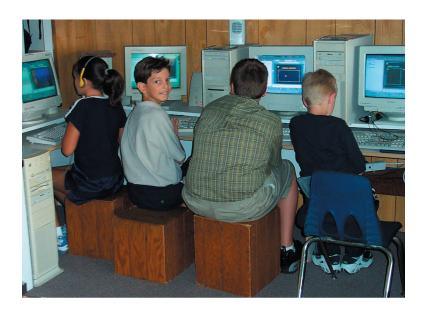
Technology and Kids



A series of lessons and resources geared to involve kids in technology

Geared for the Primary Grades Resources for K-12

> Written by Martha A. Ban

Technology and Kids

Description Of Target Ages and Grade Levels - This unit is geared for the primary elementary grade levels. The majority of activities and information can be adapted to middle and junior high levels, as well.

Purpose - The unit is written to give teachers the opportunity to involve their students in technology. The resources included will give teachers an excellent base of information to help them integrate technology into the classroom.



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What's the Big Deal With Electronic Learning?

Here are many reasons to "bother" with electronic learning opportunities. Check them out and see what you think.

CD Student Portfolios

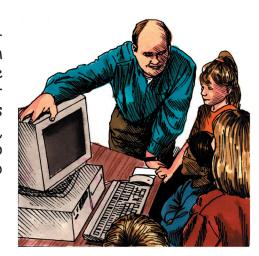
Portable E-portfolios are the newest way to give students a virtual folder of all their work, burned onto a CD, that they can take home to treasure. These portfolios can be a comprehensive tool for student assessment to share with parents. Teachers using e-portfolios have students save their essays, poems, journals, and reports in individual E-portfolios that are easily accessible on the computer desktop. The students develop a sense of ownership and responsibility, and learn to monitor their own goals and progress. At the same time, they learn basic computer skills such as how to cut, paste, and save, and scan in their artwork. Teachers can also use the CDs to store videotaped classes so they can observe their own teaching and the students' in-class experiences.

How are Kids Using Computers?

Students know what a powerful resource school computers can be. They use them to do research, homework, classwork review, and also to email their teachers and friends. Computer skills and digital literacy are part of the new 21st century skills. With the primary use of the Internet being research, students are showing they are naturally tech savvy.

Free Software Reading Help

Steve Timmer, who is legally blind and has a learning disabled son, invented Scan and Read - a software program that translates written text into spoken language. The software (for Windows 98 and up) is able to read print from books, magazines, or student-typed documents. It is available to the public for \$89.95 but is FREE to districts, libraries, and literacy groups. Downloading can take up to four hours per program. For more information and to download, visit www.premier-programming.com.



Weaving in Technology

Many teachers find the world of computer technology uncharted territory. The step they find hardest to take is in blending technology into lesson plans every day. Perhaps you're struggling with this yourself.

Computers, and the technology surrounding them, are quickly becoming more pervasive. Bus as you grow more comfortable with using them, you may begin to see their rich possibilities for your teaching and your students' learning. The wide array of technology can engage students with different learning styles and help you differentiate your curriculum.

Regularly incorporating software and/or information from the Internet into your lesson plans isn't as daunting as it sounds. Like most things in life, it happens in stages - in this case four stages. Find the stage you're in and discover some new ways of blending technology into almost every aspect of your teaching.

1 - The Beginning

Teachers who are just starting out may be both fearful and excited about using a computer. It is important to be patient with yourself during this stage; there is a lot to learn and many possible pitfalls. First, find out the type of computer equipment available to you in your classroom or your school's computer lab. For example:

- Do you have access to Macintosh or PC computers?
- What programs are on the computers? (Microsoft Word; ClarisWorks; PowerPoint, etc.)
- Do you have access to printers, scanners, or digital cameras?
- Is your school Internet-ready?

Knowing this information can help you choose the proper instructional sessions you'll need.

The next step is to develop your computer skills. Many conferences or schools offer some type of professional development - or the financial backing - to give teachers basic tools for using computers with their students. If your conference or school offers that opportunity, think seriously about taking advantage of it. Or, you may want to search the Internet for instructional sessions. The North Carolina public schools' Web site has a listing of helpful online professional development courses (www.learnnc.org/index.nsf/pd). Be sure to also tap the resources in your own school - your fellow teachers. Some colleagues may be able to help you create a Web site, while others can show you the basics.

If you feel comfortable exploring on your own, take some time after school to become acquainted with the programs on your com-



puter. Try using a word processing program and its cut-and-paste functions. Or, try to enter some student information in a database, such as Microsoft Excel. With a basic knowledge of the programs, you can explain to your students how to use them. You may also want to devote a few hours to tinkering around on the Internet to search for Web sites containing lesson plans for incorporating technology.

2. Gaining Competence

At this stage, you may have begun to blend technology into your lessons without making significant changes to them. If you are at this point, you may want to have your students work on simple word-processing lessons or Internet searches.

One group project with primary-grade students is a drawing exercise us-

ing software such as KidPix. One teacher used KidPix to make her first and second grade students familiar with the computers in her classroom and her school's computer lab. Once they were comfortable drawing pictures and manipulating the keys, she had them add words to their drawings and eventually create small books about insects. Before introducing KidPix to her students, the teacher played with the software program herself so she could explain its various functions.

For older students, try having them work on a project that uses the Internet to search web sites for answers to questions. Utilize webquests or try cyberhunts. If you create your own web search, be sure to check the

websites out yourself for content. Bookmarking the site also helps students use their time efficiently.

3. Moving Forward

At this level, you'll be comfortable enough to thoroughly integrate technology into your lesson plans. You may start to see some real benefits in using computers and the Internet: enriched learning opportunities; increased student motivation; more time to work with students.

> Although you may feel more activities for them.

> comfortable with students pursuing their individual interests on the computer, you'll likely want to continue to design and direct many primary grades, lessons in math, English, and science can easily be combined into one project.

You may also want to try creating a class web site with your students. With specifically formatted templates or a user-friendly web-page editor, you can lay out text and graphics on your computer without having to know complicated tech terminology.

4 - Tech Whiz!

By the time you've reached this stage you are probably using technology seamlessly in your teaching. You may have several project-based learning activities. Still, you'll most likely want to work to further challenge students, continue to collaborate with the other teachers, and mentor beginning teachers at the entry stage.



Integrating

technology into

your lessons will

grow more valu-

able with each

step.

Go For It!

Even if you start out being intimidated by computers, over time you'll grow more comfortable with using various aspects of technology with your class. You may even find that your experiences with your students and the Internet shape your thinking in ways you never expected.

Nine Valuable Tips to Help You Integrate Technology into Your Teaching

- Sign up for instructional sessions on how to use the Internet and educational software.
- 2. Make sure you are familiar with the computers in your classroom and in your school.
- Take some time to play with the computer to become familiar with it. This is especially helpful when you have to explain functions to beginning students.
- 4. Brainstorm with other teachers on how to use technology in your classroom and in your lesson planning.
- 5. If there is a computer lab at your school, chances are that lab time is

- scarce. Schedule and plan carefully so that students' time in the lab is used as effectively as possible.
- 6. Do your research before you introduce a lesson to students. Make sure to check web sites about the subject you are teaching. Be sure to bookmark all of the web sites you want your students to visit. This saves you and your students' time.
- 7. Start students off with simple word processing projects. This can work especially well for first through third graders. Fourth grade students can learn to use an electronic encyclopedia, dictionary, and thesaurus with their writing projects.
- 8. If graphics interest your students, gather copyright-free graphics and pictures from the Internet. Creating a folder on your computer desktop called "graphics" gives students easy access to graphics they may want to use for a project.
- Create a class website with your students. This will help both you and your students learn about the technology - while at the same time piquing student interest.



Courtesy of: Lucille Renwick Scholastic Instructor 9/2001

Why is it Good to Learn How Computers Work?

Inside your head, and inside many other heads, there are two kinds of knowledge; the memory work kind of knowledge and the logic kind of knowledge. People who have their computer knowledge on the memory work side often have problems installing new programs, using someone else's computer or adapting to new operating systems like Windows XP and many other computer-related difficulties

Things that should live on the memory work side of the brain are such things as, "What is the capital of New York state?" and "Who was the King of England in 1675?" There is no way that knowledge on the logical side can help you with these. For instance, logically speaking, New York City, a very major place, just has to be the capital of New York state, however it's not. Albany is. You just have to memorize that. And logic is not going to help you with the king question either, I mean, what's logical about kings anyway?

However, can you imagine the situation we would be in if you had to memorize the answer to all the mathematical questions? "Okay, students, is there anyone here who hasn't memorized the answer to 457 + 7,985 - 598?" You can't memorize them all, but you can learn the logic behind them so you can figure them out. Then you can't be tricked!

It is important that you learn how to figure out things about computers because there are just too many things to be done with them to try to memorize it all. Besides - if you have ever studied hard for a test the next day, you know lots of times it's the stuff you didn't study that is asked. You are pretty familiar with your TV, maybe too familiar! The TV is mostly an *output* machine or device. This means that the stuff, be it information or junk, flows from the TV *out* to you. It also has some *input* controls so that you can give it some input. These are the volume control, the on /off switch and the channel changer, which lives under the couch.

Diagram of a Computer

Directions: Use the words in the Word Bank to identify the different parts of the computer.

Word Bank

monitor floppy disk

CD keyboard

mouse computer

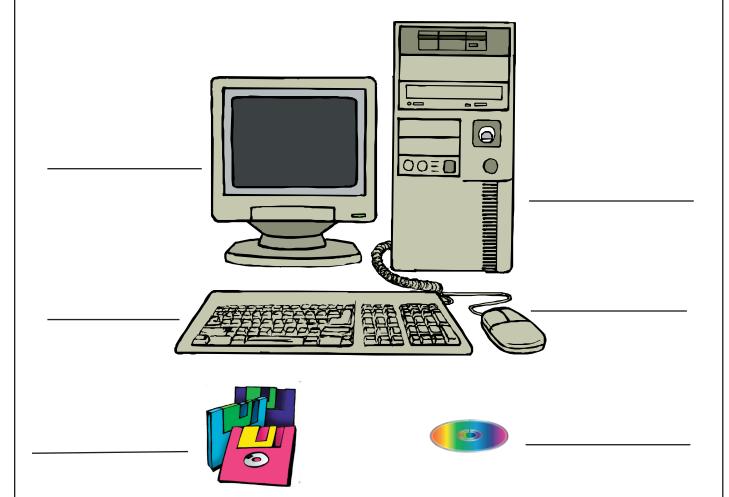


Diagram of a Computer - Key

Name ____KEY____

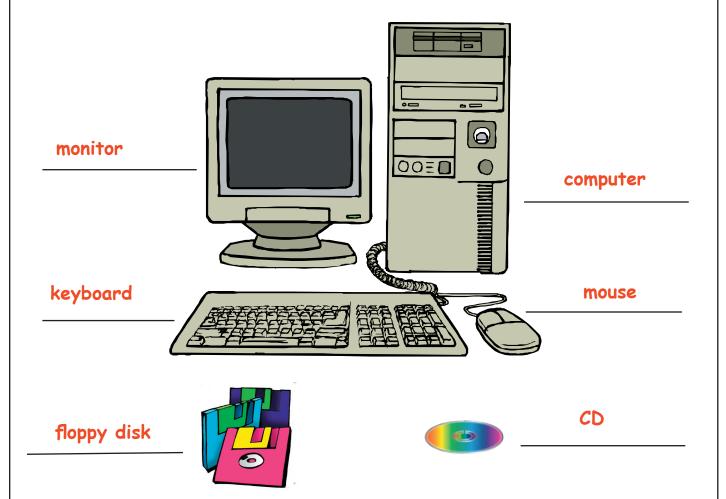
Directions: Use the words in the Word Bank to identify the different parts of the computer.

Word Bank

monitor floppy disk

CD keyboard

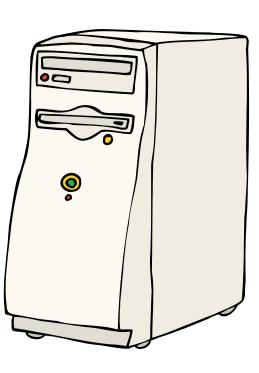
mouse computer

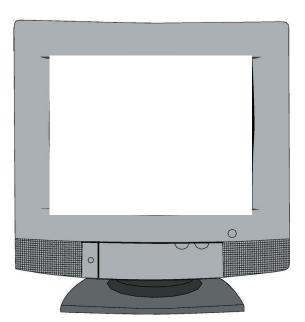


Cutouts









Getting to Know Your Computer

Children assemble their own computer with computer cutouts after learning the names and functions of the basic computer parts.

What You Need

- Scissors
- Paste
- Light-colored construction paper
- Computer Diagram
- Computer Cutouts

What to Do

Begin with a brief discussion about computers. Some children may have computers at home. Ask children to share what they know about computers. What kinds of things do they do with computers? Explain that a computer is a machine made of several parts that work together. Tell children that they are going to learn the names for the parts of a computer and how the parts go together.

Distribute the Computer Diagram to children and read the words at the top. Tell children they can use these words to fill in the missing labels in the picture below. Then point out each computer part in the diagram. As children label their diagrams, you might explain each part as follows:

- The screen the screen shows you what work you and the computer have done.
- The computer this is the most important part. It does most of the work. It follows your directions to solve problems or create new work.
- The keyboard you use the keyboard to tell the computer What to Do.
- The mouse the mouse is another tool you can use to tell the computer What to Do.
- The disk the disk is like a book. It has information that the computer can read.
 You can use the computer to read what is on a disk or to put new information on a disk.
- The CD-ROM this is another kind of disk. It can store even more information than a floppy disk, including pictures, sounds, and video.

Distribute the Computer Cutouts. Have students cut out the pieces of the computer and paste them onto a piece of light-colored construction paper. They can refer to their diagrams to make sure they assemble the computer correctly. Encourage them to draw a picture around the computer. They may want to draw a picture on the computer screen, as well. Remind them to draw wires to connect the keyboard to the computer and the mouse to the keyboard.

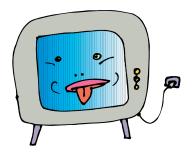


Teaching Options

- If most of the students in your class are already familiar with the computer, you may want to introduce the computer parts with a guessing game. For example, "This part of the computer is named after a small furry animal. (mouse) This part of the computer is long and flat and shaped like a board. (keyboard) This part of the computer is really the brains of the machine. (computer) This part of the computer looks like a TV. (screen or monitor) This goes in and out of a computer carrying information. (disk) This can hold a great deal of information, including video. (CD-ROM)"
- You may want to play a game where students act out being a computer. Individuals or groups can take turns being different parts of a computer. One person can be the keyboard and give the computer a job to do, or a problem to solve. Another person can solve the problem and tell the answer to the person pretending to be the screen. That person can display the answer.



What Do the Parts Do?





You are pretty familiar with your TV - maybe too familiar! The TV is mostly an output machine or device. This means that the stuff, be it information or things you shouldn't be watching, flows from the TV out to you. It also has some input controls so that you can give it some input. These are the volume control, the on/off switch and the channel changer.

Computers also have input and output. They have:

- parts to receive input
- parts to give output
- parts to do work
- parts to remember things while the power is on (short term memory)
- parts to remember things when the power is off (long term memory)

What is kind of surprising is how much effort is spent getting input and giving output, and how little is actually spent on doing work! By work I mean heavy duty arithmetic or searching through long lists for a certain item. So output is the flow of information to you and input is the flow from you to the device.

Parts of a Computer

Item	Duty	Object	
Monitor	Output		
Printer	Output	Printing of the second of the	
Processor	Work	Berner Harring	
Keyboard	Input	State	
Mouse	Input		
Memory (RAM)	Short Term Storage		
Floppy Disks	Long Term Storage	Long Term Storage	
Hard Disks	Long Term Storage		

Terminology

address - A place websites call home. The place a website lives in cyberspace is called its address - also known as a URL. It usually looks something like this: http://www.onekey.com

address bar - The space on the top of your web browser that lets you type in the address (URL). Pressing ENTER after typing in the address will take you to the website. When you browse to a website you can look in the address bar to see its address.

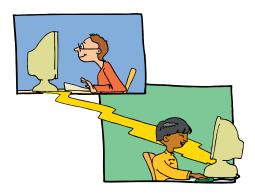
back - When you're surfing through cyberspace and you want to return to the page you just visited, the back button can help. It is usually found near the address bar and takes you to the page you were looking at before the current one.

bookmark - A browser's way of saving all your favorite sites and keeping them ready for use with a single click. When you "bookmark" a site it gets added to a list your browser saves for you. Bookmarks are the same as "Favorites." It just depends what browser you are using.

browser - A software program that lets you see and hear what is on the web. Examples include Netscape and Microsoft Internet Explorer.

CD-rom - A computer disk that can save and store things from your computer. It is also the format that most software, including games, comes on these days.

chat - A program that lets you "talk" to your friends in real time over the Internet - even if they live in Japan while you're in your room in Leominster, MA. Most often you type back and forth - although some programs let you actually use your voice.



chatroom - A place in cyberspace where you and your friends hang out to talk and share ideas. Don't enter a chatroom without your parents knowing about it!

connection speed - This tells you how fast your modem is able to "talk" to other computers and get information from them. The higher the number, the faster it talks

cookie - An Internet site's way of keeping track of you. It's a small program build into pages you may visit. It can identify you, track sites you visit, and topics you search. You can set your browser to warn you before you accept cookies or not accept them at all.

cyberspace - The world that exists only on the computer. You can't physically go there. It only exists on your screen.

download - Moving files from a site on the Internet to your personal computer.



email - Electronic mail. You can send and receive messages over the Internet from your friends, family, and teacher when you have this feature.

emoticons - Sometimes when you really want to show someone how you feel when you're writing them an email - you wish they could see your face. Emoticons are different symbols you can type on your computer that can tell your friends that

you're happy, sad, or even crying. Some examples are smileys -:) frowns: (winks;) sunglasses 8-) and yawns !-o.

ezine - Stand for electronic magazine. Most of the time these are magazines that only exist in cyberspace. Every once in a while a well-known print magazine will also post their information on the Web.

FAQ - Frequently Asked Questions. These act like mini help pages on all sorts of topics.

favorites - Similar to bookmarks. This is a list of places you visit the most. You can set these up to appear on your browser when you click on a Favorites button.



filtering software - A type of software or program that sorts information from the Internet as it comes onto your computer. It usually sorts it by its content. (Net Nanny and Cyber Patrol are examples.)

forward -Means to move ahead to the next page on a website. Also, if you go back using your browser, you can return to where you were before by hitting the Forward button



frames - Some sites you visit will want to show you more than one page at once. They solve this problem by putting their pages in frames - or different sections of the screen. When you use frames - you can keep one part of the screen open all the time while you look at other things in the other part. An example would be a page about animals that lists mammals in one frame. When you click on "moose" - information shows up in the other section of the page while the list of mammals remains the same.

FTP - Stands for File Transfer Protocol. This program will let you transfer files from your computer onto another computer server.

GIF - Stands for Graphics Interchange Format. It's used for pictures that are posted up on the web. You can tell when pictures use this because their addresses or file names will end in .gif.

hardware - The actual parts that make up a computer system - like the monitor, keyboard, printer, and mouse. These are the parts you can actually touch and see.

hit - Every time a website is visited, it gets a "hit." All the hits, or times a page is visited, make up a site's traffic for a given period of time.

homepage - Either the site that appears when you open your brower or a page you created on your own.

html - HyperText Markup Language. It's the type of language used to write webpages. HTML can be used to make items bold, underlined, and more using special tags.

http - Stands for Hypertext Transfer Protocol. It tells computers how they should be talking to each other. Addresses of webpages begin with http://most of the time.

hyperlink - This will take you from one Internet site to the next with a simple click of your mouse. You can usually tell where a link is because the writing will look different. Some links appear bold, some are underlined, and some are attached to pictures. They are also called links.

Internet - A bunch of computers all over the globe that are hooked up to one another. They can talk to one another and exchange information. To do this, they use protocols - or languages - such as FTP and HTTP.

java - A programming language used to create things on webpages such as animation and sounds.

jpeg - Stands for Joint Photographics Experts Group. It's often used to put photos up on the web. You can tell what files are using it by the fact that they use an address that ends in .jpeg.

link - This will take you from one Internet site to the next with a simple click of your mouse. You can usually tell where a link is because the writing will look different. Some links appear bold, some are underlined, and some are attached to pictures. They are also called hyperlinks.

modem - Hardware that allows computers to talk to each other through normal telephone lines.

mouse - A device that lets you move about your screen as you like so you can click on links and highlight items.

multimedia - Means you are using more than one type of media. Examples include text, audio, video, graphics, and images.

netiquette - The proper way to behave when you're hanging out in cyberspace.

newbie - Someone who's new to using the computer.

newsgroups - Ongoing discussions that are spread around by email among people on the Internet who share a common interest.



offline - Means you are no longer connected to the Internet - whether through your modem, a wireless service, or any other means.

online - Simply means that you are connected to the Internet - usually through your modem.

password - A secret word or phrase that you use to check your email, log into clubs, or check out sites for members only. You shouldn't share your password with anyone - except your parents and at times you teachers.

plug-in - Special programs you can download off the Internet to do things like watch the latest videos or listen to music. Some examples are RealAudio, QuickTime, and Shockwave.

QuickTime - A program that lets you view video clips on the Internet.

RealPlayer - A Plug-in you need to listen to certain types of audio and video clips.

refresh/reload - Depending on what browser you're using - when you hit the refresh or reload button, your computer will bring up the same page you're looking at with updated information on it.

search engine - Uses a robot or computer to search for words or topics on a certain website, or all over the web. (www.onekey.com)

server - A computer that stores information for tons of other computers.

service provider - A company that gives you access to the Internet through your phone lines. This is also known as an ISP or Internet Service Provider.

software - A computer program that is made up of certain instructions or codes that tell your hardware or computer what to do.

spam - Junk email that arrives in your mailbox that you didn't ask for.



surf - Exploring the web by clicking and moving around freely in cyberspace.

URL - Stands for Uniform Resource Locator. It's the address of a site that appears on the World Wide Web. The URL is the name that appears in the address bar that tells your browser where you want to go.

username - A name you choose for yourself that lets you get into certain places on the Web. It is usually the part of your email address before the @.

virus - Software written which can be transferred from one computer to the other and do things which can be harmless, annoying, or very damaging to your computer. Be very careful when getting email or attachments from people you don't know.

web - Short for the World Wide Web.

world wide web - An interface or system that connects you to other computers all throughout the world.

zip - A good way to store a file or program that is too big for its own good - or for email. You can make a file smaller by zipping it (compressing it) - sending it to your friends - and letting them unzip it on their computer to bring it back to full size. A zipped file's address will end in .zip.



Starting Students on the Net

You can be the guide to the great educational research projects on the Internet by showing your students that you're a web "pro." First, choose a specific research topic. Then visit several Internet sites and make a list of ones that are educationally sound and don't contain objectional material. Establish rules and consequences before students begin, then share your list of approved sites. Start with three to five. Students can get a clear idea of what types of sites merit a visit. While the students are exploring the sites, guide them to find key words that are directly related to the research topic. Encourage them to write brief reviews of the sites.

RULES FROM THE START

Be sure your student computers have some sort of filtering software installed. AOL@school is an excellent FREE software program created especially for schools. A minimum computer requirement is a pentium PC. Software for this program can be obtained through $\underline{www.aolatschool.com}$

Make the most of kids' computer experiences by setting clear limits. For many students, the first contact with a computer is at school. It's an exciting time - but also a time when students need the most guidance. Establish a few friendly rules for computer use.

- 1. Give specific guidelines for each activity before turning on the computer. Tell the students what they are going to do and how to do it. Explain to the students they must respect those guidelines or lose computer privileges.
- 2. Let students know how much time they have before they begin the activity. If you have one computer for five students, they need to learn how to budget their time. You might also pair the students or create a schedule for them to follow. One way is to form "computer groups." Rotate through the groups. While one group of students are working on the computers, the other students could be working on other projects in the classroom.
- 3. Let your students know which search engines you approve of and give them a list. Make it clear that if they stray they cannot stay.
- 4. Set up a chart with each student's name and moveable pieces, such as magnents or velcro patches, next to each name. Move the pieces every day before the students come in so they can see whose turn it is on the computer. Use the chart to see who has or hasn't had a turn. You may also want to vary the activities so the students learn to use the computer as a resource tool and are also exposed to different technological experiences.



Kids' Rules for Online Safety

I will not give out personal information such as my address, tele-1. phone number, parents' work address/telephone number, or the name and location of my school without my parents' permission. I will tell my parents right away if I come across any information 2. that makes me feel uncomfortable. 3. I will never agree to get together with someone I "meet" online without first checking with my parents. If my parents agree to the meeting, I will be sure that it is in a public place and bring my mother or father along. 4. I will never send a person my picture or anything else without first checking with my parents. 5. I will not respond to any messages that are mean or in any way make me feel uncomfortable. It is not my fault if I get a message like that. If I do I will tell my parents right away so that they can contact the service provider. 6. I will talk with my parents so that we can set up rules for going online. We will decide upon the time of day that I can be online, the length of time I can be online, and appropriate areas for me to visit. I will not access other areas or break these rules without their permission. 7. I will not give out my Internet password to anyone (even my best friends) other than my parents. I will be a good online citizen and not do anything that hurts oth-8. er people or is against the law.



The Internet An Introduction

Duration of Lesson: Three sessions



Objectives:

Students will understand:

- 1. The World Wide Web can be a helpful place to find information on certain topics.
- 2. Two ways to locate information on the Web are through the Internet Library and by using a search engine.
- 3. A web site is a place where groups of people share information and resources on the Internet.
- 4. The address of a web site is called a URL. This stands for uniform resource locator. (also universal resource locator)

Materials Needed:

Computer with Internet access

Procedure:

- Ask students to share what they know already about using the Internet. Encourage them to talk about web sites they have visited and what they do on those sites.
- 2. Make sure everyone knows and understands that:
 - a. the web can be a helpful place to find information on certain topics- including many topics studied in school
 - b. a website is a place where groups of people share information and resources on the Internet.



- 3. Ask students how they would go about using the Web to find information on a topic. Share with the class three ways to begin.
 - a. Ask your teacher or librarian for the addresses of one or more Web sites that offer information on your topic.
 - b. Use the Internet Public Library. This features Web resources organized according to the Dewey Decimal System. The URL for the Children's Division of the Internet Library is http://www.ipl.org/div/kidspace/
 - c. Use a search engine. http://www.rcls.org/ksearch.htm is a website that has links to many search engines for children. www.onekey.com is another good one.
 - d. Students should understand that all of the above methods provide the researcher with a web address, or URL. By going to that address, the researcher may find the needed information. If not, he or she should try other addresses.
- 4. Ask students to contribute to a list of topics they might want to research on the Internet. Record their topics on the board. You could also add your own topics to the list.
- 5. Divide your class into groups. Give each group time to use a computer with Internet access to research a topic of choice. (To avoid duplication have groups rank a choice of 3 topics.)
- 6. Encourage groups to visit at least three web sites while researching their topics.
- 7. Groups should use the information they have found on their topics to prepare a short report to the class.
- 8. Start a classroom library of URLs listed by topic.

Anatomy of a Web Address

The uniform resource locator or URL is the address you type into the computer to tell it which web page to retrieve for you. A typical URL looks something like this:

www.nypl.org/branch/kids/pooh/winnie.html

IMPORTANT!: It is necessary to type in the URL exactly as you see it written. All punctuation, spaces and capitalization are critical. You will not often find a URL with a capital letter in it, but if you do, be sure to capitalize that letter when you type in the URL address or the computer will not be able to find what you are looking for.

The above URL will take you to the University of Waterloo, in Canada, and brings you a list of Internet Resources by discipline.

PROTOCOL.

http:// tells the computer you are using the hypertext transfer protocol to locate a file. The http is always followed by ://

HOST COMPUTER

www.nypl.org/ is the name of the host computer, or server, where the file you want to retrieve is located. The computer name is followed by one forward slash.

This part of the URL will often give you helpful information about where the web page is coming from. Sometimes in it you will recognize the name of an institution or company. For example, nypl in the URL above refers to the New York Public Library.



EXTENTIONS

In many web pages, the letters found near or at the end of the URL may give you some indication of what type of organization is hosting the web page and/or what country the page is from.

Two letter abbreviations. If a URL ends with a two letter extension, this is a country code that tells you what country the web page is originating from. For example, in the URL http://www.lib.uwaterloo.ca, the ca stands for Canada. Many web pages from the United States do not have country codes, but many others do, especially those of public schools. The country code for the United States is us. For example, the URL for the San Francisco Unified School District is http://www.sfusd.k12.ca.us. In this example the ca stands for California, and the us stands for United States.

Three-Letter Abbreviations. The following is a table of some three-letter abbreviations you will find in certain URLs and what they stand for.

.edu	educational institution	.org	organization (non-profit)
.net	network provider	.com	commercial enterprise
.gov	government agency	.mil	military

ADDITIONAL INFORMATION ABOUT URLS

DIRECTORY PATH

branch/kids/pooh/ is the directory in which the file you want to see is located. The directory name is also followed by a forward slash.

FILE NAME

pooh.html is the name of the file which you are asking the computer to retrieve for you. All WWW files will have .html or .htm at the end.

ADDITIONAL TYPES OF URLS

Sometimes a URL will be simpler and look like this: http://www.nsf.gov. In this case, you are asking the computer to retrieve the home page of the National Science Foundation. There is no directory path or file name in this URL because you are asking to retrieve only the top level page.

Questions and Answers for Teachers

How can I use the Internet to plan thematic units for first grade?

- 1. Research the topic using reliable search engines. (www.hotbot.com; www.c4.com) Enter keywords like "farm animals" or kangaroos" within the quotations so your search is more specific. You can also click on "advanced search" to narrow the criteria using exact phrases, other languages, or specific domains. (.gov, .edu, .org, etc.)
- 2. Find lesson plans, graphics, multimedia files, links, and book lists on sites like www.discoveryschool.com, www.bigchalk.com, and http://www.discoveryschool.com, www.bigchalk.com, and http://www.discoveryschool.com, www.bigchalk.com, and http://www.discoveryschool.com, www.bigchalk.com, and https://www.discoveryschool.com, www.bigchalk.com, and https://www.discoveryschool.com, www.discoveryschool.com, https://www.discoveryschool.com, www.discoveryschool.com, www.discoveryschool.com, www.discoveryschool.com, www.discoveryschool.com, www.discoveryschool.com, https://www.discoveryschool.com, www.discoveryschool.com, www.discoveryschool.com, <a hr
- 3. Integrate technology and the Internet into the unit. You can find web-based activities for students from a learning portal. This is a starting point for web surfing that categorizes sites according to the same subject or topic. A good portal such as www.beritsbest.com has annotations, is easy to navigate, allows users to review sites, and updates links frequently. Get started by visiting portals like www.kidsites.com that index "kids only" sites.
- 4. Search for web rings relevant to the topic or grade you teach. Web rings are connected collections of web sites that share a common theme or topic. Visit http://webring.com for useful sites.

What role should software play in early and primary education?

Technology, in combination with activities like puzzles, blocks, finger painting, and the sandbox, is becoming an important component of early childhood education. Software should not take the place of these traditional activities - but it can provide a balance between developmental play and learning. Expose your students to interactive software that allows kids control, varies outcomes, and strengthens skills. A few suggestions are:

- ** STAR Reading (Renaissance Learning)
- ** Simon Skills Pack (Don Johnston, Inc.)
- ** Reader Rabbit's Complete Learn to Read System (The Learning Company)
- ** JumpStart Series (Knowledge Adventure)

What are good literacy web sites?

Primary geared web sites are useful when they are basic in design, yet dynamic enough to keep kids focused and engaged. Visual stimulation is nice, but good sites use multimedia effects in moderation. Web sites with too many sounds and flashes on the screen lead students' attention away from the purpose of the the exercises. The following sites have minimal sound and visual displays, yet provide quality activities.

www.literacycenter.net

www.wiltiky.com

www.meddybemps.com

http://web.bsu.edu/00smtancock/EDRDG430/430stories.html

http://www.ucalgary.ca/~dkbrown/stories.html

http://www.fablevision.com/northstar/

Courtesy of: Creative Classroom January/February, 2002 p. 62

Explore the Southern New England Conference bookmark site at:

www.ikeepbookmarks.com

Account: SNEC Technology

Click on Login. No password necessary.

iKeepBookmarks.com

See what sites have been selected to share with our NAD educators. If you have other sites which you would like to see, contact Millie Felt at mfelt@atlanticunion.org



Do You Know How to Use the Internet?

Essential Questions:

- 1. What is the Internet?
- 2. How do you access and use the World Wide Web?

Concepts to teach:

- When several computers are physically connected by wires or cables, they form a network.
- Networks at schools, businesses, and other organizations can be connected with each other through "backbone" wiring and cabling, or wireless connections—letting any two computers among them connect with each other to share information.
- The whole collection of networks and backbones is the Internet.
- Even computers that are not on a network, such as home computers, can connect to the Internet through a modem, telephone wires, wireless access points, cable, DSL, and an "Internet provider."
- The World Wide Web is just one part of the Internet. Two characteristics distinguish it from the rest of the Net:
 - 1. In addition to text, it can provide graphic images, sound, and video.
 - 2. The hyperlinks encoded into Web pages allow the user to move directly to related Web sites that may be on the same computer or half way across the world. You might think of this as random access.



Facts to share

- The Internet began many years ago as a way for researchers at universities and government labs to share information and ideas.
- Today, tens of millions of computers and hundreds of millions of users are connected to the Internet.
- Electronic mail (e-mail) can be sent through the Internet to anyone with access to an on-line computer.
- E-mail does not come to a particular place or computer but (through an Internet provider) to a person, who needs a password to retrieve it. This means I can send or receive e-mail from a computer at home, at school, at work, or in a public library—as long as that computer is on line and I have an internet provider account.

Skills to teach

- · Learning to use browser software
- · Learning and refining techniques to search for information efficiently
- Evaluating the reliability of sources
- Accessing and understanding relevant information from large amounts of data
- Communicating observations and findings

Materials needed

- 1. a computer or lab with access to the Internet
- 2. browser software, such as Netscape Navigator or Microsoft Explorer
- 3. a world globe or map as a visual aid



Preparation

Room Preparation

Make certain ahead of time that your Internet connection is strong. Things can and do go wrong with hardware and software. Check to see whether you can connect to the sites you plan to visit and/or have alternates in mind, since the servers that host Web sites can be temporarily off line.

Safety Precautions

- Rehearse what to do if you reach a Web site that offends you, upsets you, or just makes you uncomfortable: simply click on the "back" button to get out of it immediately.
- Occasionally, the "back" button will not take you back. If this happens, either go to the menu bar at the top of your browser window and slide from "Go" back to an earlier site or simply close your browser window by clicking on the X in its upper left corner and starting over in a new window.

Procedures and Activity

Introduction

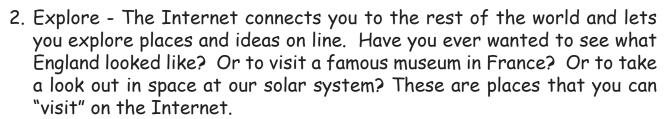
Ask the guiding guestions:

- 1. What is the Internet?
 - Listen to and guide their thoughts on what it is, how it originated, and how it works. Share the concepts, principles, and facts outlined above.
- 2. How do you access and use the World Wide Web?
 - Introduce the term "Web browser" and point out the basics: the URL (address, location), the "back" button, the hyperlinks, how to shrink or enlarge the window, how to use the scroll bar.
- 3. Today, we are going to find out where we can "go" on the Internet and how we can find specific information through it.

Activity

On the globe or map, point out where you are physically located. Explain that your computer is connected to others all over the world, allowing you to do many things:

- 1. Communicate With e-mail, you can write to people all over the world. You may find a keypal (as opposed to penpal) in Norway or ask questions of a meteorologist in Alaska or write to
 - your sister away at college. You can communicate with people from different places and with different backgrounds.



3. Seek and find - Do you need to research a topic for a school paper? Are you looking for help on a science fair project you plan to do? Would you like to find out when and where to look in the night sky to see the International Space Station or the space shuttle go by? You can do all of these things by using search engines to look through the Web.

Since you will be leaving this site for the activity, you will want to print out this lesson for ready access to the directions on what to do next. Or, if you have a large enough monitor, you could open a second browser window to this address to keep the directions handy.

Part One

We will begin today by visiting someplace else to find out what the weather is like there right now. How is the weather at Disney World (Orlando, FL), or at your grandma's house, or in the city where you used to live, or in Honolulu (etc.)? At the Weather Underground site, we can find weather information for any city in the United States.

1. Have students type the URL (uniform resource locator) for the Weather Underground in the box for URL or address. Type: http://www.wunderground.com and hit return.

Explain that the URL is like a telephone number or an address: it tells your computer where to look to find a certain site.



- 2. Once the page has completely downloaded, click on the U.S. map in the state you are interested in. You will get a list of cities and their weather right now. (Some may have a little exclamation point inside a gold warning sign under "Warning." You might want to click on that warning to see what it is—heat wave, tornado warning, etc.) Scroll down the list. If the city you want is there, you can click on its name for even more detail, such as sunrise and moonrise times. If not, click the mouse in the white box under "Find the Weather for any City, State or Zipcode, or Country," type in the city and state, and click on the "Fast Forecast" button.
- 3. Have the students read to you, to themselves, or to each other (if two are sharing a computer) the weather report. Compare it to your local weather. (This might be a good time to show participants how to open a second browser window, so that they can switch back and forth.) Allow students to investigate two locations; have them use the log sheet to record their findings and comments. (Note that this is a generic form for them to record their Net-cruising results on. Not all questions will be appropriate for the Weather exercise.)
- 4. You can also look up historical conditions for that location. There is a minute-by-minute recap of conditions on the day you request, going back to 1994.
- 5. Partway down the page, there is a link to "Add this sticker to your home page!" You may want to do just that, when you build your own Web site. That way, when people visit your site, they can see, with a little Weather Underground logo, what the weather is like where you are. A variety of self-updating banners, stickers, and "gizmos" is available. (Many flash the temperature first in Fahrenheit and then in centigrade—a good way to get a feel for the system you are not used to.)

Part Two

Search Engines - There are two main kinds of search sites: hierarchical ones that organize information by subject like a card catalog or an outline (starting with very general categories and moving down to ever more specific ones) and those that search for particular words or phrases on Web sites. Which one you use depends on what kind of information you are looking for.



1. Hierarchical or directory-oriented searching

Suppose you are looking for a public school Web site. It would be appropriate to use a hierarchical searcher like Yahoo. Have students type in the address, http://www.yahoo.com/. Find the bulleted category "Education" and click on the "K-12" link. To refine your search further, click on the "Schools" link there, then on the "Elementary Schools" link, then on "By Region," then on "U. S. States," then on your state, and finally on "Complete List." You will see an alphabetical list of every elementary school Web site in your state that Yahoo knows about. Click on one you've heard of and check it out. Someday soon you may help to create one for your school!

2. Word- or phrase-oriented searching

Next, imagine you want to research a topic for a school report. For this, it would be more appropriate to use a search engine that literally searches through all the sites in the world and catalogs them by words and phrases within them. Suppose you want information on carnivorous plants such as the Venus Flytrap.

Originally, you had to be very careful about how you phrased your request, as a search for carnivorous plants might bring you a million or more "hits" for every Web page with either word, tens of thousands of hits for sites containing both words, or merely thousands for sites with the phrase "carnivorous plants." Today (the year 2003), however, most search engines quess at what you mean to ask and refine your search for you.

- 1. For example, Dogpile http://www.dogpile.com is a meta-searcher, which formulates your request for a dozen or more search engines. Click in the white box under Dogpile Search, type in carnivorous plants, and click on the Fetch button. You will get from 10 to a few hundred responses from each search engine.
- 2. These engines are probably organized by putting whoever pays the most first, so be sure to click on the Next Set of Search Engines button at the bottom to try them all. This is a good, quick way to get an idea of which engines will produce the best results for the particular kind of search you are making.
- 3. Scroll through the results just to get an idea of what they are. Some are about buying these plants or growing them, which you probably don't need for your report. You probably do want to know where they live, though.

- 4. Click "back" once or twice until you get back to Dogpile's home page, click in the white box, and type a comma and "habitat" after "carnivorous plants," and click on Fetch again. You have asked for sites with both the phrase "carnivorous plants" and the word" "habitat," so you should get many fewer hits from each search engine. It is time to explore some of them.
- 5. Click on the one that sounds most interesting to you, if you have time to explore now—perhaps the Cook's Carnivorous Plants Index of Pictures (http://www.televar.com/~cooks/picindex.htm). Or scroll to the bottom of the page and click on the button for the next set of search engines. Looking through the results can give you ideas on how to narrow your search even further.

Even if you don't have time to explore at the moment, you can see how improving your aim by adding more specific directions to a search will really save you time. New search engines are being created every day. To check out the latest, see the Search Engines Quick Guide from InfoPeople (www.infopeople.org/search/guide.html)

But Can You Believe Everything You Find on the Web?

Once you find information, you need to think about how to judge its reliability. Can you trust the information it presents to be accurate? Apparently not, as this picture suggests.

Here are some ways to judge the quality of information you find on the Internet:

- Does the author identify him- or herself?

A new meaning for the term "dog food" from Dr. Barry Meyers-Rice's

- What credentials does the author have? (college degrees; sponsorship or connection with colleges, businesses, or other organizations; recognized authority on a subject—as from authorship of a published work on the topic)
- · Does the author request or accept comments from readers?
- Are there obvious factual errors that make you suspicious about the reliability of the rest of the material?

- Does the tone (use of sarcastic or angry words) imply that the author is very opinionated? If so, the site may contain more opinion than fact or the "facts" may be distorted to support a particular point of view.
- Has the site been recently updated? Does it have too many "dead" or expired links? In some cases, this is not important but, in others, currency correlates with accuracy.

You may also want to look through How to Evaluate Web Pages (http://www.lib.berkeley.edu/TeachingLib/Guides/Internet/EvalQuestions.html) This is an excellent overview from the UC Berkeley Teaching Library.

Evaluation

Closing - Original Question

At the end of your sessions, ask the guiding questions again:

- 1. What is the Internet?
- 2. How do you access and use the World Wide Web?

Listen for comprehension. See what has and has not been understood. Your most important objectives may vary from those of others. Parents and educators may want to know more about filtering software that attempts to block access to objectionable sites. Many Web sites have information on this. A good one to start with is Safe Kids Online (www.safekids.com). Parents and educators still need to know about the impossibility of absolute control over the Web and its content. Supervision is important! Be aware that filters eliminate a great deal of valuable information without any guarantee that they will catch all the bad stuff. For more on this, see Faulty Filters (http://www2.epic.org/reports/filter-report.html), a report from the Electronic Privacy Information Center on how content filters block access to kid-friendly information on the Internet.

Children and adults may need more specific help in finding particular kinds of information quickly. An excellent source on refining searches and understanding the different search services is provided by The Spider's Apprentice (http://www.monash.com/spidap.html). Other good resources are the Search Engines Quick Guide (www.infopeople.org/search/guide.html) and Search Tools Chart (http://www.infopeople.org/src/chart.html) from InFoPeople. These sites tell you which engine to use for which purpose and how to phrase your requests.

Extension Ideas

Learning more about web exploration really should be done on the web! Here are some places to begin your explorations.

To find out more about the Internet, the Web, and computer-related things:

- Excellent tutorials on every aspect of Web usage and technology are available from the National Cable Television Association & TECH CORPS at the Web Teacher site. (http://www.webteacher.org/windows.html) Highly recommended!
- 2. Learn the Net: (http://learnthenet.com/english/index.html) An Internet Guide and Tutorial
- 3. Web66: (http://web66.coled.umn.edu/) A K-12 World Wide Web Project

Many educators send their students on "treasure hunts" or WebQuests that are fairly scripted at first, just to give them an idea of the approved sites out there for them. http://webquest.sdsu.edu

- Lookatwhatothershavedesigned(http://www.reachoutmichigan.org/web.html#quests)
- Learn to design your own at Filamentality (http://www.kn.pacbell.com/wired/fil/)
- o Start research for your WebQuests at
 - 1. Internet Public Library (www.ipl.org)
 - 2. Librarians' Index to the Internet (www.lii.org)
 - 3. Library of Congress (http://lcweb.loc.gov/)
 - 4. Michigan Electronic Library (http://mel.lib.mi.us/)
 - 5. WebQuest

Creating Class Web Sites

Adapted from Kathy Schrock's Tech Quest Creative Classroom: January/February 2002 issue

The latest statistics show that 72 percent of American homes have access to the Internet. Having a class web site is the perfect way to encourage home-school communication, extend learning beyond the classroom, and show the world what your class is doing. With the easy-to-use templates that many hosting sites offer, you can create, post, and update a site in very little time - without even knowing HTML - the computer language used to write web pages.

Step 1: Get permission and guidelines

Before you start, check with your school about guidelines or templates for classroom web sites. Most of our schools are small schools. In this instance, you might want to share your endeavors with your school board so they are aware of the site. See samples of guidelines for school and classroom web pages at:

Plano (TX) Suggested Web Page Guidelines (http://k-12.pisd.edu/guide/schools/webpages/). Bellingham (WA) Designing School Home Pages (www.bham.wednet.edu),

To obtain proper permission for using student work, names, and pictures on your site, you may want to create a permission form for parents and students to sign. See the one used by the Bellingham Schools (www.bham.wednet.edu/copyrule.htm).

Step 2: Determine audience and purpose

Think about your site's main audience and reasons why people will visit it. For example, parents may log on to look at samples of their children's work or to send you e-mail messages. Students may depend on it to get their daily homework assignments or to visit educational sites connected to their class studies. Community members may access it to learn about different school events. If your site has the potential for multiple audiences, consider designing it with separate sections for each one.

Step 3: Find a host

A. School and Conference Web Servers - Many larger schools and/or Conferences house their own web servers and provide server space for teachers to post classroom web pages. Since there can be a lot of technical support needed to create and maintain complex web pages, design your site so you can make and update it yourself. This way you do not need to depend on other individuals. Several web sites provide instructions and templates for you to use.



- B. Subscription Internet Service Providers Many Internet service providers, such as MSN and Earthlink, give their subscribers web server space to house a personal web site. The amount of file space allocated is usually five or ten megabytes. This is sufficient for most classroom sites. Often, the provider offers telehone or web-based technical support to help move the web pages from your local computer to a web server so they will be available on the Internet. (This process is called FTP or file transfer protocol.) These providers do not help you with ideas or with the creation of the web page. Make sure you read the fine print carefully since some Internet service providers will charge you if the site is heavily visited. These extra charges could easily be incurred if you have 25 students visiting your site daily.
- C. Free Web-page Hosting Sites There are many free hosting sites on the Internet. Most include advertising in order to be able to offer the free service. Be aware of this when choosing one of them.

If you are mostly interested in posting homework assignments, try YourHomework (http://yourhomework.com). It also offers you an e-mail account, a calendar where you can post special events, and teacher-selected educational web sites to help students with their assignments.

To post notes, documents, and pictures, think about a site like eBoard (www.eboard.com). The bulletin board style of this site is very easy to use. You can opt to include a "chat" note to allow feedback from teachers, parents, and students. You can also have your site password-protected so that only authorized people can view it.

If you want to create an online photographic portfolio of classroom events and student work, try an online "photo album" site such as Ofoto (www.ofoto.com). You can easily move pictures from your computer to their site to create online "albums" that can only be viewed by people who receive your e-mailed link. This could help squelch some concerns about using student pictures on the Internet.

Several places on the web host free personal web sites - such as Geocities (www.geocities.com). There are also sites designed specifically for schools. One of the easiest is the Learning Network's "My School Online" (http://myschoolonline.com). Once registered, a teacher can choose from easy-to-use design templates. These include a welcome page, calendar, and student showcase. In addition, teachers can link to an online grade book and receive a free e-mail account. Also - check out Bigchalk (http://schools.bigchalk.com), McGraw-Hill Learning Network (www.mhln.com), and Scholastic's "Class Homepage Builder" (http://homepage.scholastic.com) for templates for building class web sites.

Step 4: Design Your Site

Before you design your site, look at different class web pages. Take note of the layout, graphics, colors, and ease of navigation to collect ideas for your own site. Be sure not to include too many graphics, colors, and fonts. They will take longer to load and will distract your viewers. Some teachers add a new page for each topic so the site is a year-long journal of classroom activities. Others remove previous information before adding new resources - to keep the site size small. Once you have decided what to include, use a graphic organizer to help you design a site that's easy to navigate.

Step 5: Spread the Word

If you have a school web page, ask the web coordinator to add a link to your class's site. Also, include the URL on your classroom newsletters and all correspondence with parents. You may also want to send e-mail reminders to parents each time you update your site. If your school is networked, see if your classroom computer's homepage can be set to automatically open when signing onto the Internet.

Step 6: Keep it Updated

Web pages are great tools, but they need to be updated regularly. When you design your site, consider how often you will be able to update the material. Then, create it accordingly. Try to work on the pages at least every other week to provide visitors with current information, replace dead links, and - more importantly - give a reason to re-visit your site. Your efforts will be appreciated!

Resources

<u>www.oswego.org/staff/cchamber/webdesign/edwebdesign.htm</u> - Explore the different types of educational web sites you can create.

<u>www.smplanet.com/webpage/webpage.html</u> - Visit this site for a guide to creating your own web page.

<u>www.siec.k12.in.us/~west/online/index.html</u> - Get tips for developing school web pages.

 $\underline{www.education-world.com/a_tech/tech008.shtml}$ - Learn about how web sites link home and school.



Computer Crafts



Whether you have one computer and a black and white printer or access to a multimedia lab (complete with scanners, digital cameras, and color printers), computer crafts are one of the best ways to introduce students to the benefits of technology. With just a few clicks and a few simple supplies, you and your class can produce personalized certificates, stickers, greeting cards, bookmarks - even do-it-yourself magnetic poetry kits.

Computer crafts are a wonderful way to enrich your class-room. They can help interest students in learning and practicing technology skills. They can also save you time and money when it comes to making classroom decorations and motivational materials for students. With just a little imagination, computer crafts can easily be tied into your reading, math, and social studies curriculums. Be crafty! Here are some helpful ideas.

Craft Software - You don't need special software to do computer crafts, but these programs can be a help.

- ** Microsoft's Picture It! and Broderbund's Print Shop can be used to create bookmarks, calendars, recipe cards, T-shirt transfers, banners, and more.
- ** Hallmark's Card Studio and American Greeting's CreataCard include hundreds of predesigned greeting cards, as well as the option to use your own clip art and text to create professional-looking cards.
- ** Tom Snyder's Diorama Designer can be used to make dioramas for a medieval castle, Native American village, and colonial and contemporary American scenes.

Paper - You will be surprised by all the things you can do with paper. Try using resume paper or pre-printed bordered paper. Also try tear-proof, waterproof, translucent, and banner paper.

- 1. Ask students to print their writing projects on paper with themed borders such as winter poems on paper with a snowflake border.
- 2. Make bookmarks with reading strategies like "Use Beginning Sounds" or ask sutdents to make bookmarks with the names of book characters and important facts about them.
- 3. Create and personalize certificates with the templates at www.CertificateCr eator.com.
- 4. Print signs for your learning centers and bulletin boards at

http://www.abcteach.com/directory/teaching_extras/



5. Print an answer key overlay for worksheets on transparent paper. Have students place it on top of their papers to quickly check their answers.

Cards - Many specially made papers can be used in your printer to make cards. There are pre-scored greeting cards that make folding easier and perforated sheets of business cards that you can print and then tear apart. You can also hand-feed index cards into your printer. Here are some card-making ideas.

- 1. Have students make trading cards of people or places you are studying, such as famous explorers, national landmarks, Revolutionary or Civil War heroes.
- 2. Make personalized flash cards or matching games using clip art images or digital pictures.
- 3. Have students design a stack of recipe cards, tie them with a ribbon, and give them as gifts.
- 4. Have students scan a picture of the class with a classroom visitor. Print it and use it as a thank you card.
- 5. Create a card catalog of approved web sites.
- 6. Print instructions for learning centers on cards.
- 7. Make business cards with your contact information to give to parents.

Labels - Printable labels come in many shapes and sizes including full-page sticker sheets that can be cut into shapes, mini-address labels, and more. Try some projects using different types of labels.

- 1. Help early readers identify their personal school supplies by making stickers with students' names and pictures to stick to crayon boxes and notebooks.
- 2. Print stickers with phrases about current class activities, such as "Ask me why volcanoes erupt," and have students wear them home.
- 3. Have students measure dry ingredients for a cookie or cake recipe (flour, sugar, etc.) and put the mix in a jar. Then let them design a label listing the wet ingredients needed (eggs, milk, etc.), baking instructions, and a special note for the recipient.



Magnetic Paper - Printable magnetic sheets come in whole pages you can cut into any desired shape, and perforated business card sheets that can be broken apart. Here are some magnetic paper crafts.

- 1. Create magnetic poetry by printing a list of words and cutting them apart.
- 2. Make a personalized wipe-off board. Print a name or a design on a magnetic sheet and laminate it.

Iron-on Transfers - Iron-on transfers work well on all-cotton materials -- T-shirts, aprons, tote bags, and fabric. Before you print iron-on transfers, especially designs with words, reverse the images or else the design you iron on will be backwards. Use iron-on transfers with these projects.

- 1. Design special class T-shirts for field trips or to recognize students of the week.
- 2. Make a simple class quilt for a special unit of study (inventors, geometric shapes, etc.) without sewing! Iron students' drawings on a large piece of material.
- 3. Iron a photo of the class on a pillow and have students decorate well-wishes for sick classmates.



Resources

<u>www.avery.com</u> You will find information on labels, cards, iron-on transfers, window decals, and magnetic sheets. Also look for printable craft ideas.

<u>www.hpinvent.com/projects</u> Get seasonal craft ideas and purchase various types of paper.

<u>www.ibmezprint.com</u> Visit this site to get templates for projects and to purchase printable cards, labels, T-shirt transfers, and magnets.

<u>www.invent-it.com</u> Get project ideas and purchase iron-on transfers, banner paper, decals, and more.

<u>www.paper-paper.com</u> Find unusual papers (fuzzy, shrink, glow-in-the-dark, etc.) and computer craft ideas.

www.printmyproject.com Log on for printable crafts and to purchase project paper.

http://www.printmyproject.com/projects.epl Select projects seen in Instructor Magazine.

http://www.primarygames.com/print_zone/print_zone.htm You will find many printable items to work with.



What's Inside My Computer?

Grade Level: 3-5

Description: Students draw a picture of what they think a computer looks like inside. Then they explore more!

Objectives

Students will:

- ** explore the inside of a computer.
- ** learn the function of each part of a computer.
- ** learn the definitions of unfamiliar computer terms.
- ** complete an activity using definitions of computer parts.

Materials Needed

computer with Internet access

Click-N-Learn http://www.kids-online.net/learn/c n l.html
Whatis.com <a href="http://whatis.techtarget.com/

Lesson Plan

Invite students to draw a picture of what they think the inside of their computer looks like. Encourage them to show what they think makes the computer work.

Then have students explore the grade-level appropriate computer at Click-N-Learn. As they read, encourage students to make a list of any words or terms they do not understand. Have them to go to Whatis.com to look up the words on their lists.

Note: The part of this lesson described above might be completed with students gathered around a single classroom computer, with a projected image of the Web site as the whole class explores it together, with students working at individual computers in a lab setting, or with students working individually at a learning center computer.

Next, write a list of words on a board or chart and have students write a one-sentence definition for each word. You might use the words below, or create your own list of grade-appropriate terms:

motherboard chipset BIOS operating system memory



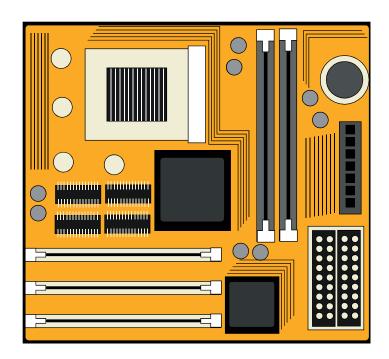
Then ask each student to create his or her own personal dictionary of computer terms. The five terms you provided for the activity can be the start of that dictionary. Encourage students to add to their lists of terms and definitions throughout the year as they learn more about computers and other technology.

Assessment

Students will provide correct definitions for each of five words in the activity.

Answer Key: (Definitions from Whatis.com.)

- 1. A motherboard is the physical arrangement in a computer that contains the computer's basic circuitry and components.
- 2. A chipset is a group of microchips designed to work as a unit in performing one or more related functions.
- 3. BIOS (Basic Input/Output System) is the program a computer's microprocessor uses to get the computer system started after it's turned on.
- 4. An operating system (sometimes abbreviated as "OS") is the program that manages all the other programs in a computer.
- 5. Memory is the name for the electronic holding place for instructions and data that a computer's microprocessor can reach quickly.



Be a Proofreader

Subject: Technology, Writing

Grade Level: 2

Time Required: 30 - 40 minute session

Description: Students use ClarisWorks to edit a paragraph for correct punctuation, capitalization and correct spelling of high frequency words.

Materials Needed:

- Classroom or lab computers
- Microsoft Word or other word processing program
- Printer
- File of paragraph to edit

Procedure:

Copy the paragraph below for students to edit.

Provide each student with a floppy disk with the paragraph.

Demonstrate to students how to open the file.

Prior to using the computer, students are taught to edit paragraphs for above skills.

Prior to using the computer, students are instructed on use of shift, space-bar, delete/backspace.

Students will edit the paragraph for punctuation, capitalization, and correct spelling using the shift, spacebar, and delete/backspace keys.

Assessment:

Print-out of paragraph after editing is complete



Pen Pals

Subject: Technology, Writing

Grade Level: 1

Time Required: 2 - 40 minute sessions

Description: Students will use a friendly letter format to correspond to a pen pal at another school using appropriate communication skills.



- Classroom or lab computers
- Word processing program
- Digital camera (optional)
- Printer

Procedure:

Prior to using the computer the students are taught how to write a friendly letter in the classroom. (Appropriate language used and the format)

Prior to using the computer the teacher takes photos to be placed on each student's letter on the computer.

Students will compose a rough draft of the pen pal letter in class.

Students will rewrite the letter using the proper format on the computer.

Assessment:

Print out of the completed pen pal letter



Acrostic Poetry

Lesson Plan Topic: Technology & Writing

Grade Level: 2nd

Description of Lesson: Students use a word processing program to create an

acrostic poem.

Duration of Lesson: 4 - 45 minute sessions

Materials Needed:

• Example of an acrostic poem

- Overhead projector (or computer with large monitor)
- Colored overhead pens
- Pencil and paper
- Dictionaries
- Computer
- Disk for each student
- Word processing program
- Students' school pictures (optional)
- Construction paper for mounting poems
- Laminating machine (optional)

Procedure:

Prewriting:

- 1. Explain an acrostic poem format using the teacher's name.
- 2. Brainstorm possible word choices for the vowels.
- 3. Stress that you cannot use your name to start the first line of the poem.
- 4. Use dictionaries to search for possible word choices.

Edit draft:

- 1. Students work with a partner, only one paper showing at a time.
- 2. Correct acrostic poem by checking for spelling and whether it makes sense.

Type edited copy into computer:

- Review terminology: keyboard, shift key, space bar, enter, delete, backspace, toolbar, format font, dropdown menu, scroll bar; and shift +letter to make capitals (it is important to have students save to disk every 15 minutes.)
- 2. Student types the first letter of his/her name, as a capital (shift +letter) then presses return.
- 3. The student types each remaining letter of his/her name, in caps, pressing return after each letter.
- 4. The student returns to the first letter of his/her name (use scroll bar), student places the "I-beam" next to the letter in his/her name, clicks so that the cursor is blinking next to the letter and types the words for that letter, from the edited draft, using the keyboard letters and space bar to enter the poem line.
- 5. The student continues typing the remainder of the lines for his/her poem, using the delete key or backspace to correct errors.

Proofread revised draft:

- 1. After each line of the poem is entered, the student goes to the menu bar, drops down "tools" and highlights "spelling and grammar" to check spelling.
- 2. The teacher needs to check the student's work before printing.

Print

Mount the poems on construction paper and add student pictures. Then laminate.

Assessment: Check List:

- 1. First letter of each line contains a capital letter.
- 2. First word in each line begins with the next consecutive letter of the student's name.
- 3. Each line makes sense and describes something about the student.
- 4. Most spelling errors have been corrected.



Cloudy With a Chance of Meatballs

Lesson Plan Topic: Writing & Science

Grade Level: 2nd

Description of Lesson: Students will respond to <u>Cloudy with a Chance of Meatballs</u> by Judi Barrett by illustrating a class slide show and writing a sentence to go with the illustration. Weather terminology will be used in the sentences.

Duration of Lesson: 4 - 30 minute sessions

Materials Needed:

- Book: Cloudy With a Chance of Meatballs by Judi Barrett
- Classroom or Lab Computers
- Powerpoint Software

Procedure:

- 1. Read Cloudy With a Chance of Meatballs with the students.
- 2. Generate a list of favorite foods that could "rain" from the sky.
- 3. Generate a list of weather vocabulary (ie. rain, sleet, hail, etc.) for the students to use in their writing.
- 4. Open Powerpoint. Have each student create one slide showing their favorite food falling from the sky.
 - This can be done by filling the slide with blue color and adding the clipart of the food.
- 5. Have students type a sentence about their illustration using weather vocabulary from the generated list.
- 6. Create a slide show using the student slides.
- 7. Print the slide show (if desired) for a class book or share the slide show during parent conferences.

Assessment Checklist:

- 1. Slide depicts the students' favorite food falling from the sky.
- 2. Slide contains details in the illustration.
- 3. Sentence on slide correctly uses weather vocabulary.
- 4. Sentence matches the illustration.

Desert Animal Reports

Lesson Plan Topic: Technology & Writing

Grade Level: 2nd



Description of Lesson: Students create a report using the Internet and other resources to create a Power Point presentation on a desert animal. The report must contain 4 sentences which: a) describe the animal; b) tell about its enemies; c) describe the food it eats; and d) describe its type of protection.

Duration of Lesson: 8 - 45 minute sessions

Materials Needed:

- Classroom or lab computers
- Floppy disk for each student or network to save presentations
- Power Point or other presentation program
- · Appropriate web sites such as <u>www.arizhwys.com</u> for pictures and text

Procedure:

- 1. Students choose or are assigned a desert animal to research.
- 2. Two students may be assigned the same topic to do the needed research on their animal as partners.
- 3. The student should use library books, Internet sites, encyclopedias and other resources to research information about his assigned animal: (a) describe the animal (b) tell about its enemies (c) food and (d) its type of protection.
- 4. Have students make a list of the references they use in gathering information.
- 5. Have students open PowerPoint or some other presentation tool. Using Word Art, have students type in the name of their animal for the title page of the presentation.

- 6. Then have the students go to a web site like www.arizhwys.com to copy and paste a picture of their animal into their presentation. On the next slide have the students type the word "Description" using Word Art.
- 7. On the following slide, have the student type one or more sentences describing their animal using information acquired during earlier research periods (height, weight, coloring, mammal, reptile . . .).
- 8. Repeat steps 6-7 for the other pieces of information like enemies, food and protection.
- 9. Add pictures from web sites or clip art to the text. (Example: a picture of the enemy or the type of food the animal eats)
- 10. On the final page list all resources used for the report.
- 11. Optional: The bells and whistles of sound, animations . . . may be added as some students finish earlier than others.
- 12. Save to floppy disk or file server.
- 13. Have students print out presentations or use the screen as presentation tool to share information.

Assessment: Check List

- 1. Title page
- 2. Picture of animal
- 3. Four sentences containing capitals and periods about the animal's appearance, enemies, food and means of protection
- 4. Closing page containing resources used



Felix Teaches Technology

Lesson Plan Topic: Reading

Grade Level: 1st



Description of Lesson: Students learn basic computer terminology by viewing and participating in a Power Point Presentation

Duration of Lesson: 30 minutes

Materials Needed:

- Computer hardware: monitor, CPU, printer, keyboard, mouse, floppy disks,
 CD Rom
- Felix Teaches Technology Power Point slide show.

Procedure:

- The teacher will point out the various parts of the computer. Include the monitor, CPU, keyboard, mouse, a floppy disk, and a CD.
- The teacher will present the Felix Teaches Technology slide show. (Power Point show is created with Office XP, but will run in other Office versions.) Students will participate by reciting the words on each slide along with the teacher. As students gain confidence with the format and terminology presented on the slides, they can recite without teacher participation.

Assessment:

Teacher created checklist.

Include the following: monitor, CPU, keyboard, mouse, printer, floppy disks, CD

Felix's Tech Lesson

Lesson Plan Topic: Technology & Language Arts

Grade Level: 2nd



Description of Lesson: Students will identify and use computer terminology

Duration of Lesson: 30 minutes

Materials Needed:

- Picture of a computer monitor, and CPU (central processing unit), keyboard, mouse, disk drive, floppy disk, CD-ROM, and printer
- Computer
- Computer attached to a projection device OR, an overhead projector and transparency
- Crayons- eight different colors
- One set of flashcards with the following words written on them: monitor,
 CPU, keyboard, mouse, disk drive, floppy disk, CD-ROM, and printer

Procedure:

- Use the flashcards to review the computer vocabulary with the students.
- 2. Call on students to point to, or touch, the actual computer hardware referred to on each vocabulary card.
- 3. Take two flashcards and ask students to use both words in a sentence. Try this with three flashcards and see what happens!
- 4. Distribute enough pictures and crayons so that everyone has one of each.

- 5. Display a flashcard and have the students say the word. Tell them to find the picture of that word on their paper and color it green. Continue in this manner with the rest of the flash cards, using a different color for each word.
- Show slide show Felix's Computer Dictionary for review.
 (Power Point show is created with Office XP, but will run in other Office versions.)

Assessment:

Students self-assess as the teacher projects the picture and elicits responses from the students as to the correct color of each object in the picture.



monitor **CPU** keyboard mouse floppy disk CD disk drive printer

Dear Johnny . . .

Lesson Plan Topic: Writing a Friendly Letter

Grade Level: 3

Duration of Lesson: 5 - 30 minute lessons

Description of Lesson: Students will write a letter to Johnny Appleseed describing how they use technology in their daily life and the advantages and disadvantages of using it.

Materials Needed:

- Johnny Appleseed story (any version will work)
- Writing paper
- Chart Paper
- Computers

Procedure:

- 1. Read the story, Johnny Appleseed.
- 2. Discuss and compare the differences in the time Johnny Appleseed and the time we live.
- 3. Discuss the uses of technology in our lives and the advantages and disadvantages.
- 4. Make a list for the students to refer to as they write their letters.
- 5. Review the 5 parts of a friendly letter (heading, greeting, body, closing, signature).
- 6. Have the students work with a partner to write a letter to Johnny Appleseed.
- 7. Have them tell 3 forms of technology they use in their lives and the advantages or disadvantages.

- 8. Have the students edit their writing and format in a word processing program on the computer.
- 9. Have students share their letters with each other and parents during parent conferences.

Assessment: Checklist

1. Parts of a letter are included in the correct order:

Heading

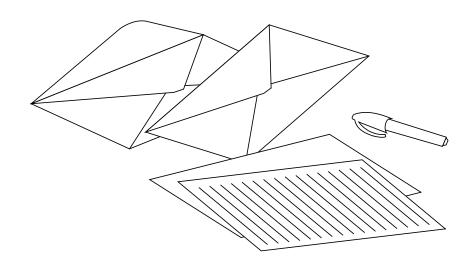
Greeting

Body

Closing

Signature

- 2. Body of letter discusses 3 forms of technology, the use of technology, and the advantages or disadvantages of technology.
- 3. Correct spelling is used in the letter.
- 4. Correct sentence structure (capitalization and punctuation) is used in the letter.



Life Cycles

Lesson Plan Topic: Science, Technology, Language Arts

Grade Level: 3rd

Description of Lesson: The students will work in cooperative groups to gather information, create their product and present to an audience. The groups use all sources of media to gather information, including electronic encyclopedias and the Internet. They will use Power Point to illustrate their cooperative group's life cycle. Each group will also write a report describing the steps in their life cycle in a text box on that same page to complete the project. Finally, they will create a cumulative classroom Power Point Slideshow to present.

Duration of Lesson: 3 hours classroom time; 2 - 3 computer sessions

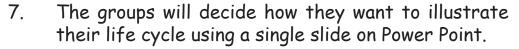
Materials Needed:

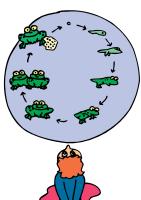
- Classroom and/or lab computers
- Power Point software
- Drawing paper, markers, pencils
- Resource books, Internet, multimedia encyclopedias for information, etc.
- Book Binder (if you want to create a hardcopy of the Slideshow for a class book)

Procedure:

- 1. Have students generate a list of living things.
- 2. Define cycle. Define life cycles. Discuss that all living things have a life cycle
- 3. Put students into cooperative groups of 4 students each and have each group draw or choose from the list of living things to determine which life cycle their group will study.
- 4. They will use a variety of media (books, software, and Internet) to gather their information documenting at least three sources of information.

- 5. After their information gathering is complete, the groups will write a report about all the stages of their life cycle. They will need to edit the report.
- 6. On paper, each student is responsible for writing about at least one of the stages of their life cycle.





- 8. On paper, each student in the group is responsible for designing at least one stage of the life cycle.
- 9. Using the classroom computers or the computer lab, the students will illustrate their page to communicate their group's life cycle. They will also create a text box to communicate in words the story of that life cycle.
- 10. On the computer, each student in the group is responsible for illustrating one stage of the life cycle.
- 11. On the computer, each student is responsible for writing their part of the life cycle in the text box.
- 12. If computers are networked, the group needs to access the school's file server and save their documents in their classroom folder under one of the student's names. The group will save a back-up copy to a floppy disk.
- 13. The teacher creates a master Power Point presentation in the amount of pages that there are cooperative groups. Add one extra page for the Title Page.
- 14. When finished, with the teacher's help, the group will copy their page and paste it onto the master Power Point presentation that will be turned into a Life Cycle Slide Show.
- 15. The groups will present their final product to the class. They may also present this to their parents during as evidence of their Science, Language Arts and Technology learning either at a collective meeting or by taking the presentation home on disk.



Math Stories

Lesson Plan Topic: Math & Written Language

Grade Level: 2nd

Description of Lesson: Students will use technology to draw shapes or select pictures to represent an addition or subtraction equation. They will also write the equation, and a story that matches the equation.

Duration of Lesson: 50 minutes

Materials Needed: Word processing software Classroom Computer or Computer Lab



Procedure:

- 1. Launch Microsoft Word or similar program.
- 2. The teacher or a student calls out an addition or subtraction fact, i.e. "3 + 4" or "5 + 3".
- 3. Students use pictures or shapes to illustrate the fact.
- 4. Students write an addition or subtraction story to go with the fact.
- 5. Students include the addition or subtraction equation, along with the answer.
- 6. Share orally, or print for sharing at a later time.

Assessment:

Students include their name on the document and print it. Peer grading as well as teacher grading can be implemented following these guidelines:

Does the picture match the written fact?

Does the story match the picture?

Optional: Are the sentences written with accurate spelling and mechanics?

Primary Keyboarding Skills

Lesson Plan Topic: Keyboarding

Grade Level: K-2

Description of Lesson: Introduce the younger student to the "home row" position of the keyboard with a "special phrase." Introduce the primary student to the basics of keyboarding.

Materials Needed: Computer with keyboard (paper cutout - optional)

Procedure:

- 1. Introduce the concept of "keyboarding" and the rationale for learning to use the keyboard correctly.
- 2. Have students place their left hand fingers on "home row" position with the following phrase to help them remember the placement:

A Silly Dancing Frog

3. Have students place their right hand fingers on the "home row" position with the following phrase:

Jazzy Kangaroo's Little Semi (use semi-truck photo or hot-wheel-type car for describing purposes)

4. After ASDF and JKL; are mastered an option would be to add the pointer finger movement with these words:

For the f to g movement: A Silly Dancing Frog Giggles
For the j to h movement: Hits Jazzy Kangaroo's Little Semi

5. Handout - Give students a paper keyboard with the ASDFGHJKL; letters marked. Have students trace their two hands on the bottom of the page. Using crayons, have them color in a letter to match the correct finger for keyboarding technique.



- 6. Extension Have the students draw Giggles (the silly dancing frog) and Jazzy (the kangaroo with the little semi-truck) to reinforce the letters.
- 7. Extension Bulletin board display of Giggles (A Silly Dancing Frog) and Jazzy (Kangaroo with the Little Semi-truck) pictures drawn by the students
- 8. Creative Extension Have students create their own ASDF and JKL; phrases.
- 9. Continue to reinforce the "home row" positions by having students place their fingers on the keys each time they prepare to do "stories", etc. on the computer.

Assessment

Teacher Observation of students using the ASDF and JKL; placement when typing with the keyboard.



Hidden Technology

Name	Date
------	------

Directions: Find the technology words hidden in the puzzle.

cd computer cpu disk drive floppy disk internet keyboard monitor

mouse printer www

m	0	n	i	†	0	r	m	а	S	S	а	С	h	u
S	e	†	†	S	r	h	0	d	e	m	i	S	С	1
i	n	†	e	r	n	e	†	а	n	0	d	С	d	0
n	n	e	С	†		С	u	†	m	u	а	i	n	e
d	i	S	k	d	r	i	V	e	h	S	а	m	p	1
٧	e	r	m	0	n	†	n	e	w	e	S	h	i	а
r	e	n	e	W	У	С	0	r	k	0	h	р	i	р
0	m	i	С	h	i	р	9	а	w	n	р	r	e	†
n	n	S	У	-	٧	u	а	n	w	i	а	i	С	0
С	0	m	р	J	†	e	r	a	w	1	i	n	f	р
0	r	n	i	а	h	а	W	а	i	i	а	†	-	а
S	k	е	У	b	0	а	r	d	k	а	С	е	0	1
0	r	а	d	0	n	e	b	r	а	S	k	r	а	q

Hidden Technology - Key

Name_	_KEY_		Date	
-------	-------	--	------	--

Directions: Find the technology words hidden in the puzzle.

cd computer cpu disk drive floppy disk internet keyboard monitor mouse printer www

m	0	n	i	†	0	r	m	а	S	S	а	С	h	u
S	е	†	†	S	r	h	O	d	e	m	i	S	С	-
i	n	t	e	r	n	e	+	а	n	0	d	C	d	0
n	n	e	С	†	i	С	u	†	m	u	а	i	n	e
d	i	S	k	d	r	i	V	e	h	S	а	m	р	_
٧	e	r	m	0	n	†	n	e	w	e	S	h	-	a
r	e	n	e	W	У	C	0	r	k	0	h	р	-	р
0	m	i	С	h		p	9	a	w	n	p	£	e	+
n	n	S	У	_	>	3	а	n	W		a	•	U	0
C	0	m	p	u	†	e	r	а	w	1	i	n	f	q
0	r	n	i	а	h	а	W	а	i	i	а	†	1	a
S	k	e	y	Ь	0	a	r	d	k	а	С	e	0	1
0	r	а	d	0	n	е	b	r	а	S	k	r	а	q

Lesson Plans from www.microsoft.com/education

1. Biographies Come to Life

http://www.microsoft.com/education/?ID=BiographiesToLife

Summary: Students read a biography of a well-known individual, create a Power-Point presentation about that person, and then present to others.

2. Birdfeeder Cam Project

http://www.microsoft.com/education/?ID=BirdfeederCam

Summary: Students with learning disabilities construct a bird feeding station and a Web site with a Web camera. They formulate their own inquiry-based science fair projects using data collected from the bird feeding station; develop a Power-Point presentation for the science fair; work together to develop a Web site featuring their findings about birds.

3. Discovering Africa and Its Culture

http://www.microsoft.com/education/?ID=DiscoverAfrica

Summary: A yearlong project on Africa. Students write letters to African pen pals; research African animals; write a country report; use the Internet to gather information; and create a data graph in Excel.

4. Global Internet Projects

http://www.microsoft.com/education/?ID=600corner

Summary: Students expand their horizons beyond the classroom by interacting with technology to share ideas and experiences with students of different nationalities or from different regions of the country.

5. Lesson Plan: Amazing Autobiographies

http://www.microsoft.com/education/?ID=AmazingAutobiographies

Summary: Students look at autobiographies of famous historical figures, then explore the basic elements of narrative writing by creating their own autobiographies.



6. Lesson Plan: Boning Up on Bones

http://www.microsoft.com/education/?ID=BoningUp

Summary: In this month-long unit students learn about the human skeletal system by creating and sharing multimedia presentations, newsletters and Web sites.

7. Lesson Plan: Simple Machines

http://www.microsoft.com/education/?ID=Machines

Summary: In this project students are challenged to identify and study simple machines in everyday life - from a seesaw to a treadmill. They investigate how these simple yet fascinating "machines" work. They study their efficiency, effort, and resistance forces. They then work in groups to combine everyday parts to invent and make their own imaginative but useful two-dimensional machine.

8. Lesson Plan: Who doesn't love ice cream?

http://www.microsoft.com/education/?ID=IceCreamScience

Summary: Students have fun learning how ice cream is made, and master important science concepts of physical and chemical reactions in the process. They top off the experience with a presentation about what they have learned.

9. Let's Get Warm

http://www.microsoft.com/education/?ID=picwarm

Summary: Students investigate various methods that animals use to warm up in cold weather - everything from growing new fur to burrowing in mud - and explore the scientific principles involved. They then identify human parallels and create a presentation.

10. No Flakes Like Snowflakes!

http://www.microsoft.com/education/?ID=flake

Summary: Students explore snowflakes from the inside by making their own snow-flake. They learn key concepts of geometry - including symmetry, angles, and scale - bringing mathematics, science, and art together into one creative and insightful activity.

11. Pita Tortilla Baquette

http://www.microsoft.com/education/?ID=PTBaguette

Summary: Students learn about the variety and unity of our world by exploring in depth the "bread" of different nations and then reporting their findings to the class.



12. The Eruption of Mount St. Helens

http://www.microsoft.com/education/?ID=MtStHelens

Summary: Students use technology to review the forces of nature at work and the recuperative power of the United States' most active volcano.

13. The Insect Files

http://www.microsoft.com/education/?ID=insect

Summary: Students find out all about the insect of their choice. They then show what they have learned in a multimedia presentation to the class about the insect's physical characteristics, habitat, and life cycle.

14. The Inside Story

http://www.microsoft.com/education/?ID=InsideStory

Summary: Students are inspired to to read and understand non-fiction by reading about common objects in order to write about what they've learned.

15. Use a Slide Master in PowerPoint

http://www.microsoft.com/education/?ID=UseSlideMaster

Summary: Use the slide master to customize a Microsoft PowerPoint presentation.

16. Virtual Classroom Tour: EQuilts

http://www.microsoft.com/education/?ID=VCTeQuilts

Summary: After reading literature with a story quilt theme, students get to write a story about an event in their lives and create their own story quilt depicting that event.

17. Virtual Classroom Tour: Grandparents

http://www.microsoft.com/education/?ID=VCTGrandparents

Summary: By exploring their grandparents' history, students gain an understanding of life two generations ago. Third graders read "When I Was Nine" by James Stevenson, a story about a man reflecting back on his childhood. Then, they write to their grandparents to ask them about their childhood years. The students create a presentation comparing and contrasting their lives to that of their grandparents at the same age. They learn to incorporate digital photographs, sound files, and a family tree using www.storytree.net/ and www.familybookmark.com/.

18. Virtual Classroom Tour: Hermit Crabs

http://www.microsoft.com/education/?ID=VCTHermitCrabs

Summary: After reading A House for Hermit Crab, written by Eric Carle, students complete concept maps about the story. Students then research sea creatures or other sea elements and create multimedia presentations to demonstrate what they've learned.

19. Virtual Classroom Tour: Origami In Flight

http://www.microsoft.com/education/?ID=VCTOrigami

Summary: Using math and science, young aviators will learn about the principles of pitch, yaw and roll, and other aspects of aerodynamics. Investigating flight and distance dynamics, students research a type of aviation vehicle, build a prototype, test the design, and present their scientific findings to the class. Students also write an essay describing their experience and results.

20. Virtual Classroom Tour: Shapes in Our Lives

http://www.microsoft.com/education/?ID=VCTShapes

Summary: Through this activity students locate shapes in their daily lives, identify shapes by name and create PowerPoint presentations on these found shapes.

21. What's the Real Deal?

http://www.microsoft.com/education/?ID=realdeal

Summary: Students learn the concept of intellectual property and identify ways to overcome piracy and counterfeiting. Students also practice basic computer and research skills using library and Internet resources.

World Languages

1. Have fun with World Languages. Study animal names and sounds. Do your students know that in Spain a perro says vov vov and in Germany the same animal says wuff wuff? Write a list of familiar animals on the board, such as cow, duck, dog, cat, frog, rooster, and snake. Play a few sound clips to allow your class to hear actual animal sounds. Discuss the sounds and have students guess the English words we use to make those sounds. Write the sound words beside the animal names and have students copy the list onto paper. Taking the paper to the computer, students should use the Internet to find out how other languages represent the sounds of these animals. Be sure to preview the sites first. When the class has finished their research, give each student a chance to pronounce one of the animal sounds for the class to repeat.

Links

Sounds of the World's Animals http://www.georgetown.edu/cball/animals/animals/animals.html

SeaWorld/Busch Gardens: Animal Sounds Library http://www.seaworld.org/animal-info/sound-library/

Parc Safari

http://parcsafari.qc.ca/english/indexanE.htm

2. Give your students a chance to guess the Spanish names for various animals. Send them to the Internet to take this online quiz. Have them write their answers on a piece of paper. After they have sent their online responses, students can record their scores and write the correct answer for any missed sounds. As a follow-up activity, students can draw one of the animals and label the picture with the Spanish name and animal sound words.

Quiz Link

Test Your Animal Knowledge: Animales

http://www.colapublib.org/children/kids/wild/animal/animales/index.html

3. Instruct students to choose their favorite animals. Have them use a child-safe search engine such as www.onekey.com or www.yahooligans.com to find a picture or photograph of the animal that can be cut and pasted to a word processing or drawing document. Remind them to list the web site address with the picture. Print out the pictures and send students back to the Internet to find the name of the animal in three or more different world languages. Have them cut out the picture, glue it onto one side of an index card, and write the name of the animal in each of the languages on the back of the card. Create a class book by combining the cards in alphabetical order.

4. Spanish is the language of Spain. It is also the language of many other countries. Can your students name some of these other countries?

Ethnologue.com (Spanish)
http://www.ethnologue.com/show_language.asp?code=SPN

5. During school breaks your students might have an opportunity to travel to other parts of the United States or the world. Have your class pretend that they will be traveling to a Spanish-speaking area during the next break and must quickly learn a few Spanish phrases. In small groups have students visit one of the Web sites that offer free Spanish tutorials. Assign a situation from the Web site to each group – such as taking a taxi ride, ordering a meal, finding a hotel room, or meeting a Spanish family. Give the group time to copy the dialogue from the web site or, depending on their level of expertise with the language, write original dialogue for the same situation. Have the groups memorize the dialogue and present it to the class to guess the situation. Do the same activity with a different world language.

Spanish Steps

http://www.bbc.co.uk/education/languages/spanish/lj/

Learn Spanish: A Free Online Tutorial http://www.studyspanish.com/freesite.htm

March 2003





Resource URLs

Title: Click-N-Learn

Description: This is a great place to start learning about the parts of a computer. The information is available for different levels of computer knowledge. Once you choose a level, click on the different parts to learn what they do.

URL: http://www.kids-online.net/learn/c_n_l.html

Title: BrainPOP: The Internet

Description: A video showing information about the Internet. A great site to show how much you can do with the Internet and the World Wide Web.

URL: http://www.brainpop.com/tech/communication/internet

Title: BrainPOP: The Computer Mouse

Description: A short clip explaining what a computer mourse does.

URL: http://www.brainpop.com/tech/digital/computermouse

Title: eThemes Resource: Internet Safety

Description: These sites have tips and advice on how children and young adults can use the Internet safely. Includes tips on surfing, chat rooms, and how not to give out personal information. There are online games and activities that teach lessons about Internet safety. There are also pledges and certificates that children can sign.

URL: http://emints.more.net/ethemes/resources/500000652.shtml

Title: Technology Buzzwords for Students

Description: A technology glossary with examples of how the words are used.

URL: http://www.tekmom.com/buzzwords/

Title: Museum of Modern Technology

Description: This fun site is a primer for information technology. Click on "Lobby" to learn about different programs frequently used.

URL: http://www.actden.com/skills2k/

Title: eThemes Resource: Technology: Excel

Description: These sites offer numerous ideas for doing classroom projects that include the use of Microsoft Excel. There are many examples of using timelines, graphs, and probability charts for a variety of fun activities. Many sites offer step-by-step instructions or allow you to download a pre-formatted spreadsheet and change it to fit your needs. Also includes Excel tutorials.

URL: http://emints.more.net/ethemes/resources/500000602.shtml

Title: Welcome to the Web

Description: This online tutorial teaches about the Internet, guestbooks, Web browsers, searching the net, and researching the net. Simply choose a topic and read on. Includes printable worksheets to use with the lessons.

URL: http://www.teachingideas.co.uk/welcome/

Title: eThemes Resource: Keyboarding Skills: Elementary

Description: These sites provide online practice for keyboarding skills. Ideas for class

activities about typing are also included.

URL: http://emints.more.net/ethemes/resources/500000448.shtml

Title: How Floppy Disk Drives Work

Description: This site from How Stuff Works tells all about the disk drive on a computer

and how it works.

URL: http://www.howstuffworks.com/floppy-disk-drive.htm

Title: How Computer Mice Work

Description: This site from How Stuff works tells about the mouse and how it works.

URL: http://www.howstuffworks.com/mouse.htm

Title: How Computer Monitors Work

Description: This site from How Stuff Works explains computer monitors and how they

work.

URL: http://www.howstuffworks.com/monitor.htm

Title: How PCs Work

Description: This site from How Stuff Works explains what a personal computer is and

tells all about its parts.

URL: http://www.howstuffworks.com/pc.htm

Title: Computer History Museum

Description: Learn about the history of computers. Includes a timeline. "Exhibits" has

links to the online exhibits.

URL: http://www.computerhistory.org/

Title: Computer Chronicles: From Stone to Silicon

Description: This ThinkQuest is a timeline about computers through the years.

URL: http://library.thinkquest.org/22522/

Title: Internet Guide Printables

Description: This site from Teacher Vision.com has printable sheets that can be used to

explain email, the Internet, and searching tips.

URL: http://www.teachervision.com/lesson-plans/lesson-6007.html

Title: Getting to Know Your Computer Activity

Description: This lesson lets students get familiar with the parts of a computer.

URL: http://www.eduplace.com/rdg/gen act/g start/computer.html

Title: Her Story

Description: Get kids to explore the index of famous females and browse the "Media Gallery" for images, videos, and recordings. View a time line of events and download a study guide of activities and resources.

URL: www.women.eb.com/

Title: Exciting Ecosystems

Description: Discover our planet's geographic diversity - from tropics to tundra. Learn about each of the world's six biomes through Q & A activities, text, and images. Have students distinguish between freshwater and marine ecosystems. Locate eco-regions on maps, and find out about plant life and animals in each habitat.

URL: http://mbgnet.mobot.org/

Title: Crafty Classroom

Description: Visit the Art Room to enjoy web-based art sparkers and adventures. Check out the Art Library and resources for book lists, advice, and links. Have kids browse the art gallery, view historical artifacts, play games, and take quizzes.

URL: www.arts.ufl.edu/art/rt_room/index.html

Title: Learning Tastes Good

Description: Nutrition Cafe's "Nutrition Sleuth" and "Grab a Grape" games will give kids proper eating tips. Click on "Have-a-Bite" to find nutrient and vitamin rich meals and discover the nutritional values of their favorite foods.

URL: http://exhibits.pacsci.org/nutrition/

Title: Kids Bank

Description: Your class will laugh all the way to this banking web site and learn the "value" of their money. K-6 students will explore the banking process through an interactive story and tour. Kids can put their money on the line with the fun quizzes in the Game Room, Bulletin Board messages, or Ask Mr. Money.

URL: www.kidsbank.com

Title: Teach Them Poetry

Description: Use Bruce Lansky's famously funny poems to get kids writing their ownrhymes. Click on "Poetry Class" for activities, lesson plans, and poem types - clerihew, limerick and haiku - and writing techniques including similes and tongue twisters. Download versions to perform in class. Have kids visit "Giggle Poetry" for fill-in-the-blank poems, contests, and interviews with poets.

URL: www.poetryteachers.com

Title: Field Trip Factory

Description: Take your class on a free field trip in your own community. Field Trip Factory will help locate, schedule, and plan your next trip. Businesses, such as Petco and Pearl Vision, sponsor outing that teach K-8 students about animal welfare, health care, fitness and smart shopping.

URL: www.fieldtripfactory.com/pages/home.html



Title: Technology and Young Children

Description: The mission of this site is to lead discussions, share research and information and demonstrate best practices regarding technology so it can be used to benefit children aged birth through eight years.

URL: http://www.techandyoungchildren.org/bestedu.html

Title: Kid Space at the Internet Public Library

Description: The Internet Public Lirbary is a public service organization and a learning/

teaching environment at the University of Michigan School of Information.

URL: http://www.ipl.org/kidspace/browse/cai0000

Title: Tech Mom's Treasures for Teachers

Description: Resources and tools to help the K-8 teacher with technology.

URL: http://www.tekmom.com/treasures/index.html

Title: Kidsmart - Internet Safety

Description: Resources and tools promote Internet safety at school and at home.

URL: http://www.kidsmart.org.uk

Title: Copyright with Cyberbee

Description: Copyright law and a wealth of other legal issues are simply explained.

URL: http://www.cyberbee.com/copyrt.html

Title: Adventures of Cyberbee

Description: A goldmine of internet resources - curriculum ideas, research tools,

web projects, treasure hunts, web links, articles, and more.

URL: http://www.cyberbee.com/

E-Museums Computers On-Line!

If you and your students can't visit great museums in person - log onto the Internet and give electronic exhibits a try. Many notable museums display the works of the Masters online. Browse masterpieces by Michelangelo, Rembrandt, Matisse, and other great artists. Then gather art resources, including timelines, biographies, critiques, and information on various art forms. Get started with these web sites.

www.getty.edu www.guggenheim.org www.metmuseum.org www.louvre.fr/louvrea.htm www.nationalgallery.org.uk www.lacma.org/ www.clevelandart.org/ www.frick.org/ www.artmuseum.net/ www.moma.org



Kid Friendly E-Muesums

- 1. American Museum of Natural History (http://ology.amnh.org/). It's well-designed, interactive, and kid-friendly. Easy-to-read information pages on the sciences also include fun follow-up activities.
- 2. National Gallery of Art (www.nga.gov/kids/kids.htm). Kids can take online "Adventures in Art" and get ideas for projects. After sorting the colors and shapes in Kandinsky's works, they can explore Martin Johnson Heade's rain forest landscapes, view current and past exhibits, and tour the sculpture gardens.
- 3. Children's Museum of Indianapolis (<u>www.childrensmuseum.org</u>), have kids click "Fun Online" to read how paleontologists merge art and science to create a "kinetosaur" and the "Arts Workshop" to see structures and meet modern sculptors.
- 4. Art Institute of Chicago (<u>www.artic.edu/aic/kids/askartie.htm</u>), kids can "Ask Artie" questions about art. This site covers artists and their work, and offers some of the best lesson plans on the web.
- 5. Franklin Institute of Science (www.fi.edu).
- 6. Children's Discovery Museum (<u>www.cdm.orq</u>).



Museums With Online Images

American Musuem of Photography (<u>www.photographymuseum.com</u>) teaches about photographic prosses - from salt prints to daguerreotypes - and offers primary resources on African Americans, landscapes, and other topics.

The Smithsonian Institution - made up of many museums - has images as well as portraits of historical figures. Start at the Smithsonian's main site (www.si.edu), and then click "Museums" to narrow your search.

Natural History and Science Muesums with Online Exhibits

Carnegie Museum of Natural History (www.carnegiemuseums.org/cmnh) - American Indian, mineral and gem, and Jurassic fossil exhibits

Orinoco Online (<u>www.orinoco.org</u>) - features more than 350 artifacts from the Venezuelan Amazon region. Kids can view objects of aboriginal daily life, tools, and sacred objects including masks and amulets.

Others -

American Museum of Natural History (<u>www.amnh.org</u>) Field Museum (www.fmnh.org)

Dallas Museum of Natural History (www.dallasdino.org)

Florida's Museujm of Natural History (www.flmnh.ufl.edu)

Royal Ontario Museum (<u>www.rom.on.ca</u>)

San Francisco's Exploratorium (<u>www.exploratorium.edu</u>)

Academy of Natural Sciences (www.acnatsci.org)



URLs for Bible Class

Adventist History

Adventist Pioneer Library Pictures of Pioneers Washington, NH Church Sabbath Trail http://www.aplib.org/
http://www.aplib.org/

http://www.tagnet.org/washington/



Character Building Stories

Adventures in Odyssey

http://www.oneplace.com/Ministries/Adventures in Odyssey/Archives.asp

Down Gilead Lane

http://cbh.gospelcom.net/gilead/

Keys for Kids - devotions

http://cbh.gospelcom.net/keys/index.php?ifpSectionID=14

Classic Stories

http://cbh.gospelcom.net/classic/index.php?ifpSectionID=27

Resources - coloring pictures, music, etc.

Virtual Church http://www.virtualchurch.org/kids.htm

Manhattan SDA Church

Digging4Truth http://www.digging4truth.org/index.asp
Just for Kids http://www.digging4truth.org/kids.asp

Sermons for Kids http://www.sermons4kids.com
http://www.bibleinfo.com

Miscellaneous Sites

Bible Study Tools
For teachers/parents/kids

http://www.sermoncentral.com
http://hefirstlovedus.com/



Cyberguides for Grades K - 3 http://www.score.k12.ca.us/

The above website links to cyberguides for the following books.

Abuela by Arthur Dorros

Annie and the Old One by Miska Miles

Apples (A Thematic Unit)

Bread and Jam for Francis

Cloudy with a Chance of Meatballs by Judi Barrett

Charlotte's Web by E.B.White

The Courage of Sarah Noble by Alice Dalgliesh

Dear Mr. Blueberry by Simon James

The Desert is Theirs by Byrd Baylor

Frog and Toad Are Friends by Arnold Lobel

The Goat in the Rug by Charles L. Blood & Martin Link

Grandfather's Journey by Allen Say

The Great Kapok Tree by Lynne Cherry

The Hungry Giant by Joy Cowley

<u>Katy and the Big Snow</u> by Virginia Lee Burton

Katy No Pocket by Emma Payne

<u>Here a Plant, There a Plant, Everywhere a Plant, Plant</u> by Robert Quackenbush

<u>Hill of Fire</u> by Thomas P. Lewis

How My Parents Learned to Eat by Ina R. Friedman

The Hungry Thing by Jan Slepian and Ann Seidler



I Like Books by Mark Browne

<u>Little House in the Big Woods</u> by Laura Ingalls Wilder

Long Way to a New Land by Joan Sandin

The Lotus Seed by Sherry Garland

Now One Foot, Now the Other by Tomie dePaola

The Magic School Bus on the Ocean Floor by Joanna Cole

The Mitten by Janet Brett

A New Coat for Anna by Harriet Ziefert

My Great Aunt Arizona by Gloria Houston

Miss Rumphius by Barbara Cooney

Mr. Popper's Penguins by Richard and Florence Atwater

The Pea Patch Jig by Thacher Hurd

The River Ran Wild by Lynne Cherry

Stellaluna by Janell Cannon

Sweet Clara and the Freedom Quilt by Deborah Hopkinson

Two Bad Ants by Chris Van Allsburg

The Very Hungry Caterpillar by Eric Carle

Too Many Tamales (English version) by Gary Soto

Velveteen Rabbit by Margery Williams

Watch the Stars Come Out

We're Going on a Bear Hunt by Michael Rosen

The White Stallion by Eliabeth Shub

The Wump World by Bill Peet



Cyberguides for Grades 4 - 5 http://www.score.k12.ca.us/

Annie and the Old One by Miska Miles

Ben and Me by Robert Lawson

Blue Willow by Doris Gates

Borreguita and the Coyote by Verna Aardema

Caddie Woodlawn by Carol Ryrie Brink

<u>Crow and Weasel</u> by Barry Lopez

Dragonwings by Laurence Yep

The Forgotten Heroes (Buffalo Soldiers) by Clinton Cox

Freedom Train by Dorothy Sterling

The Great Horn Spoon by Sid Fleischman

From the Mixed-up Files of Mrs. Basil E. Frankweiler by E. L. Konigsburg

The Island of the Blue Dolphins by Scott O'Dell

A Jar Of Dreams by Yoshiko Ochida

Miss Rumphius by Barbara Cooney

Mrs. Frisby and the Rats of NIMH by Robert C. O'Brien

Morning Girl by Michael Dorris

<u>Mufaro's Beautiful Daughters</u> by John Steptoe

My Brother Sam is Dead by James Lincoln Collier

Nettie's Trip South by Ann Turner

The Night of the Twisters by Ivy Ruckman



Owls in the Family by Farley Mowat

Patty Reed's Doll by Rachel K. Laurgaard

Sarah, Plain and Tall by Patricia MacLachlan

The Sign of the Beaver by Elizabeth G. Speare

Stone Fox by John Reynolds Gardiner

Summer of the Monkeys by Wilson Rawls

Treasure in the Stream: The Story of a Gold Rush Girl by Dorothy and Thomas Hoobler

The Trumpet of the Swan by E. B. White

The White Stallion by Eizabeth Shub

The Year of the Boar and Jackie Robinson by Betty Bao Lord

Zia by Scott O'Dell

Cyberguides for Grades 6-8 http://www.score.k12.ca.us/

Abraham Lincoln: A Photobiography by Russel Freedman See also: <u>Civil War Literature</u> Causes of the American Civil War

Adam of the Road by Elizabeth Janet Gray

The Adventures of Ulysses by Bernard Evslin

African Folktales

(Related: Folk Art & Lore)

The Apprentice by Pilar Molina Llorente

Aztec Legends

(Related: Folk Art & Lore)

Baseball in April by Gary Soto

Behind Rebel Lines by Seymour Reit

i.

The Bronze Bow by Elizabeth George Speare

Bull Run by Paul Fleischman

Canyons by Gary Paulsen

La Casa en Mango Street por Sandra Cisneros (in Spanish only)

<u>Catherine Called Birdie</u> by Karen Cushman

The Cay by Ted Taylor

Charles Dickens: An Author Unit

<u>Civil War Literature</u>

Jayhawker Two Roads to Greatness Bull Run Nightjohn Freedom Train Letters from a Slave Girl Charley Skedaddle Across Five Aprils The Last Silk Dress Sherman's March

Lincoln: A Photobiography

The Dark Frigate by Charles Boardman Hawes

A Day No Pigs Would Die by Robert Peck

Dear Mr. Henshaw by Beverly Cleary

The Door in the Wall by Marguerite de Angeli

The Drummer Boy of Shiloh by Ray Bradbury

See also: Civil War Literature

Causes of the American Civil War

The Egypt Game by Elizabeth Keatley Snyder

The Giver by Lois Lowry

The Golden Goblet by Eloise Jarvis McGraw

The Grey King by Susan Cooper

Harriet Tubman by Ann Petry

Hatchet by Gary Paulsen

I, Juan de Pareja by Elizabeth Borton de Trevino

Johnny Tremain by Esther Forbes

Journey to Joburg by Beverly Naimoo

The Celebrated Jumping Frog of Calavaras County by Mark Twain

The Legend of La Llorona by Rudolfo Anaya (Related: Folk Art & Lore)

The Light in the Forest by Conrad Richter



Living Up the Street by Gary Soto

Lyddie (from Kroc MS) by Katherine Paterson

Lyddie (from Memorial) by Katherine Paterson

Madeleine L'Engle: An Author Unit

Mara, Daughter of the Nile by E. J. McGraw

Maroo of the Winter Caves by Anne Turnbull

The Master Puppeteer by Katherine Paterson

Mayan Culture

(Related: Folk Art & Lore)

The Missing 'Gator of Gumbo Limbo by Jean Craighead George

The Monsters Are Due On Maple Street by Rod Serling

My Side of the Mountain by Jean Craighead George

Native American Poetry

The Night of the Twisters by Ivy Ruckman

The Odyssey by Homer (for ELD students)

The Old Man and the Sea by Ernest Hemingway

The Outsiders by S.E. Hinton

<u>Patchwork of Cultures: A Thematic Unit</u> (includes Chrysanthemum by Kevin Henkes, The Keeping Quilt by Patricia Palacco and The House on Mango Street by Sandra Cisneros)

(Related: Folk Art & Lore)

The Pigman by Paul Zindel

Prairie Songs by Pam Conrad

Pyramid by David Macaulay

Roll of Thunder, Hear My Cry by Mildred Taylor



<u>Sadako and the Thousand Paper Cranes</u> by Eleanor Coerr <u>Saleng</u> (A Pilipino Folk Tale)

Salmon Boy (A Haida Legend) \
(Related: Folk Art & Lore)

Sign of the Chrysanthemum by Katherine Paterson

<u>Song of the Sky Loom</u> by Tewa Indian (Related: Folk Art & Lore)

To Be A Slave by Julius Lester

Tuck Everlasting by Natalie Babbitt

20,000 Leagues Under The Sea by Jules Verne

Walk Two Moons by Sharon Creech

Where the Red Fern Grows by Wilson Rawls

The View from Saturday by E.L. Konigsburg

Virtual Museums

Medieval Chinese Inventions and Innovations

<u>Civil War Literature</u>

Causes of the American Civil War

Teacher Developed Projects

The following lessons have been developed by teachers to use in their classrooms. They are presented here for your use as well as a source to build from with your own lesson ideas.

Power Point Prentations

Nouns and Verbs by Susan Andrews, Edgewood Elementary School, Stoneham, MA
A presentation geared for 3rd and 4th grade.

In Black and White by Sandra Bent, Greater Boston Academy, Stoneham, MA
A presentation of six contemporary black and white photographers. Geared for high school students. Activities are included.

Web Quest

The Chosen - A web quest created and designed by Rondi Aastrup, Greater Boston Acad emy, Stoneham, MA. Written for high school students.

