanced introducing special effects that can be achieved with the use of interactive buttons. The appendix includes a helpful glossary, as well as, a set of design and instructional criteria for producing a multimedia project.. Presented together, the introduction to HyperStudio tutorial can be easily adapted to a day long workshop for students and teachers..

### **What are the system requirements?**

No matter how careful you are in buying a computer, a more powerful computer with more

storage capacity is around the corner. Most of the computers in use today, however, were purchased before multimedia capabilities became popular. Like most, you may have to upgrade where needed. The following are general guidelines that will enable you to capture, edit, and play sound and video. You can add or subtract from the following list to adapt to your computer's configuration. A salesperson from a reputable computer store can help you regarding this. One thing is for sure, you can't have enough RAM and the price has dropped in this area considerably.

#### **For Windows, you'll need:**

- 386 processor or higher
- 6 Mb at least
- MPC-2 compliant CD-ROM drive recommended
- Windows 3.1 or higher; DOS 5.1 or higher
- 256 colors required in Windows
- Sound Blaster or Windows sound system
- Compatible sound card

- Image capture requires video digitizer, digital camera or TWAIN-compatible device
- Sound support: WAV sound files
- Digital Movie Support: QuickTime and AVI movies
- Graphics Support: BMP, PCX, JPG, TIF, TGA, and PICT.

#### **For the Macintosh, you'll need:**

- 68020 processor or higher; System 6.0.7 or higher
- 6 Mb at least
- CD-ROM drive
- QuickTime 1.5 or higher
- Image capture requires video digitizer or digital camera
- Color monitor recommended
- Sound Support: AIFF, AIFC, SND1, SND2, MOD, System 7, WAV and QuickTime sound files.
- Graphics support: PICT, TIFF, EPS, JPEG, GIF, PCX, BMP, MacPaint, and Photo-CD
- Digital Movie Support

**Who created the tutorial?**

The tutorial is result of an evolution of events. An ESL instructor, Carol Barney, currently with the Shawnee Mission school district, developed the original lesson plan. The layout and editing of the content was handled by Karen Lynne Sorensen, Internet Projects Manager at Johnson County Wastewater.

The final “mini-course” is a practical guide for you to use in whichever manner you like: as a stand alone presentation where you can interact one-on-one with the computer at anytime, or as a stand along presentation in a classroom or workshop setting.

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# Objectives

Goal: To clarify what HyperStudio is, who uses it, and for what purposes.

- Objectives:
- To describe HyperStudio to others.
  - To acknowledge how HyperStudio can benefit you.
  - To identify the basic steps needed to create a HyperStudio stack.
  - To identify five advanced features accomplished with interactive buttons.

- Activities:
- Discover why HyperStudio was created and what the application is all about.
  - Learn how you can benefit from using HyperStudio.
  - Hands-on: working either alone or with a partner, go through a tutorial introducing you to its basic and advanced features.
  - Explore some HyperStudio stacks.

*Refer to Appendix for a schematic of objectives.*



# Pretest / Post test

1. HyperStudio is a multimedia tool that lets people create new ways to retrieve, \_\_\_\_\_, customize, and deliver information; skills that are becoming as fundamental as word processing.
2. HyperStudio was created to provide users with a \_\_\_\_ that gives them new ways to quickly and easily access, organize, and create large bodies of information such as the information now available on CD-ROM and the Internet.
3. HyperStudio was created to provide \_\_\_\_\_ experts with a way to distribute their knowledge to others.
4. HyperStudio was created to provide \_\_\_\_\_ with at tool that can integrate text, graphics, sound, animation, and video.
5. When you open HyperStudio the first card you see is the \_\_\_\_\_. The icons on this card are buttons that access the
6. HyperStudio presents information in \_\_\_\_\_, just like index cards. Cards can contain both text and graphics. Cards are organized into stacks. Each stack contains several cards of related information. A card is always the same size.
7. Links enable you to \_\_\_\_\_ any piece of information on one card to any other card or media element. You link cards to organize information in whatever way is most useful to you. To move from one card to another, you click on buttons.
8. At the top of the HyperStudio application is a set of “pull-down” menus. The “Edit menu” has an \_\_\_\_\_ command that gives you an opportunity to undo your last action. You’ll also use the “Edit menu” in other ways such as for cutting and pasting. The “Go menu” enables you to navigate among cards.
9. HyperStudio skills fall into two major categories: \_\_\_\_\_ and authoring. The hand tool indicates you are in the browsing mode enabling you to access information but not change it. The pointer indicates you are in an authoring mode enabling the creator to interact with the application, adding and
10. HyperStudio is beneficial to use because it is one of the most powerful products available for \_\_\_\_\_ and distribution of text, graphics, sound, and video. It lets you organize information by nonlinear association and context in addition to linear hierarchical fashion.

1. organize (acceptable)
2. tool (acceptable)
3. subject-matter
4. developers (acceptable)
5. "Home Card"
6. cards
7. connect
8. Undo
9. browsing (acceptable)
10. integration (acceptable)

ANSWERS



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# Unit 1

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# Unit 1

## *“Advanced Organizer”*

*Unit 1 will help you become familiar with the fundamentals of the HyperStudio application and how to create a simple project. Most of the new concepts that are introduced will have accompanying illustrations. By the end of the unit you will have advanced to creating a stack of three cards.*

*This will prepare you for Unit 2 in which you'll gain further experience creating various kinds of buttons and the special effects you can achieve.*

*Note: This tutorial serves as a brief introduction to becoming acquainted with the program and producing your first stacks. For more information ranging from using keyboard shortcuts to creating animation and using Hyperlogo, HyperStudio's programming language, please refer to the HyperStudio manual that accompanies the application.*

*In addition, there are many other references and resources available. HyperStudio, for example, offers a free working demo of their latest 3.0 version that also includes a tutorial. Please visit the HyperStudio web site, <http://www.hyperstudio.com> to obtain more information about their free CD and additional resources.*

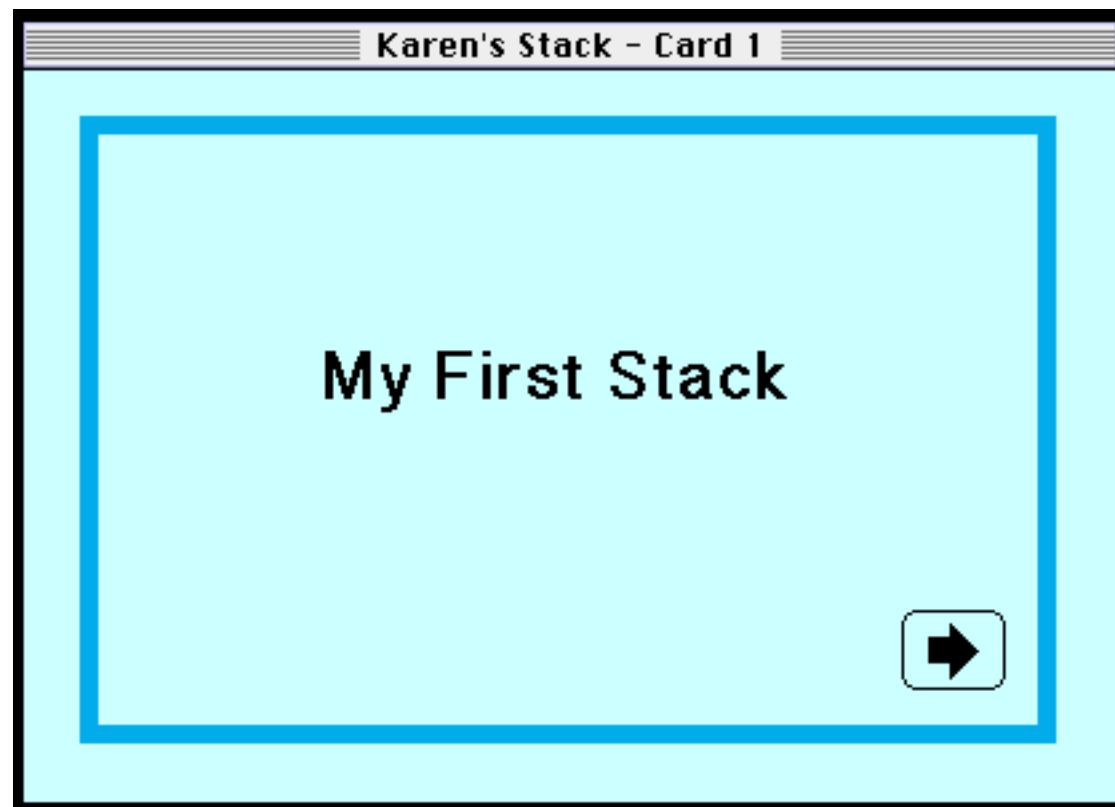
*One final word for those using this tutorial in a workshop setting, please don't hesitate and ask if you need assistance with the lesson plans or equipment. Thanks!*

# Lesson 1

*In this lesson you will create a card, containing a colored background, border, and title. (Buttons for navigating will be added in Lesson 4.)*

**Upon completion of this lesson you will be able to:**

- Start a new stack.
- Select “Preferences.”
- Customize your card's dimensions.
- Save and name a stack.
- Create a tools palette on your desktop.
- Create a card.
- Determine a background color.
- Create a border
- Add text.



# 1-1.

Open the HyperStudio application.

Click twice on the HyperStudio software application.



# 1-2.

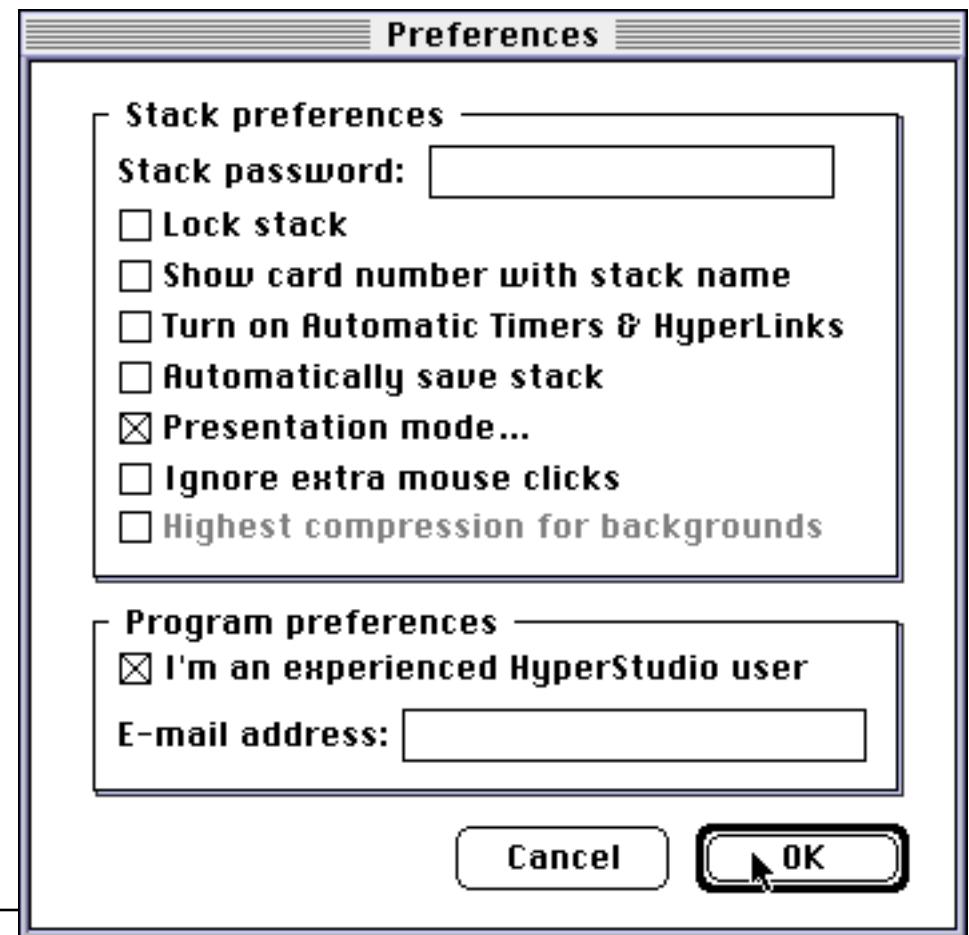
Determine your skill level.

The HyperStudio's "Home" card appears, pull down the "Edit menu" and select "Preferences."

In the "Stack Preferences" box, select "Presentation" mode.

In "Program Preferences", select "I'm an experienced HyperStudio user." Deselect the other choices. Click "OK."

Note: Please remember, there is a glossary in the appendix if you have questions about definitions related to this tutorial.



# 1-3.

Start a “New Stack.”

Start a “New Stack” by clicking on the “New Stack” icon.

You can also start a new stack by clicking on the “Home card” or going to the “File menu” and selecting “New Stack.”

A dialog box appears and asks, “This launches a new untitled stack. Are you sure you want to leave the Home Stack now?” Select, “Yes.”



# 1-4.

Customize the look of your stack.

A second prompt appears and asks, “In your new stack do you want the same card size and number of colors as in the current stack?” Select, “No.”

---

A third dialog box appears and asks, “Pick how many colors you want and how big you want your cards to be.” If 256 colors and the “Standard HyperStudio Card” size is selected, press “OK.” If not, “Pick how many colors” you want by placing your cursor over the down arrow while pressing your mouse button. A pull-down menu of various options should appear. Select 256 colors and let up on the mouse button. Do the same for the “Card Size” and select the option, “Standard HyperStudio Card”, width 512 and height 342.

---

**Pick how many colors you want and how big you want your cards to be (or just click OK).**

**Pick how many colors:** \_\_\_\_\_

256 Colors ▼

**Pick a card size:** \_\_\_\_\_

Standard HyperStudio Card ▼

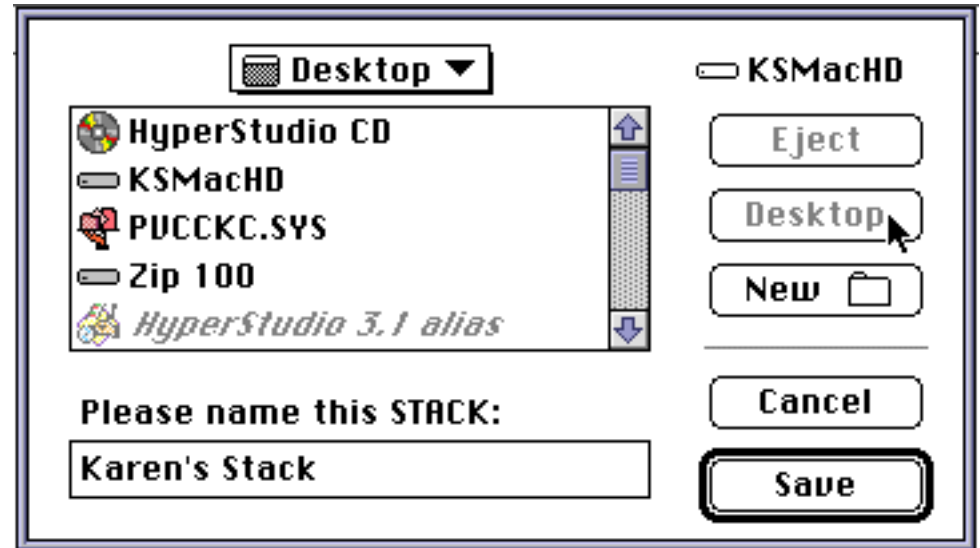
Width 512 Height 342

Cancel OK

# 1-5.

## Save your stack.

You will now see a blank white screen which you will make a “Title Card.” Save your stack by going to the “File menu” and selecting “Save stack as.” Use your name to name the stack, such as “John’s stack.” The area in which to type your name should already be selected so you can simply type in the name of your stack.



If not, place your cursor inside the area, drag over “Untitled”, and begin typing.

Next, click on the “Desktop” button on the right side of the prompt. This will save your file to the desktop where it will be easy to find. Click on “Save.”

# 1-6.

**Make a tools palette on your desktop.**

Go to the “Tools menu.”

To make a tools palette which will remain on your desktop, hold your mousekey down and drag the tool palette away from the “Menu bar” and to the side of your screen.

If it overlaps with your card, you can move your card over by placing your cursor over the top of the “Title bar”, holding your mouse key down, and dragging the card to the side.

---



# 1-7.

**Create a card and color a background.**

Select the “paint can” located on the “Tools palette.”

Go to “Colors menu” and select a color.

Fill your card with color by placing your “paint can” pointer over your screen and press the mouse. Your card will fill with the color you selected.

If you do not like the color you picked, pull down the “Edit menu” to “Undo” and repeat the process.

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# 1-8.

## Make a border.

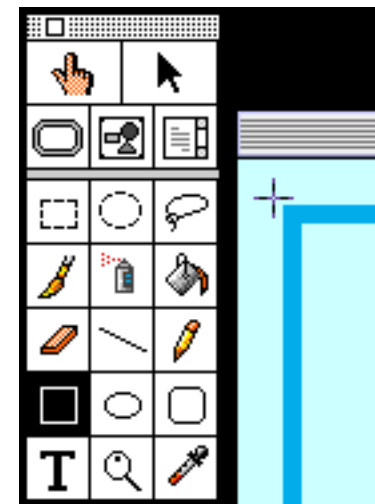
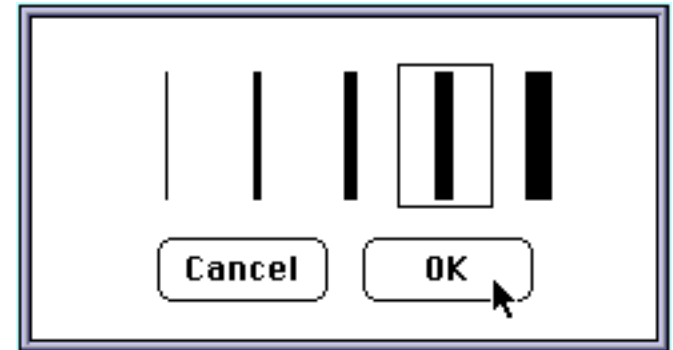
Go to the “Options menu” and select a “Line size.” The 4th line from the left is a good size for a border. Click “OK.”

Go to the “Tools palette” and select the “Square.”

Go to the “Colors palette” and select a color for the border, a color which is different from your background.

Position your mouse about a quarter of an inch from upper left corner of the card.

Drag the mouse diagonally to the right to about a quarter inch from the lower right. When you release the mouse, you should have border around your card.



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# 1-9.

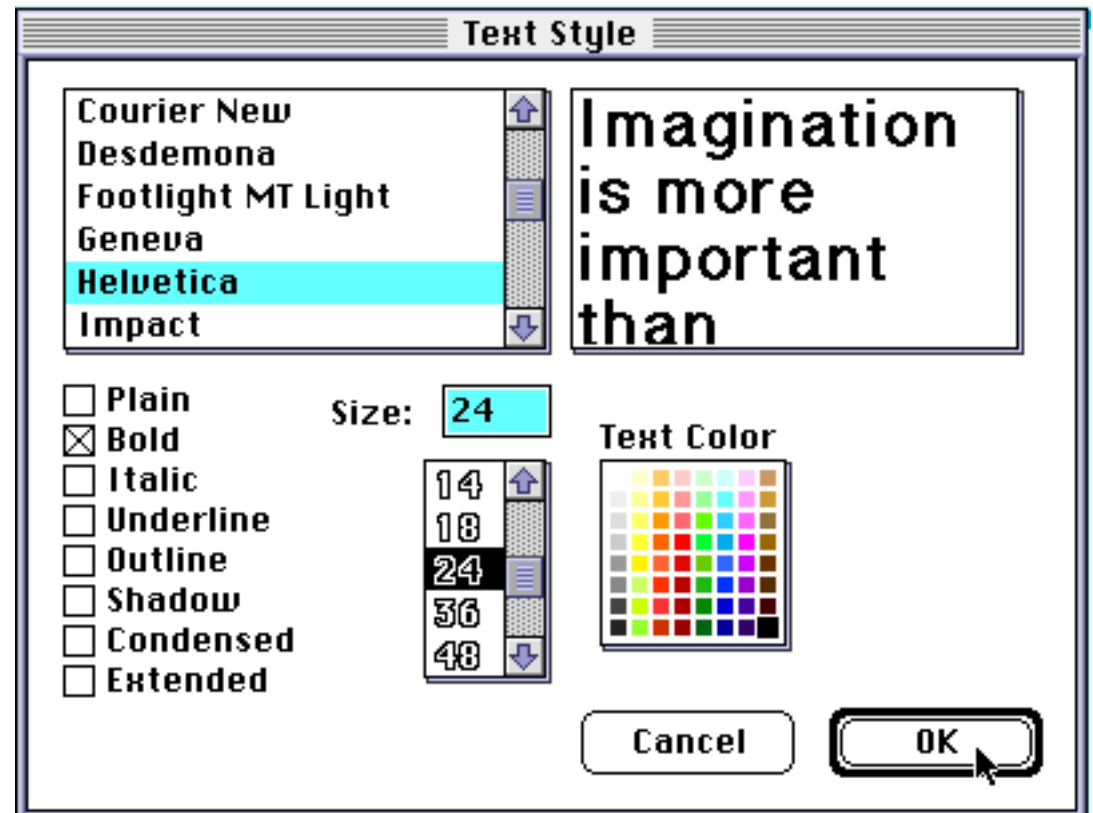
## Create a title.

Under the “Options menu”, select “Text Style.” A dialog box appears providing your with four choices. Of the four options, select the font “Helvetica”, the style “Bold”, the size “24”, and the color “Black.”

Go to the “Tools palette” and select “T” for “Text.”

Click your mouse where you want the beginning of your title to be and type “My First Stack.”

**Warning:** Before you move your cursor to go elsewhere, double check the spelling of the title. If you have



misspelled a word, backup by pressing the “Delete key.” Once you have placed your cursor elsewhere, you can not edit your text.

If by some chance you move your cursor too early, then select the “Editing tool” in the upper left hand corner of the “Tools palette” (it looks like a box with dashed lines), drag the editing tool over an area of solid color, and drag the selected area over the misspelled text. Let up your mouse and begin again.

---

# 1-10.

**Center your title.**

Go to the “Tools palette” and select the “Editing” box to the left of the lasso.

Click to the upper left of “My First Stack” and drag to the lower right. Place your cursor over the active selection. Your cursor will change to an icon with four arrows. Drag and center the text. Click outside the dotted rectangle.

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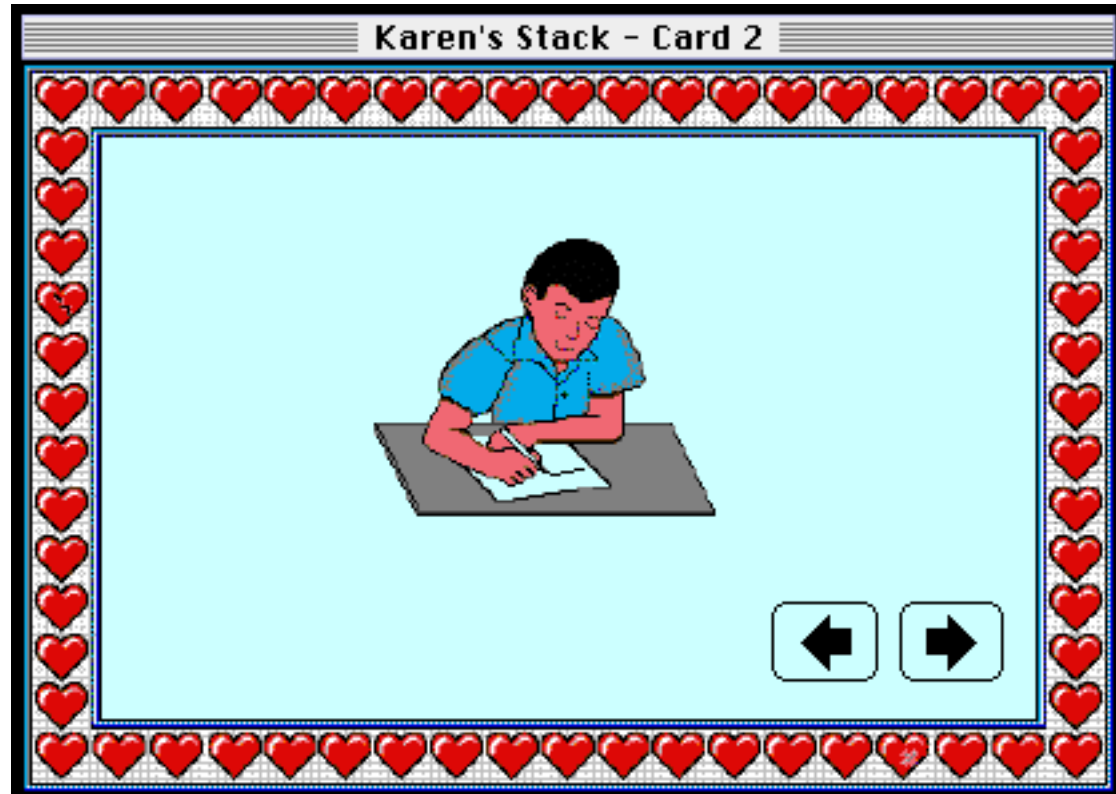
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# Lesson 2

*In this lesson you will create a card containing a colored background that includes clip art and invisible button that plays a recording of your voice.  
(Buttons for navigating will be added in Lesson 4.)*

**Upon completion of this lesson, you will be able to:**

- Add a second card.
- Import and arrange clip art.
- Create an invisible button.
- Customize the look of your cursor.
- Use the built-in “Tape Player” to record your voice.



## 2-1.

Make a second card.

Under “Edit menu”, select “New Card.”

## 2-2.

Import a background from HyperStudio's Clip Art collection.

Under the “File menu”, select “Import Background.” Click on “Open.”

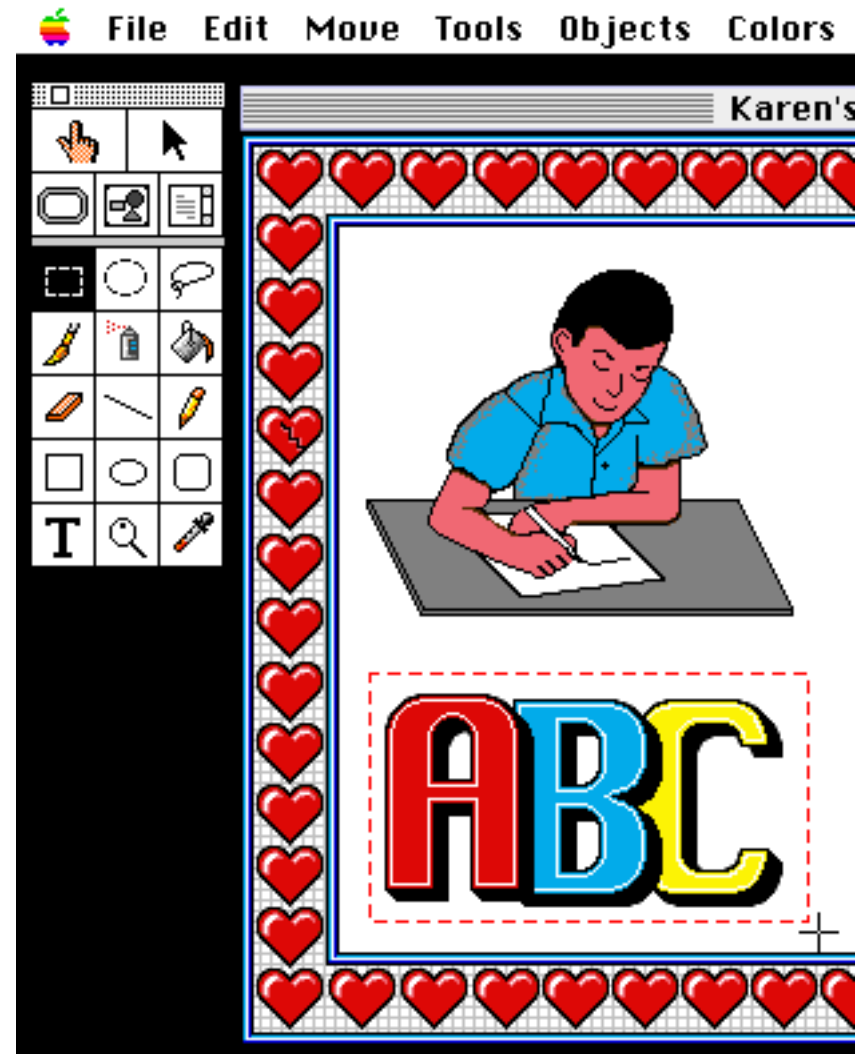
Open “HS Art” and select “Education 2.” The image will automatically transfer to your second card. You can tell by looking at the name in the “title bar.”



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Drag and place a “Tools palette” on your desktop.

To begin cleaning up your new background, select the “Editing tool”; the rectangle with the dashed outline located towards the upper left side of the “Tools palette.” Place your cursor (which changes to a “crosshair”) on the upper left hand corner of the “ABC” image. Drag the cursor to the opposite corner. Once the “ABC” is “selected” or enclosed by a dotted rectangle, press the “Delete” key on your keyboard. The image disappears. Repeat with the remaining images except the border with the hearts and the boy writing on a piece of paper.



Move the image of the student to the center of the screen. Outline the student with the "Editing tool." Place the cursor, which has changed to an icon with four arrows, inside the active rectangle. Press the button on your mouse and drag the image to the center of your screen.



Color the background like you did in Lesson One using the "paint can" tool and "color palette."

## 2-3.

Create an invisible button.

Under the "Objects menu", select "Add a button."

A dialog box appears called, "Button Appearance." Pick the third button on the lower left.

Deselect "Show name", "Show Icon", and "Highlight."

**Button Appearance**

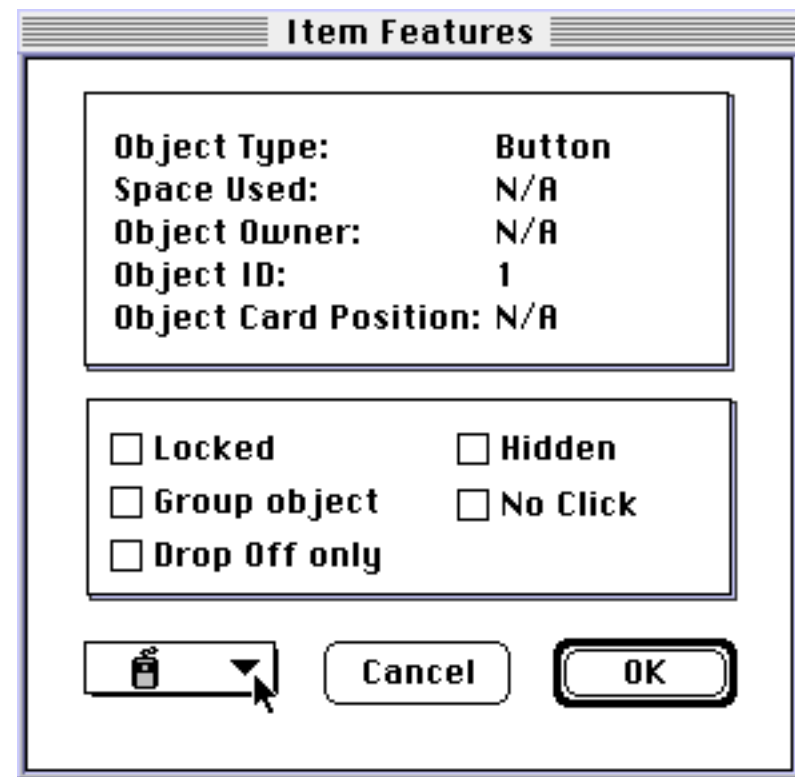
<b>Type</b>	<b>Your button will look like this:</b>								
<table style="width: 100%; text-align: center;"> <tr> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">○</td> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">◻</td> </tr> <tr> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">□</td> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">□</td> </tr> <tr> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: black; border-style: dashed;">□</td> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">✎</td> </tr> <tr> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">↔</td> <td style="border: 1px solid black; width: 50px; height: 50px; background-color: yellow;">✍</td> </tr> </table>	○	◻	□	□	□	✎	↔	✍	invisible
○	◻								
□	□								
□	✎								
↔	✍								
<div style="text-align: center; border: 1px solid black; padding: 2px; margin-bottom: 5px;"><b>Position</b></div> <input type="checkbox"/> <b>Show Name</b> <input type="checkbox"/> <b>Show Icon</b> <input type="checkbox"/> <b>Highlight</b>	Name: <span style="border: 1px solid black; padding: 2px 10px;">New Button</span>								
<div style="display: flex; justify-content: flex-end; gap: 20px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px 15px;">Features...</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px 15px;">Icons...</div> </div>									

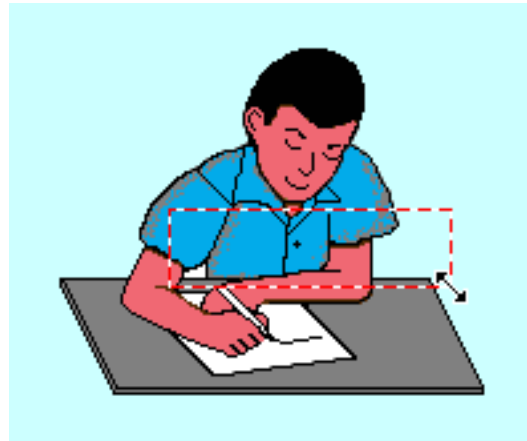
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Click on the middle button, named “Features”, on the lower right side of the screen. A new dialog box that appears called “Item Features.” Make sure the following are deselected: “Locked”, “Group object”, “Drop off only”, “Hidden” and “No Click.”

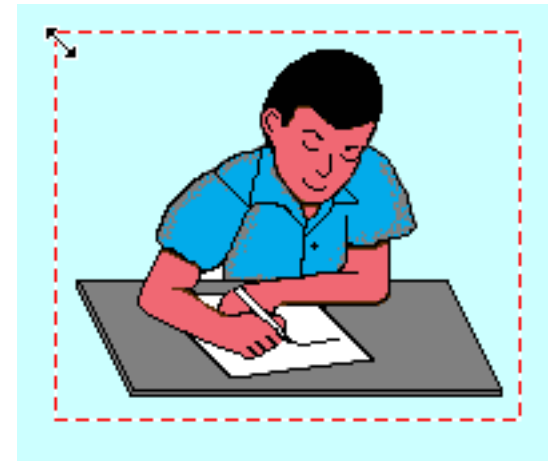
From the pull down menu in the lower left hand corner, select an icon that looks like a mouse. Later, as you move your cursor over the screen, the cursor will change from the “hand” icon to the “mouse” icon indicating that the pointer is over a button.

The “Button Appearance” dialog reappears. Click on “OK.”





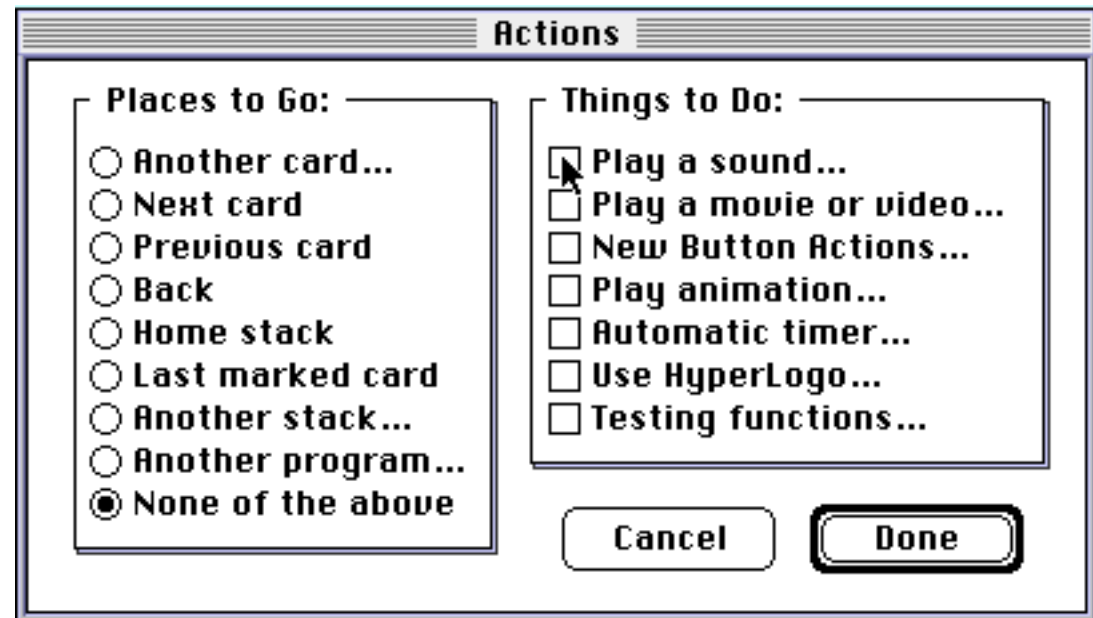
A dotted rectangle appears over the center of the screen. Resize the “invisible” button to cover the image of the boy. Achieve this by carefully placing your cursor in the corner of the active area until the cursor changes into a diagonal arrow. Stretch the box into the appropriate size.



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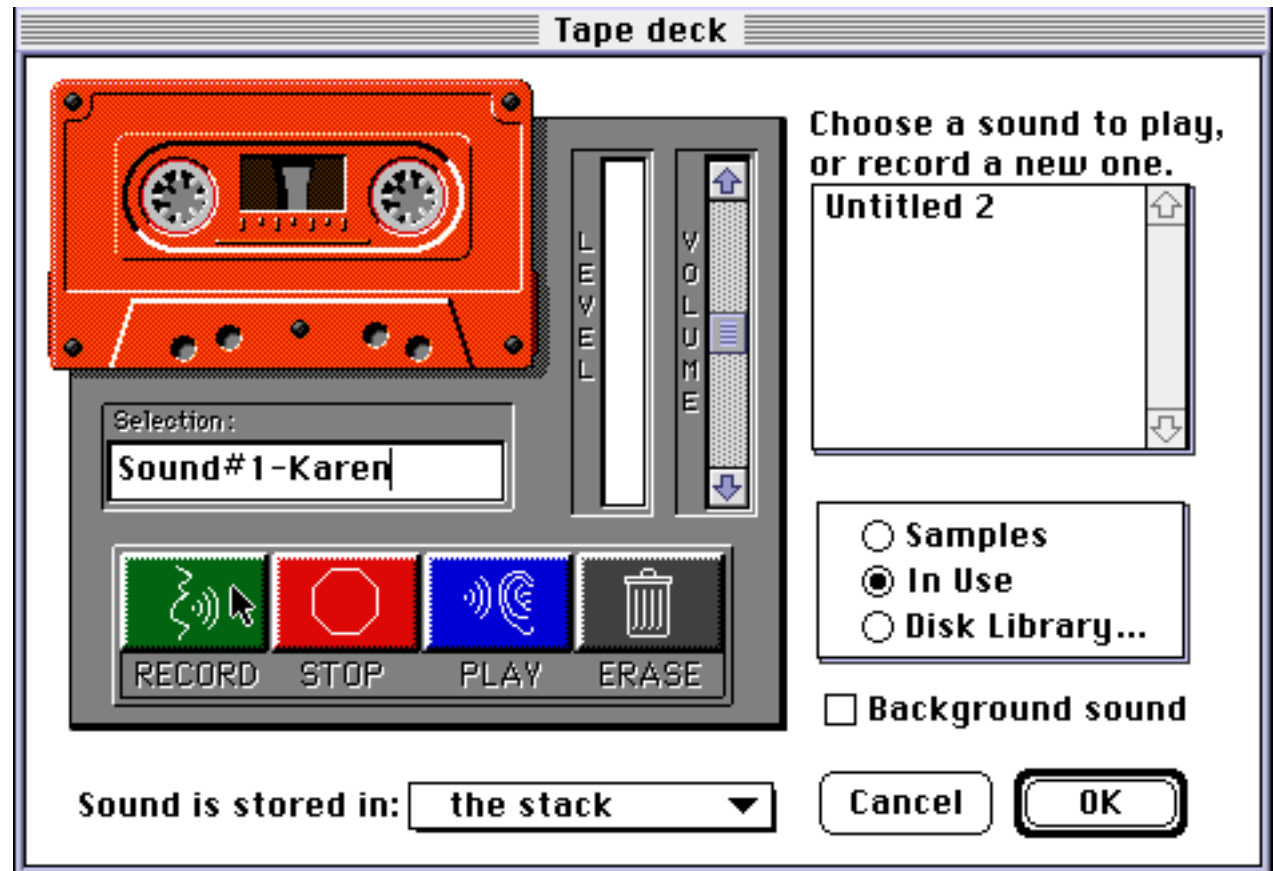
## 2-4.

Record your voice.



Click the mouse outside of the button. A dialog box will appear titled "Actions." In the right hand column, select "Play a sound." Click "OK."

A new screen appears titled "Tape Deck." Click on the "Record button" and speak into your microphone and say, "The student is writing a story." Click on "Stop" when you are finished speaking. Press "Play" to check the recording. Re-record if you are not satisfied.



Name the sound and label it with your name, for example, “sound #1 - Kim.” Click “OK.” Store the sound in “the stack.” Click “OK.”

Your screen returns to the previous “Actions” dialog box. Click “Done.”

Under the “File menu”, “Save” your stack.

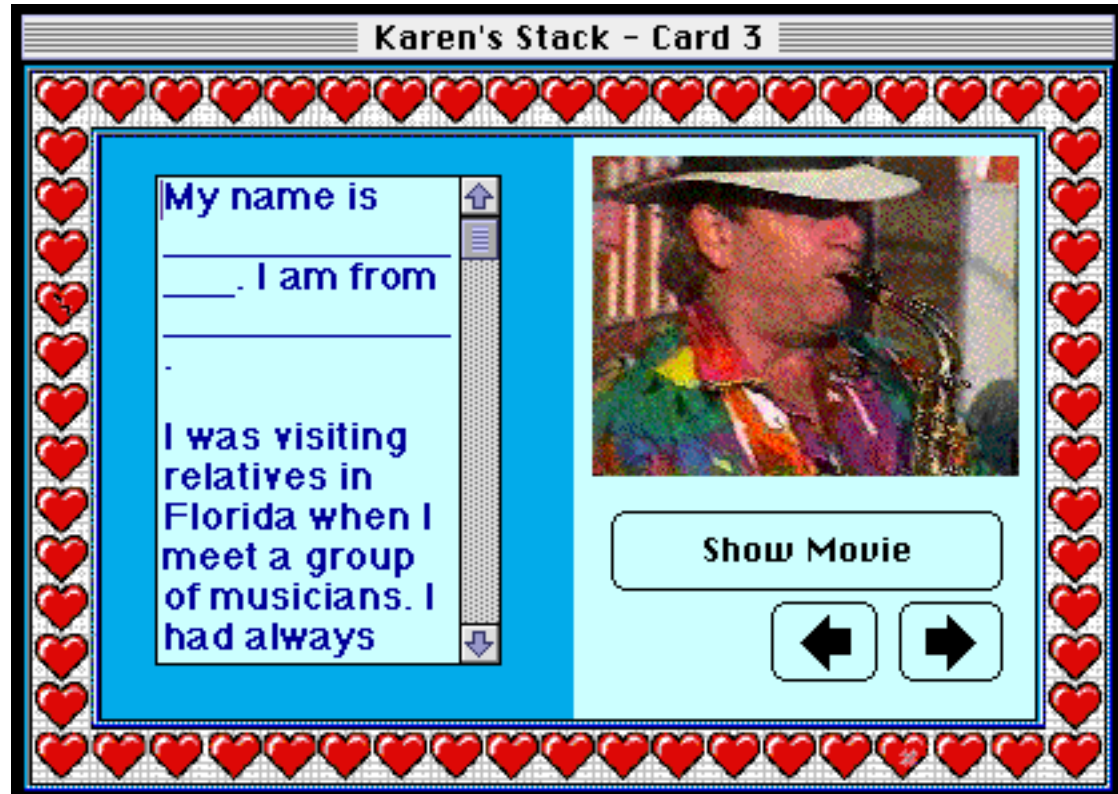
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# Lesson 3

*In this lesson you will create a card using the background from the previous card, import a QuickTime movie, and make a scrolling text box. (Buttons for navigating will be added in Lesson 4.)*

**Upon completion of this module, you will be able to:**

- Create a third card.
- Incorporate an existing background.
- Create a visible button.
- Name a button that you see on the screen.
- Set the button to highlight when pressed.
- Import and position a movie on the screen.
- Add a colored scrolling text block.



# 3-1.

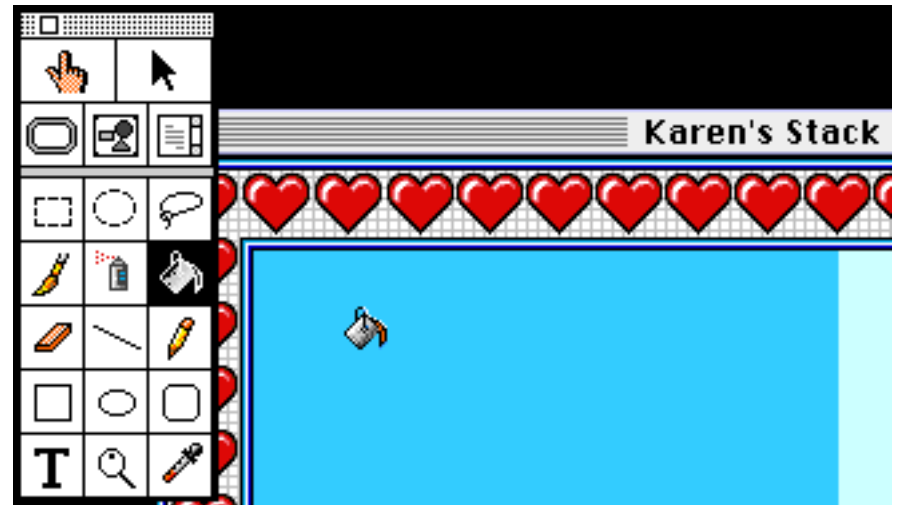
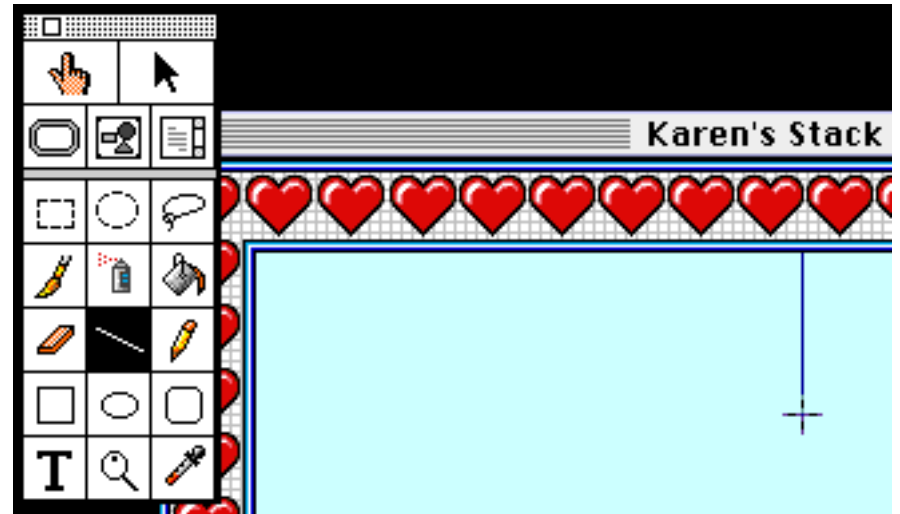
Create a third card with an identical background as the previous card and modify it.

Under the “Edit menu”, drag your cursor down to “Ready Made Cards” and over to your right to “Same background.” Note that the title bar on your screen has changed from card 2 to card 3.

Create a floating “Tools palette.” (See Lesson One.)

Using the “Editing tool”, delete the image of the student.

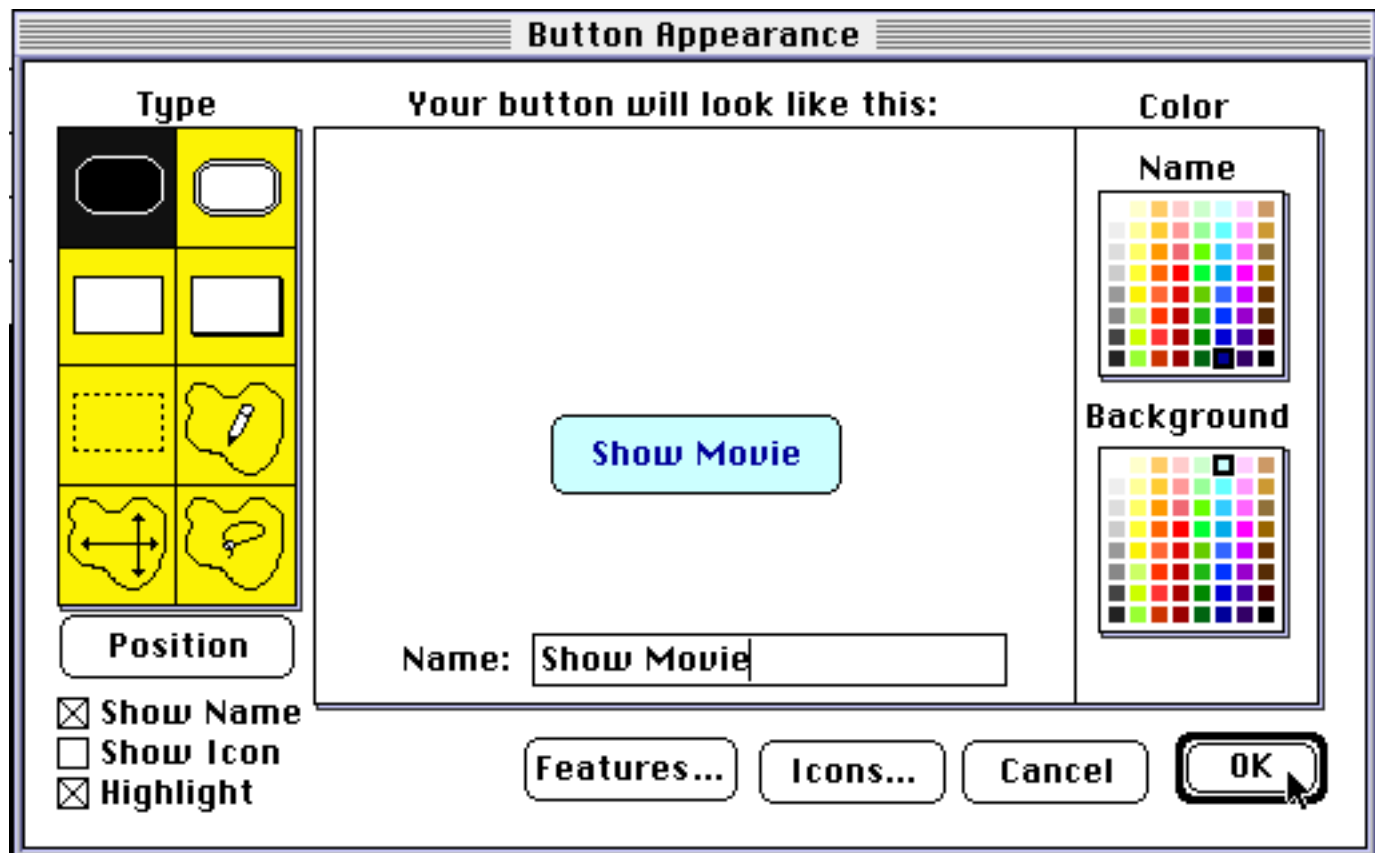
Using the “Line tool”, divide the foreground in half. Use the “paint can” to color the left side with a darker color. (See Lesson 1.)

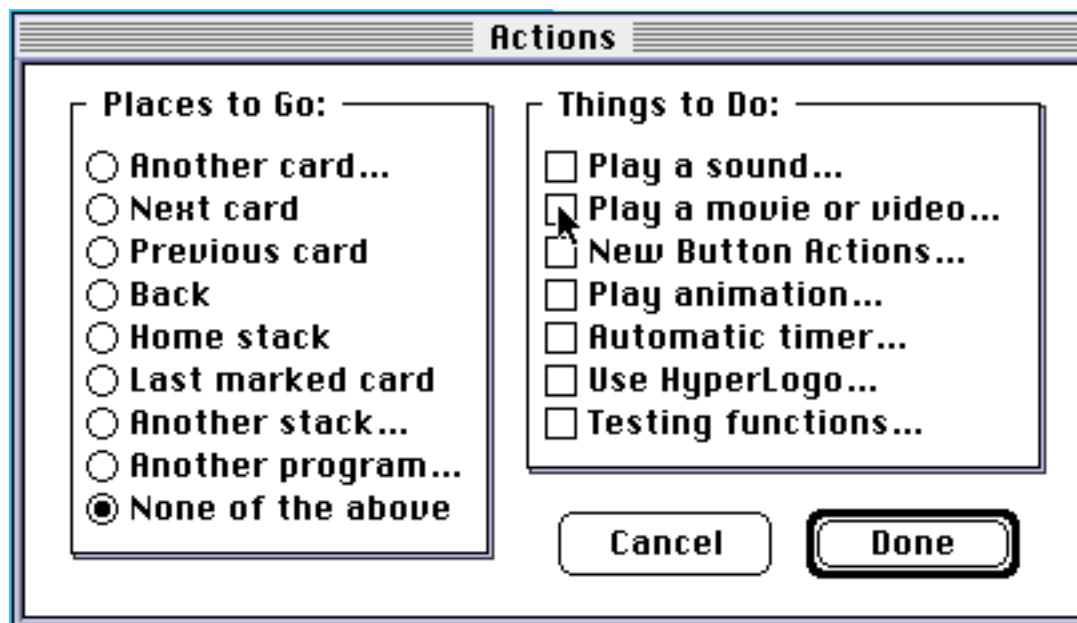


## 3-2.

Add and name a visible button that highlights when pressed and plays a QuickTime movie.

Go to “Objects menu” and “Add a button.” A dialog box will appear called, “Button Appearance.” Select any of the top four buttons. Also select “Show name” and “Highlight” in the lower left hand corner. On the right side, select colors for the button's

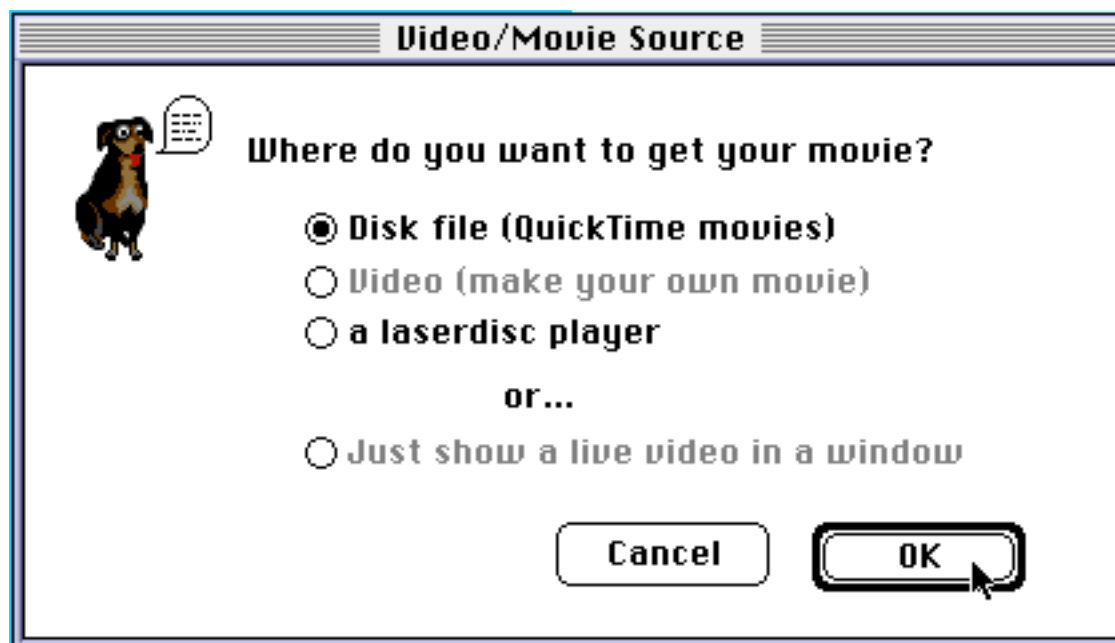




name and background. Name the button  
“Show Movie.” Click “OK.”

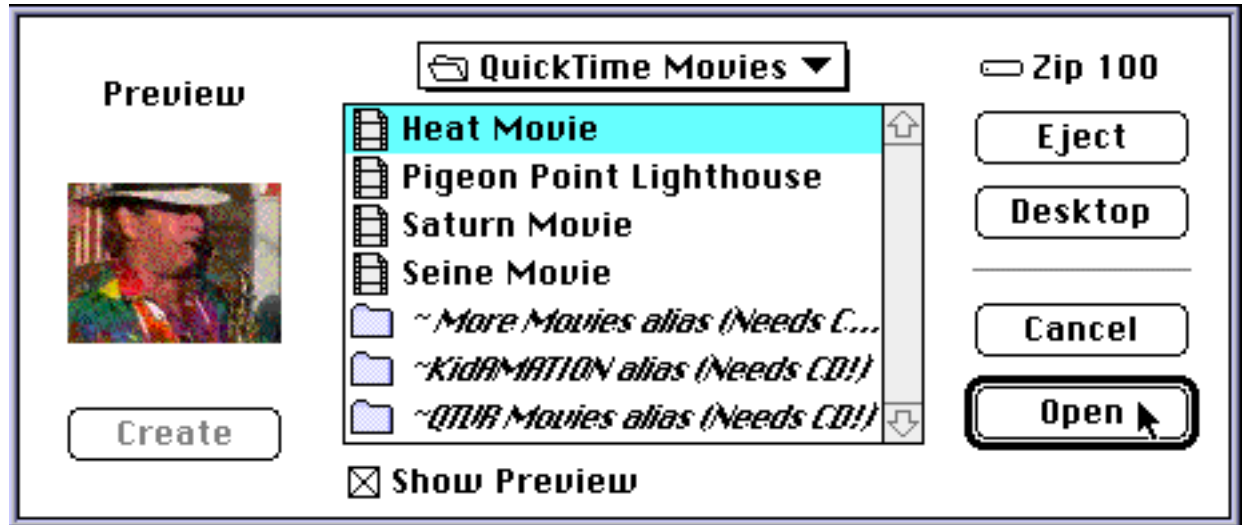
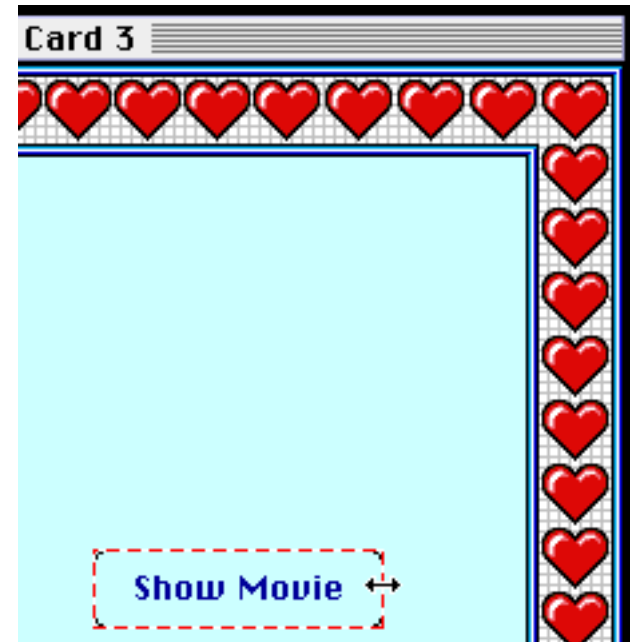
The “Actions” dialog box will appear. Select  
“Play a movie or video ....”

A “Video/Movie Source” prompt will appear  
and ask, “Where do you want to get your  
movie?” Select from the “Disk file.” Click  
“OK.”



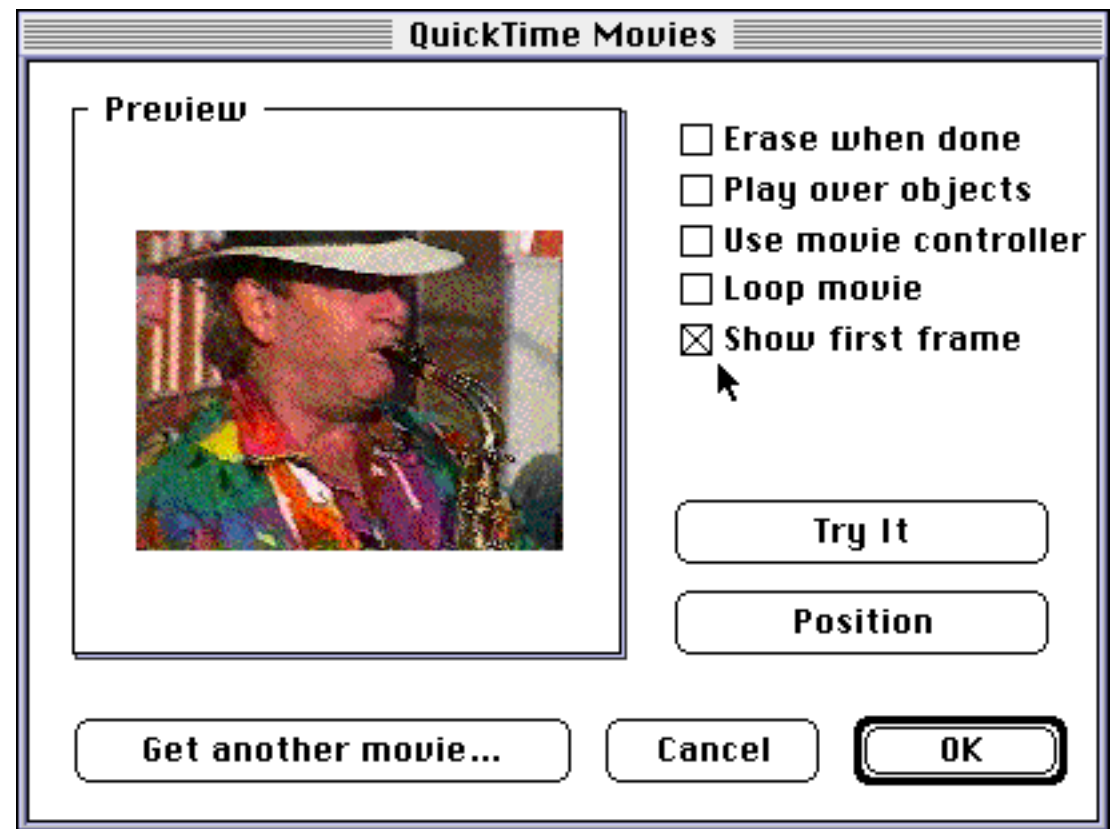
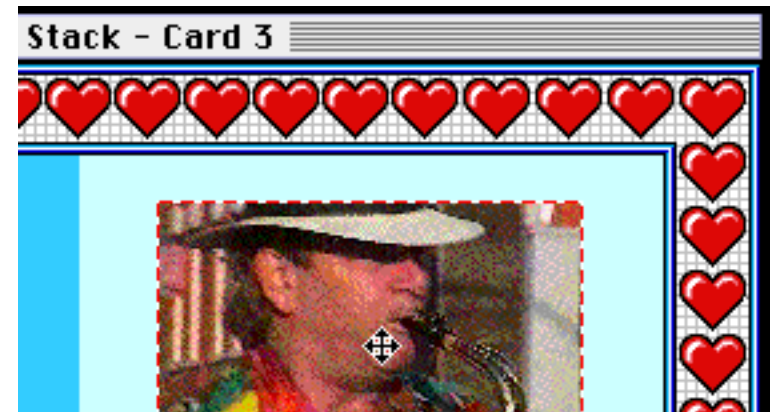
Reposition and resize the button that appears on the screen. Click off the active area.

A third prompt appears with a list of QuickTime movies. Select "Heat." Click "Open."



Position the movie on the upper left hand side of the card. Click outside the active box.

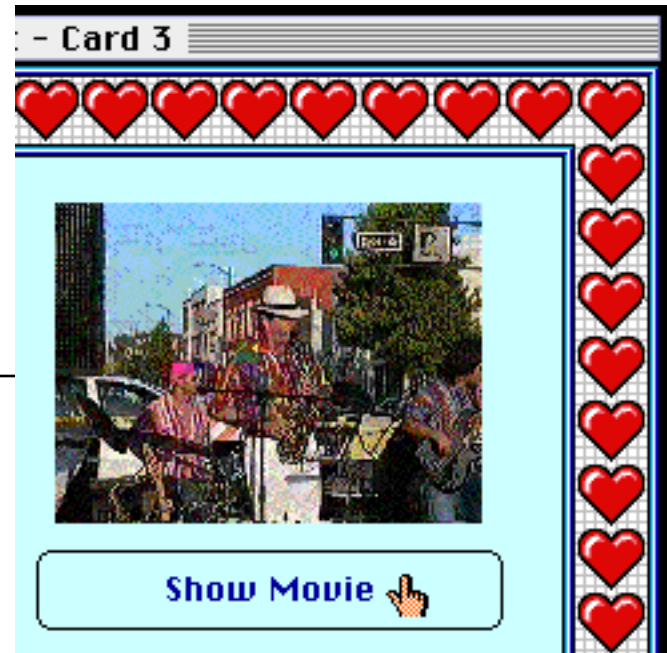
The dialog box “QuickTime Movies” appears. Select, “Show



first frame.” Click “OK.”

The “Actions” dialog box reappears. Click “Done.”

Click on your new button “Show Movie” to view the QuickTime segment.



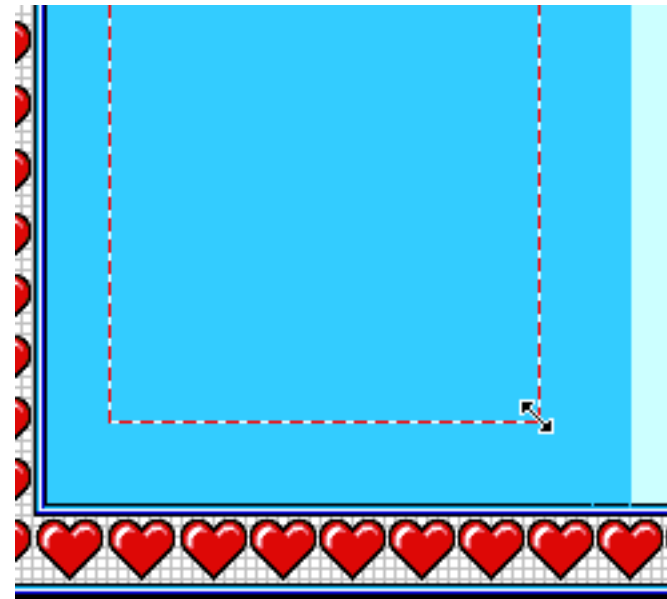
## 3-3.

### Add scrolling text.

Open the “Object menu” and select “Add a Text Object.”

Place your cursor on the active box and drag the text box to the right side of the window. Resize the text box so it fits the right half of your screen. Click off the active text box.

A dialog box appears called “Text Appearance.” Change the style of the type if you like. Name the text “Travel Story” (You can only type 15 letter into this space). Select a text color and background. Click on “Draw scroll box”, “scrollable”, and “draw frame.” Click “OK.”



You will see a flashing cursor in the “Textbox.” Type your name and where you are from. Have fun and invent a story, writing about a place you've (imaginarily) visited incorporating a description of the movie. For example, “I was visiting relatives in Florida when I meet a group of musicians ...” and continue the story.

When you are finished, open the “File menu” and “Save” your file.



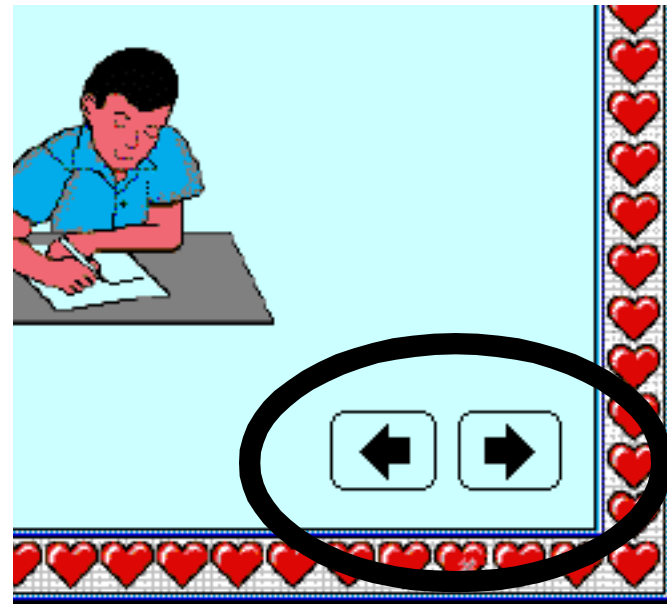
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# Lesson 4

*In this lesson you will create buttons which will allow you to navigate back and forth from card to card.*

**Upon completion of this module, you will be able to:**

- Select an appropriate icon for your button.
- Customize your button's color and size.
- Create a button which will highlight when pressed.
- Select a transition from card to card.
- Become familiar with HyperStudio's Browse mode.

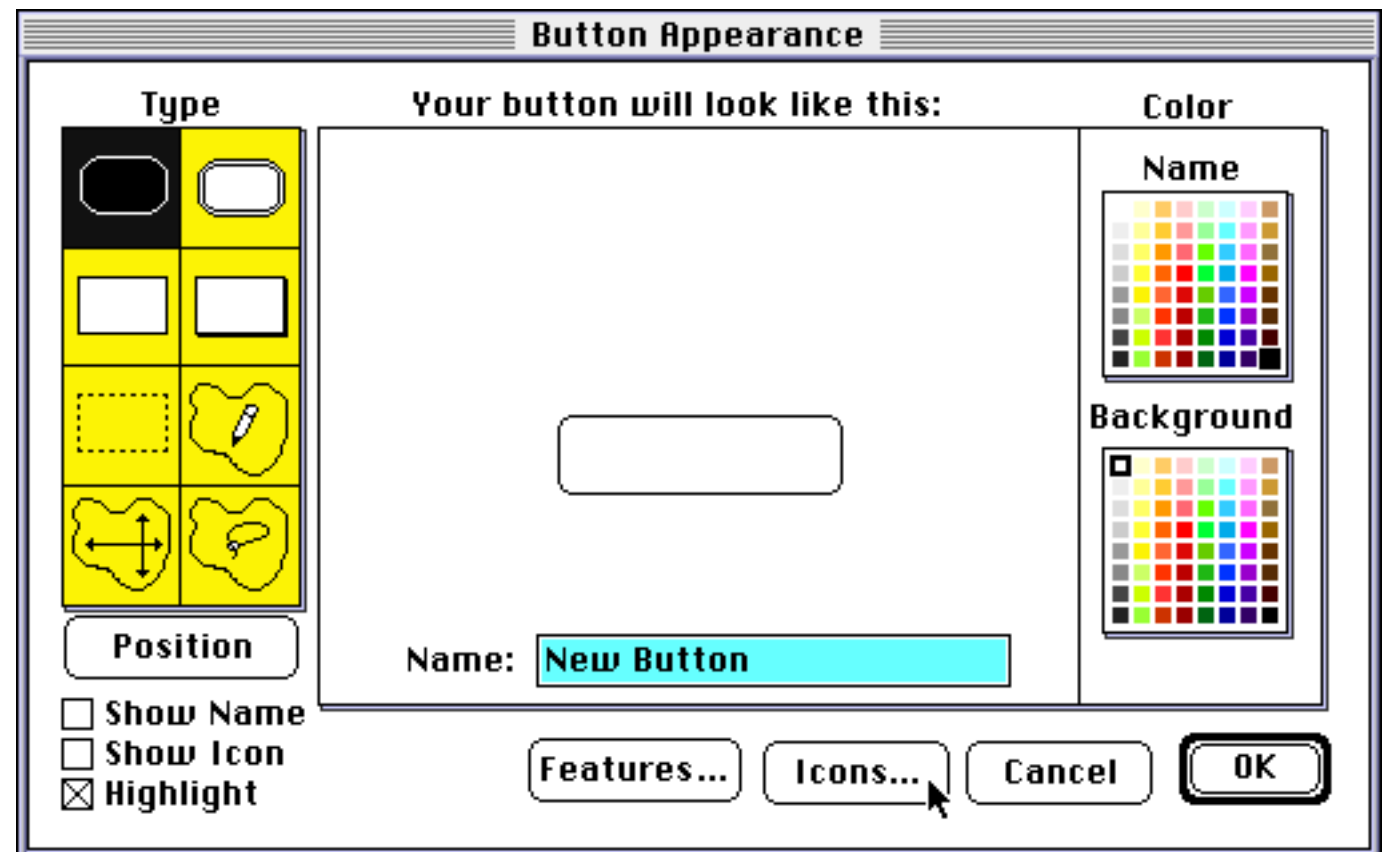


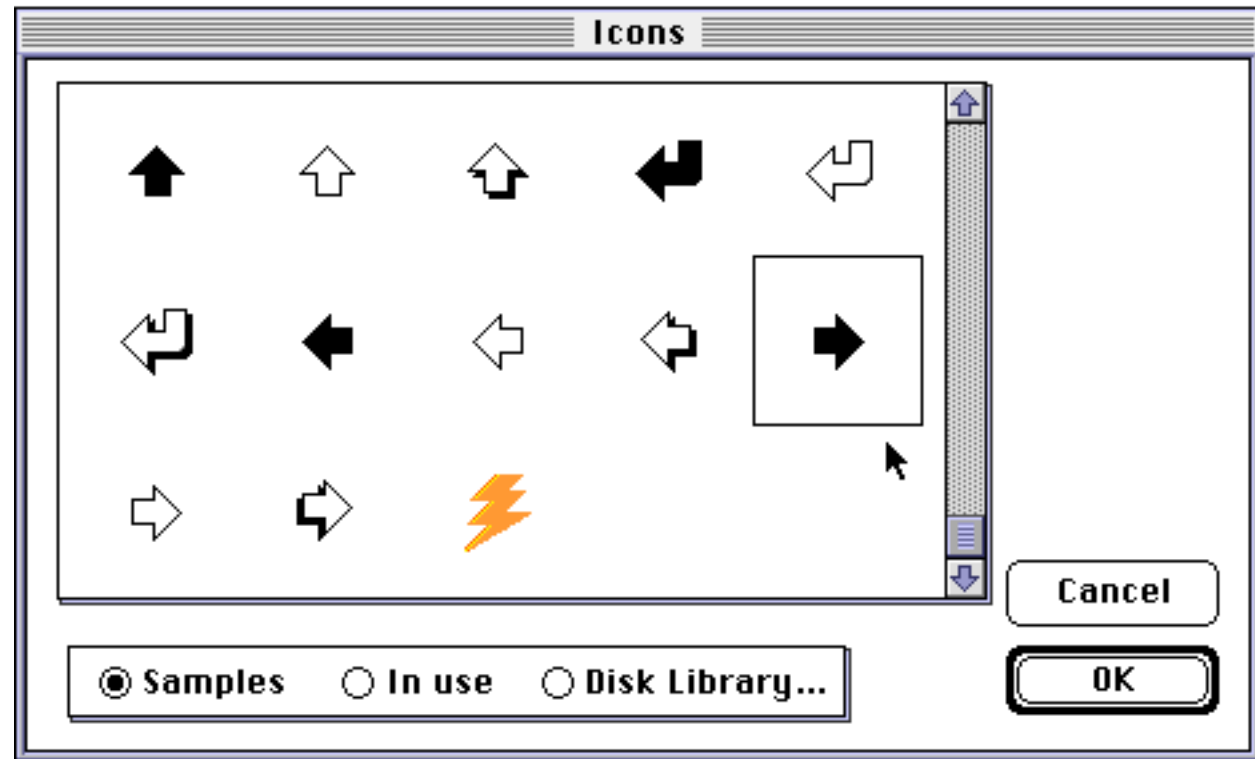
# 4-1.

Create a customized button which will take you to the next card.

When you have finished creating your third card, open the “Move menu” and select “First Card.”

After the first card appears, open the “Objects menu” and select “Add a Button.” The “Button Appearance” dialog box appears. Deselect “Show name” and “Show Icon.” Select “Highlight.” Click on the “Icons” button.

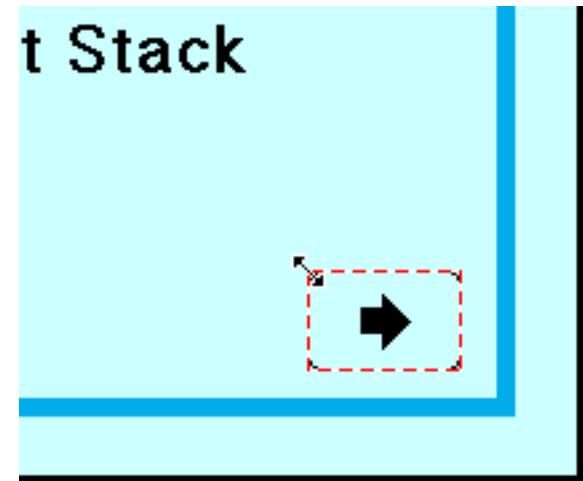


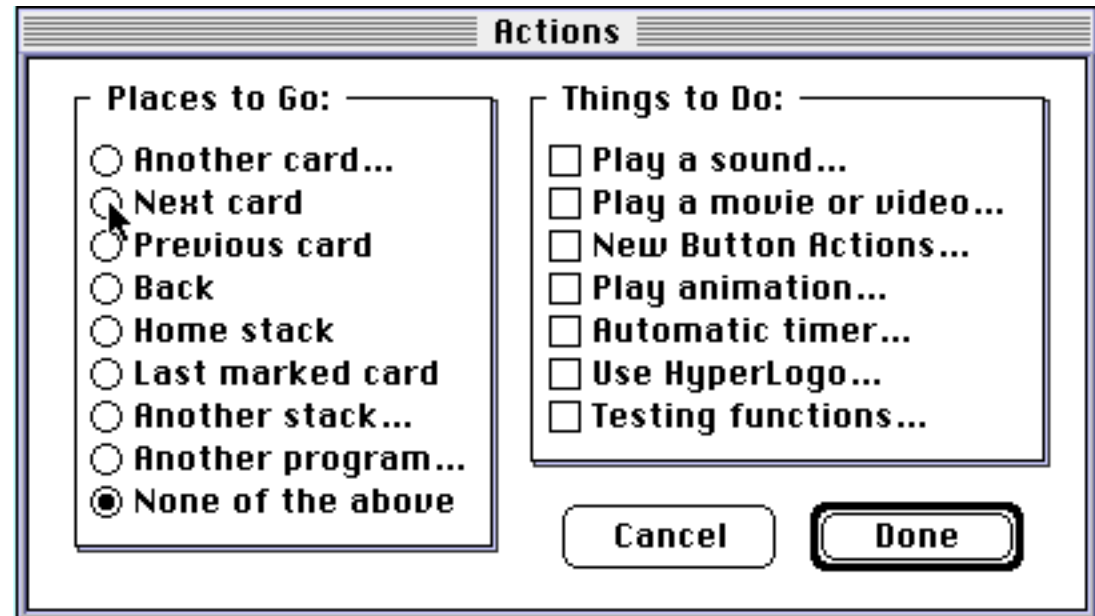


After the “Icons” dialog box appears, scroll down and select an icon of an arrow pointing to the right. Also check to see that the “Samples” button is selected. Click on “OK.”

The “Button Appearance” prompt reappears. Select the color of your new button's background. Click on “OK.”

Position and resize the “Right arrow” in the lower right corner. Click outside the button.

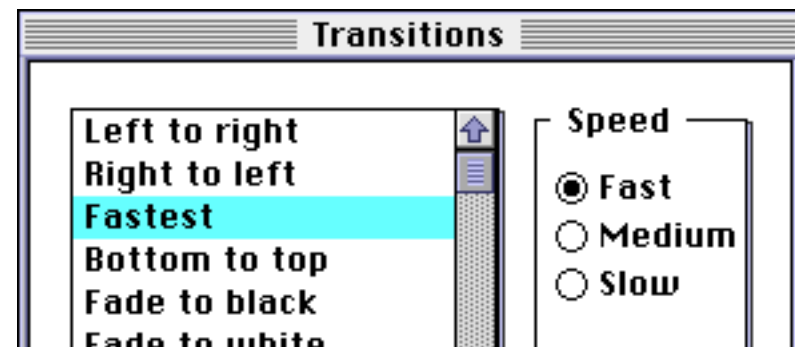




The “Actions” dialog box appears. Under the “Places to go”, select “Next Card.”

The “Transitions” dialog box appears. Select a “Transition” and a “Speed.” Click on “Try it.”  
When you have found a transition and speed you like, select “OK.”

When the “Actions” prompt reappears, click “Done.”



## 4-2.

**Create an identical button and copy it onto another card.**

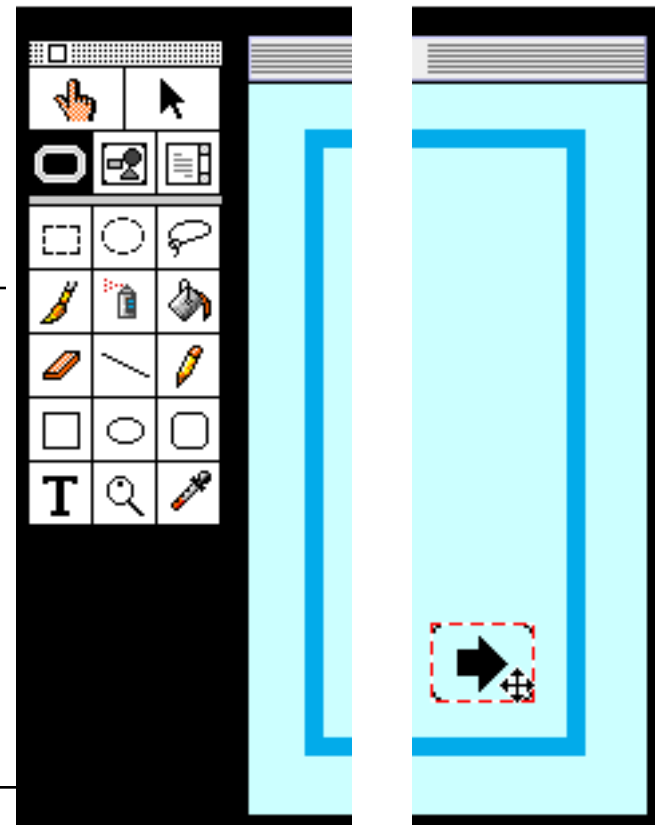
Create a floating “Tools palette” and select the “Button” and on the second row from the top, first icon on the left side.

Click once on the “Forward button” you've just created. Under the “Edit menu” menu, select “Copy button.”

Go to the “Tools palette” and select the “Hand/browse” tool on the upper left. With your cursor, press the “Forward button” and proceed to the second card.

Open the “Edit menu” and select “paste button.”

File Edit Move



## 4-3.

**Create a button which will take you back to the previous card.**

Repeat the previous steps. When you are finished, you should have four new buttons in your stack; a forward button on your first card, one forward and one “previous” button on the second card, and on “previous” button on the third card.

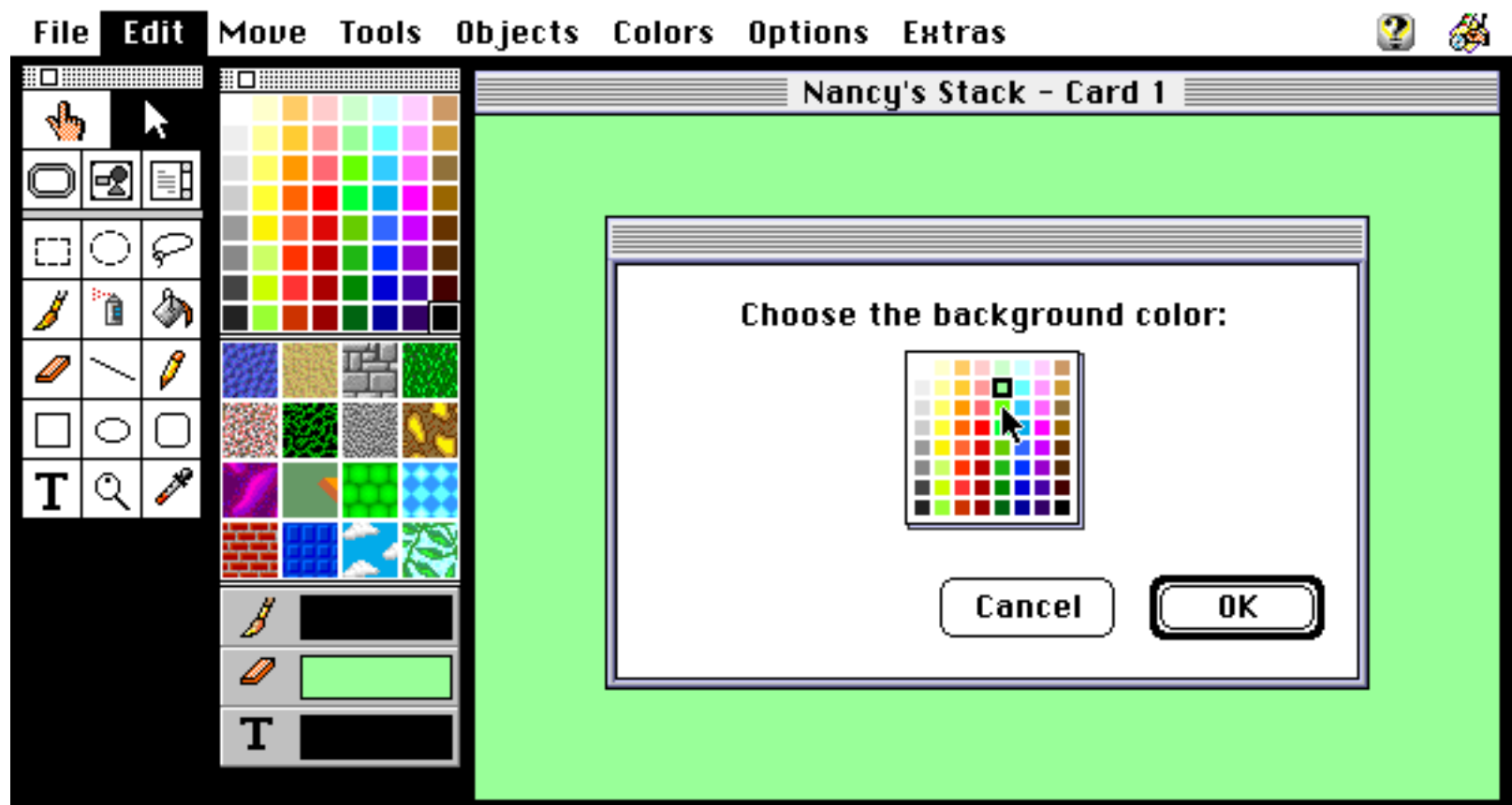
*Optional: As time permits, open and explore existing HyperStudio stacks.*

# Lesson 5

*In this lesson you will create a stack consisting of two cards illustrating a topic related to the Wastewater industry.*

Upon completion of this lesson, you will be able to:

- Use the “Erase background” function.
- Integrate science-related content into a stack.



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# 5-1.

**Choose a topic.**

Select one of the topics below. As you choose, keep in mind that you will be creating two cards based on this topic. One card will illustrate what you know about the subject (or at least, one aspect of what you know about the subject). The other card will illustrate a question you still have (or what you would like to know more about) concerning the topic.

- **The food chain process at the microbe level in either a pond or treatment plant.**
  - **A general term that may have a new meaning in a science class, i.e., culture, solution, etc.**
  - **The importance of washing your hands frequently.**
  - **Human population growth and its effect on a wastewater treatment plant.**
  - **Maps and their role in the Wastewater industry.**
  - **Ways to conserve water in a household or industrial setting.**
- 

# 5-2.

**Create a card using the “erase background” function and illustrate what you know about the topic.**

Click on “New Stack” on the lower left side of the HyperStudio Home Card. Go to “Edit menu”, select “erase background”, and choose the color of your choice. Drag the tool and color palettes to your desktop so that they will always be handy.

Double click on the “T” (for text) on the tool palette and choose Helvetica, Bold, 18 pt. Choose black or a color with good contrast to the background color of your card. Type the name of the topic you have chosen. Double click on the text tool again, choose Helvetica, plan, 14pt, and write a short explanation of what you know about your topic. Use the tool and color palettes to decorate your card.

---

## 5-3.

**Make a second card; illustrate a question.** Under the “Edit menu”, select “New Card”. Select “Erase Background” as you did earlier and choose a new color. Also repeat the steps using the text tool, but this time type a sentence using the idiomatic expression. Once again, decorate this card.

---

## 5-4.

**Add a button to card 1 for navigation.**

Select “Move” on the menu bar and select “First Card”. Choose “Add a Button” from the “Objects menu.” Select the invisible button (third down on left). Click on “Show Icon” only. Choose a button style. Click “OK.”

Move your button to the location you desire by putting the mouse arrow inside the moving dashed lines. Click anywhere outside of the button area when you are happy with its placement. Click “OK.”

When you see the “Button Actions” screen, choose “Next Card” under “Places to Go.” Click on “Play a Sound” under the “Things to Do” menu and choose a sound from the screen, text file (under HS Sounds), or record your own. Then click “Done” on the lower right portion of the screen.

Remember “Transitions” are simply fun ways of going from one card to the next. Try a few using the “Try It” button, or try them all if you like. Choose one and then click on “Done.” Now try your button!

---

## 5-5.

**Add a button to card 2 for navigation.**

Repeat the activities for making a button on card 2, only choose “Previous Card” on the Button “Actions” screen. This creates a “loop” as a means of exiting your last card.

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# 5-6.

**Save and show!**

Save your stack. Prepare to show and share the presentation with the rest of the class.

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## Summary

HyperStudio can help you organize, manage retrieve, and present information. In Unit 1 you learned how to start a HyperStudio document. More specifically, you learned how to use buttons and menu choices to move from card to card; how to automate browsing by clicking on the button that symbolizes browsing; make changes in your stack by switching to the pointer tool; how to add and modify information on cards.

## Review questions

1. Did you have any problems creating the stacks in Unit 1?
2. What was the objective of your projects?
3. Was the information or content within the project you created presented in a logical, easy-to-understand order?
4. Was your topic suitable for the audience you presented your project to?
5. What new skills did you learn from Unit 1?
6. What would you do differently if you were to repeat the assignments?
7. How might you go about creating a larger or more complex project?

# Notes:



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# Unit 2

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# Unit Two

## *“Advanced Organizer”*

*Throughout the lessons in Unit 1 you became familiar with HyperStudio's interface by learning how to create a stack with buttons for navigating.*

*Unit 2 builds upon the previous lessons in Unit 1 enabling you to gain a higher level of expertise with HyperStudio. The second unit focuses on the special effects you can achieve using “New Button Actions.”*

*Please refer to previous lessons for procedures already covered in Unit One. Most of the new concepts that are introduced in Unit 2 will have accompanying illustrations.*

# Lesson 6

*In this lesson you will create a stack of two cards which utilize five kinds of interactive buttons.*

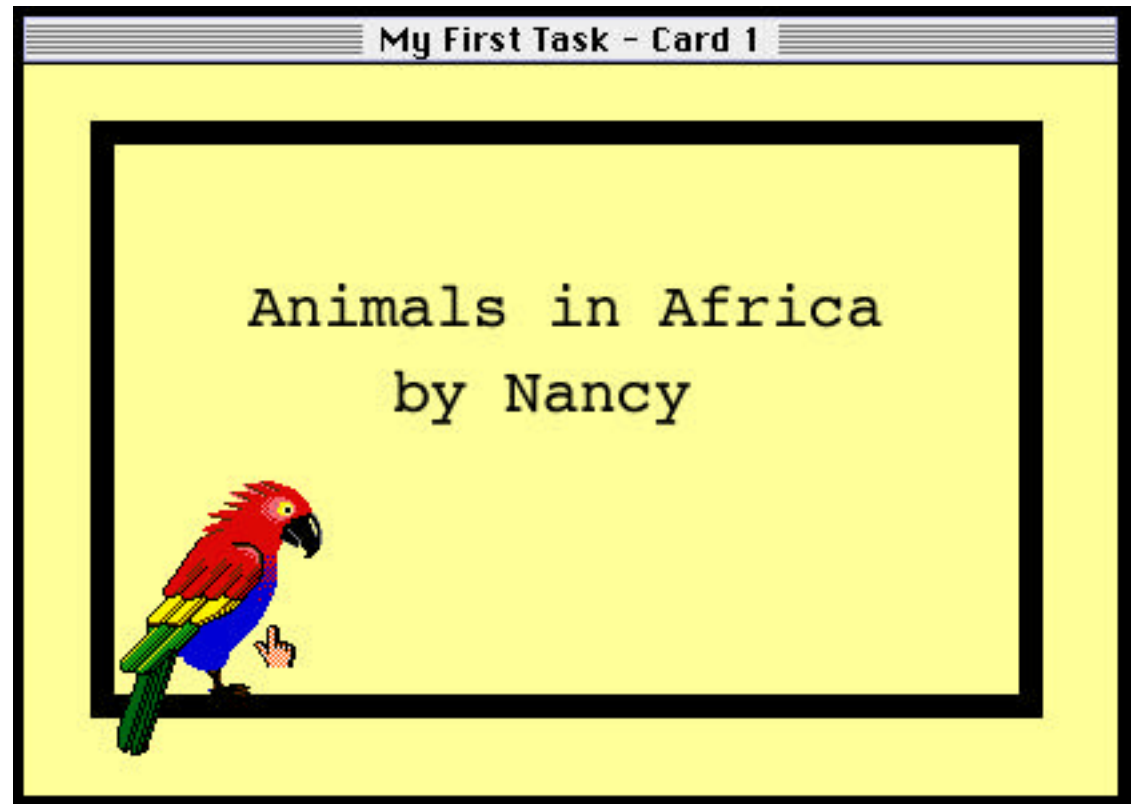
**Upon completion of this lesson, you will be able to:**

- Add selective portions of clip art with the freehand lasso tool.
- Convert clip art to a button.
- Import text to a scrolling field from an existing text file.
- Create a hypertext link.
- Use the “Map tool” to create a button.
- Create an “Exit” button.
- Create computerized speech.

## 6-1.

**Create a title card with a border and title.**

Click on “New Stack” on the bottom left side of the Home Card. Save and name your project “My First Task.” Click on “OK” then go to “Erase Background” under the “Edit menu.” Select a color. Go to the “Options” menu and select “Line size.” Choose the thickest line. Drag the “tools” palette to your desktop. Also drag the color palette to your desktop. Do this in the same manner as you use with the “Tools” palette. Choose Black. Select the “rectangle” tool above the “T.” Draw a border. Position your mouse in the upper left area about one half inch from the top and side of the card. Drag the mouse to the lower right corner and make a rectangle.



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## 6-2.

Create a title for your first card and enhance it with clipart.

Double click on the “Text tool.” Choose any font you like and make it bold, point size 18. Go to the “Options menu” and select “Text Color.” Choose black and then click “OK.” Position the cursor about an inch from the left and top. Type “Animals in Africa.” If it is not centered on the card, go to the “Tools palette” and select the “Editing tool” which is next to the circular lasso. Surround the text with the box and position it in the center. Repeat the process by writing your name below the title.

To add clip art: Select “Add Clip Art” under the “File menu.” Choose disk file “HS Art” and open “Animals.” Use the lasso to circle the piece of clip art you want to use and then click on “OK.” Position the artwork by moving it with the mouse. When you are satisfied with its position, click outside of the artwork.

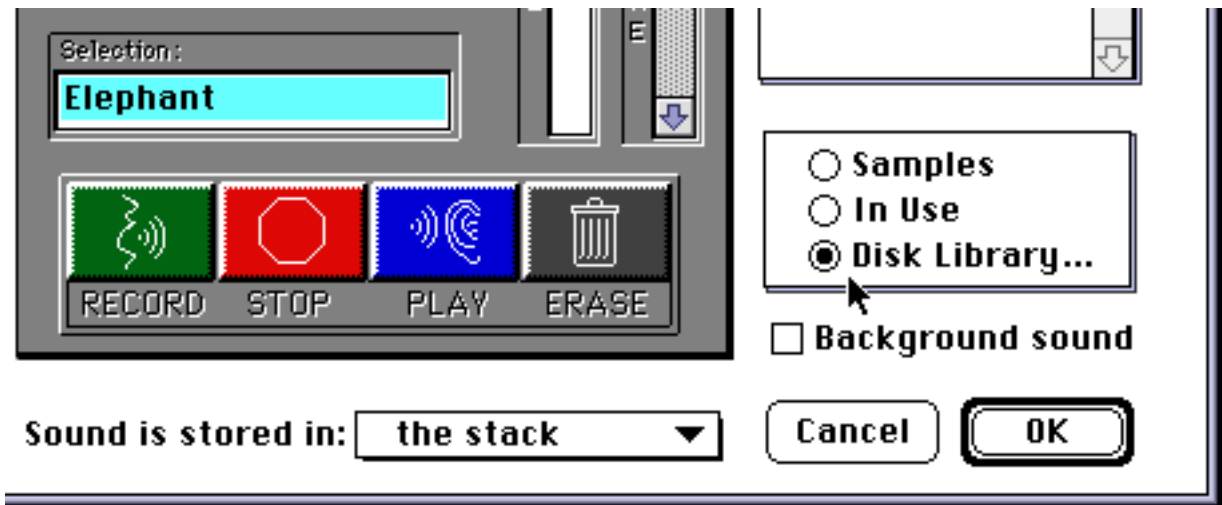
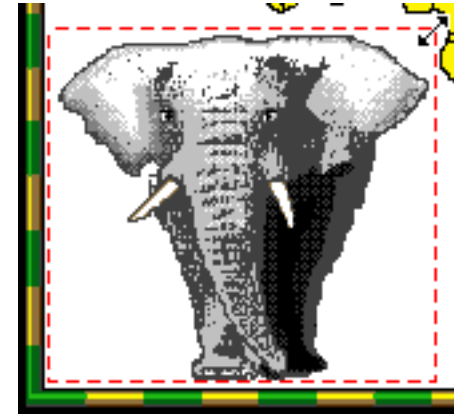
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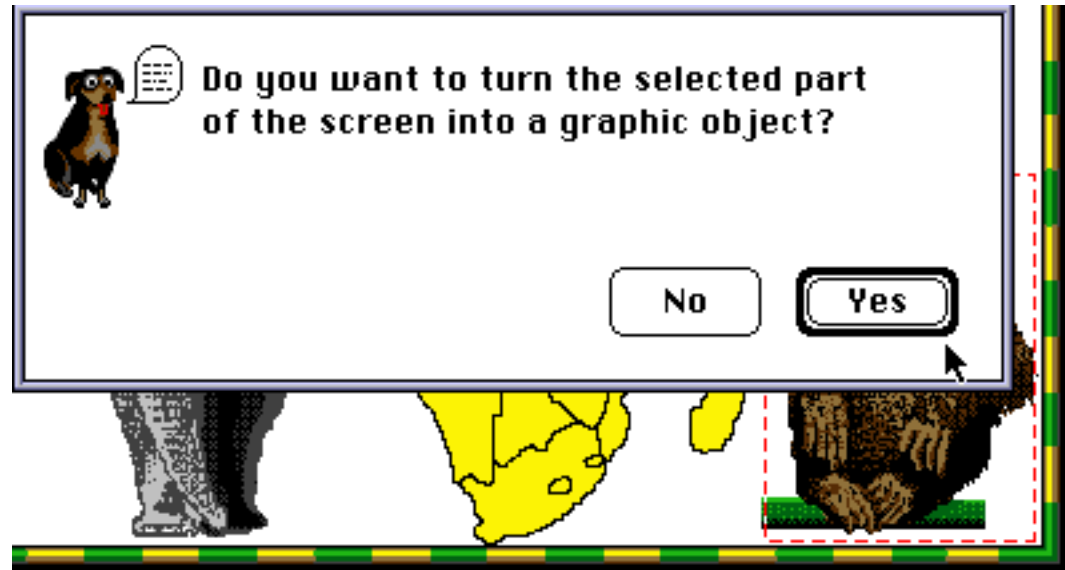


## 6-3.

Create card 2, import a background and create an invisible button with sound.

Go to “Edit” and select “New Card.” Go to the File menu and select “Import Background.” Under “HS Art”, choose the file called “Animals.” The card will fill with the picture. Go to “Objects” and “Add a Button.” Select “Invisible” which is the third one down on the left. Deselect “Show Name”, “Show Icon” and “Highlight” and then click “OK.” Position the button over the elephant and click outside the active area. Select “Play a Sound.” At the “Tape Deck” prompt, select from the “Disk Library.” It’s located under “HS Sounds.” Choose “Elephant” and then click “OK.” Click on “Done.” Test your button. With your pointer, click on the arrow tool and watch an outline appear around the button. Move the button to see that your clip art is unaffected. Move the activated area back in place. Click off the button.





## 6-4.

### Turn a piece of clip art into a button.

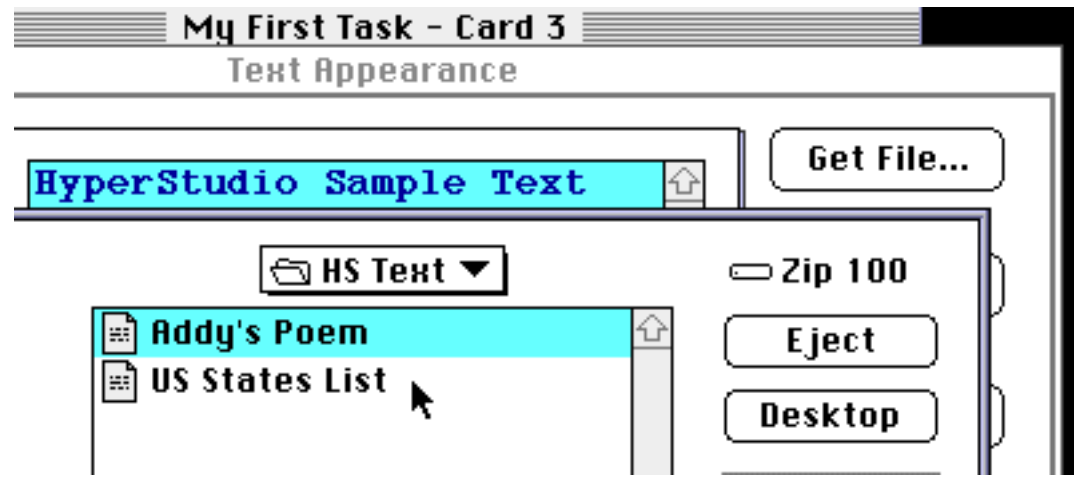
On the “Tools palette”, select the “Editing tool” and surround the chimpanzee. Open “Objects”, select “Add a graphic object.” A prompt appears “Do you want to turn the selected part of the screen into a graphic object?” Click “Yes.”

At the prompt “Graphic Appearance”, name the object “Chimp.” To the left side of the screen, under “Places to Go”, select “Next card.” Choose a “Transition”, click “OK.” Click “Done.” Place your cursor over the image of the chimp and drag it slightly to see that you've turned it an object.

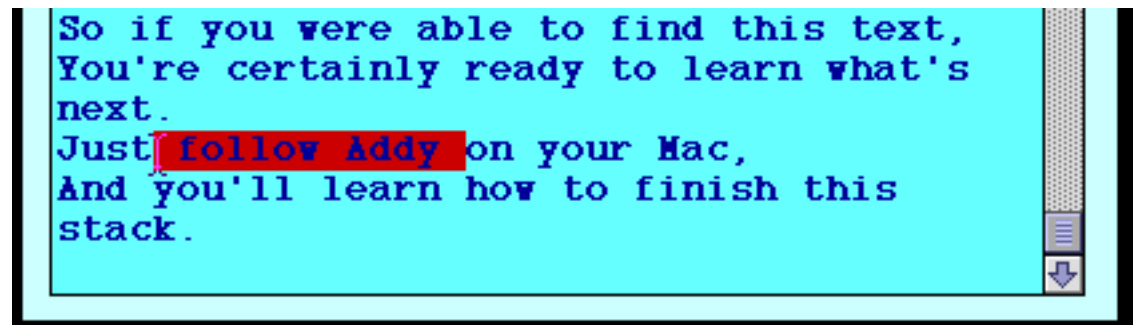
## 6-5.

### Import text into a scrolling text field and create a hypertext link.

Under the “Edit menu”, select “New card.” Color the background. Under “Objects”, select “Add a Text Object.” Resize it to fill the screen more. Click off. Select “Draw scroll bar”, “Scrollable” and “Draw frame.” Name the text box “About Addy” We'll pretend the chimp's

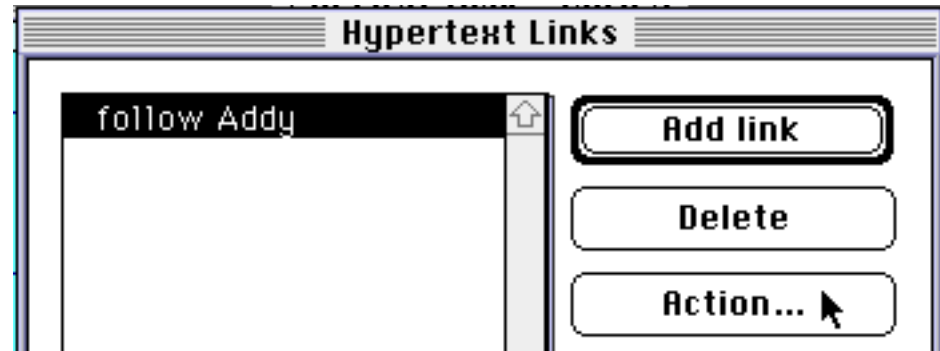


is a pet and it has been named “Addy.” Select color for the text and background. Click on the “Style” button. Change the text to 14 pt. In the upper right hand corner, press on the button “Get File.” Open the folder “HS Text” and select “Addy's Poem.” Click “OK.” If you need to, with the arrow cursor, click once inside the box and resize it so the poem fits well.



In the Browse mode, scroll down until you see the last line. Switch to your text tool and highlight the words “follow Addy” and change the color of the highlighted text. Under “Objects”, select “Hypertext Links”, type “Chimp” in the box at the bottom of the prompt “Hypertext Links.” Click on “Add link.” The remaining four buttons on the right become

active. Select “Action.” Under “Place to go”, select “Previous card.” Select a “Transition.” Click “Done.” Click “Done” again.



## 6-7.

Convert a selected area to a button using the “Map” tool.

Under the “Objects menu”, select “Add a Button.” Highlight the “map” button on the lower right side. Click the button below it, “Position.” Place your cursor over a country and click one. Click “OK” at the prompt



“Your button's shape has been defined.” Click “OK.” Be sure “None of the above ” is selected under “Places to Go.” To the right side under “Things to Do” select “New Button Actions.” A “New Button Actions” prompt appears. Select “Blabbermouth” on the left. Click on the button below, “Use this NBA.” Type in the text field, “Many African countries have taken steps to save





their rich wildlife heritage.” Select a voice, click on the “Try It” to test it. Click “OK.” Click “OK” again. Click “Done.” Once your back to “card 2”, test your new button.

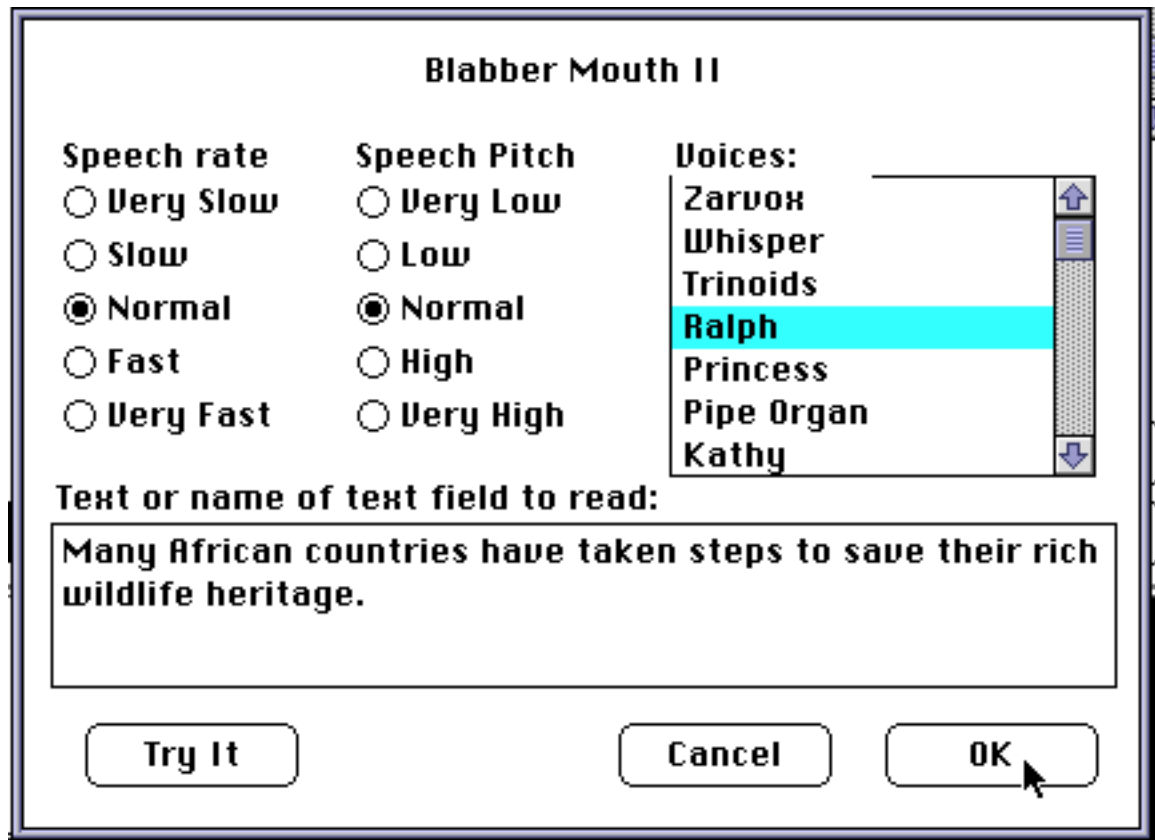
## 6-8.

Convert a selected area to a button using the “Freehand” tool.

Use the freehand button tool. Under “Objects”, select “Add a button.” Select the freehand tool on the lower right. Click “Position.” Circle the parrot. The prompt will appear, “Your button's shape has been defined.” Click “OK.” Indicate this button should return to the previous card. Click “OK.” Test your button.

On “Card 1”, repeat the steps you just performed except indicate on the first card's parrot



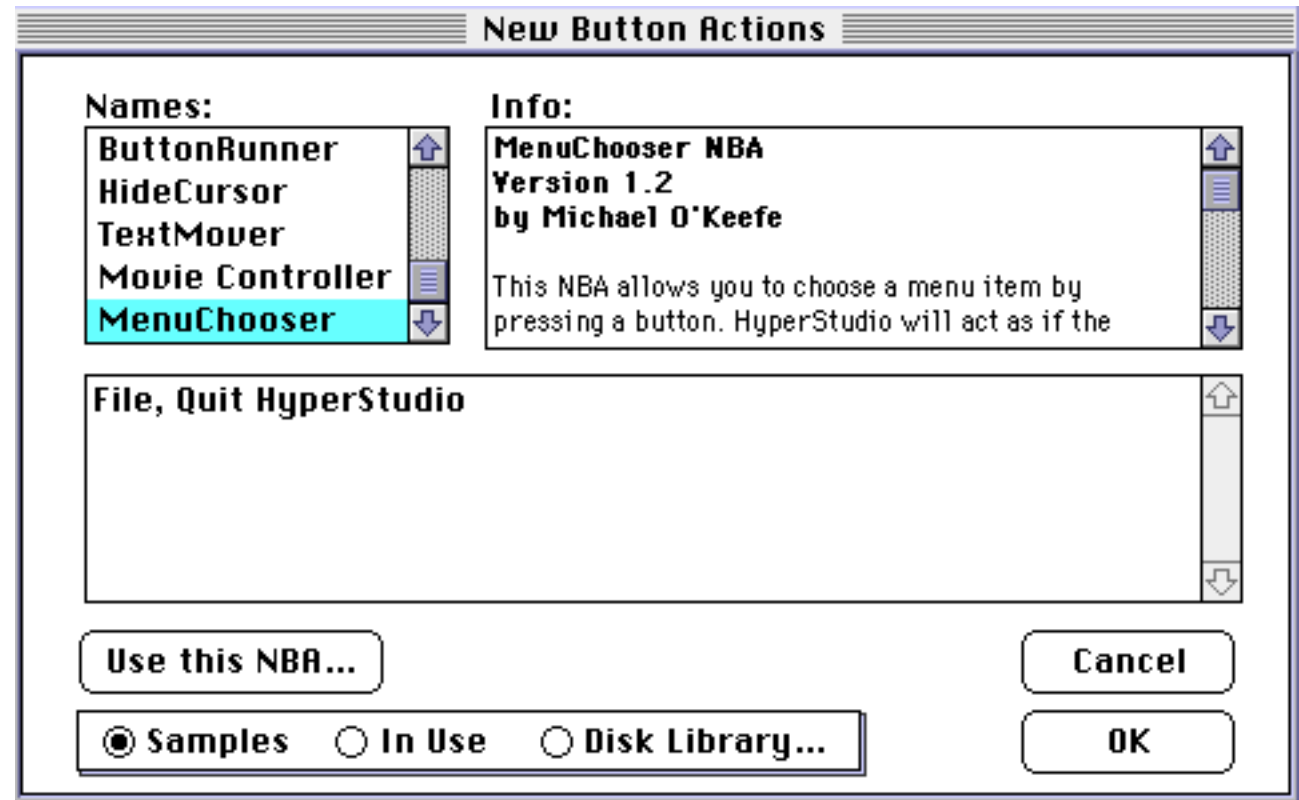


that the card should go to the “Next card.”

## 6-9.

Create an exit button.

Under “Objects”, select “Add a button.” Choose the freehand tool. Position by drawing around the lion. Click “OK.” Click “OK” to return back to the “Actions” screen. Select “New Button Actions.” Under “Names” scroll down and select “MenuChooser.” Click on the button below,



“Use this “NBA.” Type “File, Quit HyperStudio.” Click “OK”, Open the “Icons” button, select the icon that looks like an exit sign. Click on “Actions”, and select “Play a sound.” At the “Tape Deck” prompt, select “Disk library” and select the sound “Lion”, “Open” and click “OK”, then “Done.”

*As time permits, review lesson 2-3 and modify each button in this project so the pointer changes as it passes over the button.*



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***Suggestion/optional: Build upon the previous lessons and form into teams, dividing tasks and creating a project based on instructional design criteria designated for multimedia products. (See Appendix 4, Principles of Design.)***

Benefits:

- To gain experience working in groups and learning from each other.
- To gain more practice and a higher level of skills with the HyperStudio application.
- To gain insight into multimedia production and management of larger or more complex projects.

Tasks:

1. Choose a topic related to wastewater.  
Obtain approval for the topic.
2. Choose people from your group to fill the following responsibilities:
  - a. Programmer- knows how to use HyperStudio well.
  - b. Artist- has knowledge of colors and artistic relationships; can draw with the mouse and tools.
  - c. Writer- has good ability to communicate through writing; high ability in grammar and style.
  - d. Subject-Matter Expert- has ability to use the library and Internet to locate needed materials.
3. Work schedule: approximately 4-6 hours.
4. Specifications for Grading (minimum):
  - Eight cards plus a title card and credits card
  - Importation of original text and pictures

- Narration included in presentation
- Principles of Design applied (See Appendix 4).

*Suggested sequence of team activity:*

1. *Form a cooperative team.*
2. *Brainstorm story ideas.*
3. *Define goals and gather information.*
4. *Divide the project into tasks and set deadlines.*
5. *Script a storyboard diagram on paper.*
6. *Design a consistent screen background or template.*
7. *Create graphics, text and navigation.*
8. *Put it all together.*

## Summary

In Unit 1 and Unit 2 you learned everything you need to know to begin authoring your own stacks. HyperStudio lets you add, change, and delete cards; customize your card's appearance with the paint tools; add information integrating a variety of media. You also learned how to copy any button from any card to another card allowing you to organize and link information in a way that is most useful to you.

## Review questions

1. How did the objective(s) of your project in Unit 2 differ from Unit 1?
2. Did you have any problems creating the project in Unit 2?
3. What new skills did you learn in Unit 2?
4. What would you do differently if you were to repeat the assignment?
5. Since the production of a project can be time consuming, how might you go about streamlining the process?
6. What would you like to learn next related to the creation of a HyperStudio project?

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**Notes:**

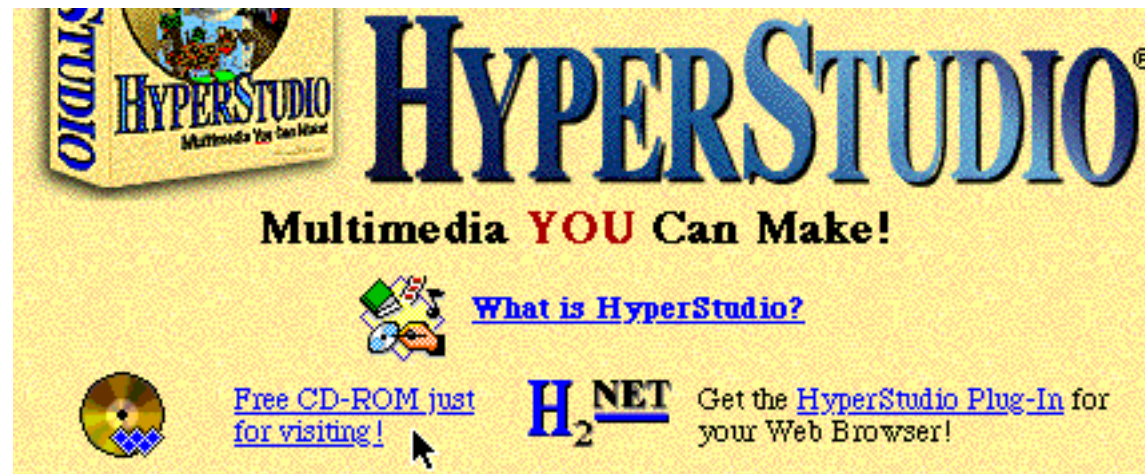
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# Appendix

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# Appendix 1: Reading and Browsing

There are many sites on the Internet worth visiting related to the type of instruction illustrated in this mini-course. To begin, we recommend a Web search using keywords of topics you are interested in or visiting the sites we have recommended below.



**Multimedia:** <http://www.hyperstudio.com>

Description: Discover the newest HyperStudio developments, software updates, lots of sample projects, and more.

**ESL:** <http://www.aitech.ac.jp/~iteslj/>

Description: The Internet TESL Journal -- resources for ESL/EFL students and teachers, including links to additional web sites and electronic publications.

**Water Science:** <http://www.wef.org/WefStudents/Teachers/index.htm>

Description: An educational section on the Water Environment Federation's Web site provides complementary activities, glossaries, and materials covering today's most important water environment topics. Their link to Wastewater Treatment, for grades 6-8, is well designed and especially relevant to this tutorial or a tour of a treatment plant.

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## Appendix 2: Suggested workshop schedule\*

**Workshop Description:** Those enrolled in this course will begin to learn how to use multimedia in their classrooms for teacher-directed and student-centered activities with HyperStudio. Students will perform tasks intended to help them learn the application and create their own short programs.

### DAY ONE

- 8:00-9:00 \_\_\_\_\_ Introduction: This introduction explains what you'll cover in this mini-course, why HyperStudio was created, what it is, and how to use the applications basic features. A pre-test will be given.
- 9:00-10:30 \_\_\_\_\_ Unit #1: You'll go through the tutorial and get a chance to explore HyperStudio on your own.
- 10:30-10:45 \_\_\_\_\_ BREAK
- 10:45-12:00 \_\_\_\_\_ Completion of the tutorial and student experimentation.
- 12:00-1 :00 \_\_\_\_\_ LUNCH
- 1 :00-2:30 \_\_\_\_\_ Unit #2: Apply what you've already learned to author your own stack(s). You'll take a look at more advanced techniques with buttons.
- 2:30-2:45 \_\_\_\_\_ BREAK
- 2:45-4:00 \_\_\_\_\_ Presentation of projects and assessment of projects and workshop.

*\* This schedule could be easily spread over a couple of days. Decide what is best in your situation and the age level you are addressing.*

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# Appendix 3: Glossary

- Active area \_\_\_\_ An area that you have selected with one of your lasso tools which you can then alter.
- Application \_\_\_\_ A set of instructions describing actions for a computer to perform to accomplish a task, conforming to rules of a particular programming language. Computer programs are sometimes called “software.” Applications are more sometimes referred to as “programs.”
- Authoring \_\_\_\_ Creating or modifying buttons, links, fields, cards, backgrounds, and stacks using the button tools and commands in the Objects menu.
- Background \_\_\_\_ A solid color, gradient, pattern, or picture file that covers the entire screen behind all other objects.
- Browse \_\_\_\_ To explore HyperStudio by clicking buttons and using the Go menu.
- Browse tool \_\_\_\_ The tool which looks like a hand that you use to click buttons.
- Button \_\_\_\_ An object drawn with the Button tool or from the Objects menu usually resembling a pushbutton. Buttons are designed to have interactivity added to them such as designating, confirming, or canceling an action.
- Card \_\_\_\_ A type of HyperStudio object; a rectangular area that can hold buttons, fields, and graphics. All cards in a stack are the same size.
- Click \_\_\_\_ Press the button on your mouse.
- Clip art \_\_\_\_ Electronic pictures that you can copy from one stack or document and paste into another stack. The term comes from the use of scissors to clip pictures on paper.
- Color palette \_\_\_\_ The palette that you can “tear off” from the color menu.
- Color scheme \_\_\_\_ A basic set of colors balanced to provide a consistent and unified look to your presentation.
- Command \_\_\_\_ An instruction that causes the computer to perform some action. Commands can be issued by the user through a mouse device or by keyboard commands.
- Cursor \_\_\_\_ The “I” shape that the pointer assumes when you drag over text.
- Dialog Box \_\_\_\_ A message window or prompt that appears with either a question and /or instructions.
- Drag \_\_\_\_ See “Highlight.”
- Field \_\_\_\_ A rectangular area in which you type text.
- File \_\_\_\_ An named collection of data created by application and stored on a disk.
- Font \_\_\_\_ A complete set of characters for one typeface; for example, Helvetica.
- Graphics \_\_\_\_ An image such as a photograph, chart or clip art.
- Highlight \_\_\_\_ To select text by dragging the pointer over it. The highlighted text will be affected by your next action.

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“Home” card	_____	Usually the first card in a stack which acts as a Title page or Table of Contents to the rest of the cards and stacks.
Interactivity	_____	The ability to cause the presentation to switch to a different card or perform some other action such as playing a sound based on input from the user. For example, clicking the mouse button on an object may cause a sound to play.
Layer	_____	Each card is a composite of layers: the background layer, such as a picture or subtle design, and the foreground layer, with objects such as buttons, fields and graphics on top of the background.
Link	_____	Usually in a button, an instruction that allows you, for example, to move from card to card.
Message window	_____	A message window or prompt that appears with either a question and /or instructions.
Menu Bar	_____	The row of menu names that appears at the top of the presentation window.
Object	_____	Anything found on the screen overlaying the background such as text, an image, a button, etc.
Palette	_____	A small window that displays icons or patterns you can select by clicking, such as the “Tools palette” or the “Color palette.”
Pointer tool	_____	The tool used most often to select and manipulate text and graphics.
Preferences	_____	A command on the File menu that you can use to control default settings.
Program	_____	A set of instructions describing actions for a computer to perform to accomplish a task, conforming to rules of a particular programming language. Computer programs are sometimes called “software.” Programs are more sometimes referred to as “applications.”
Programmer	_____	The person most responsible for creating a set of instructions describing the actions for a computer or application to perform.
Prompt	_____	A message window or dialog box that appears with either a question and /or instructions.
QuickTime	_____	An extension program that allows the computer to move and play data with the integration of sound, video, and animation.
Stack	_____	A collection of HyperStudio cards.
Storyboard	_____	A written and drawn visualization the completed presentation. Usually used for planning purposes.
Subject-matter expert	_____	A person, such as an instructor or researcher, that has the most responsibility and influence on the presentation’s content.
Template	_____	A presentation whose screen format and color scheme you apply from card to card.
Title Bar	_____	The stripped bar at the top of your window that indicates the name of the project you are working on.
Tools Palette	_____	The palette that you can “tear off” the Tools menu
Transitions	_____	The effects that move one card off the screen and the next card on.
User	_____	A person who utilizes a computer program as a reference or to perform a function.
Window	_____	An area on the computer screen that displays information.

# Appendix 4: Principles of Design

Visual Appeal	Needs More Attention	Overdone/Distracting	Just Right
Consistent color scheme used throughout.			
Color used to draw attention to what is most important.			
Background doesn't overpower the foreground.			
Consistent style of type used throughout.			
Limit of 2-5 objects per page.			
User Interface			
Multi-sensory integration of a variety of media.			
Buttons are alike, correct and placed consistently.			
Each card has a way to exit.			
Content is relevant to audience.			
Objectives and summary included in program.			
Images relevant to content.			
Program delightfully engages the user.			

# Appendix 5: Objectives Schematic

