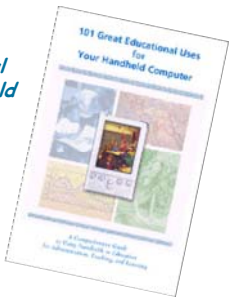



Presentation includes information from:

Fasimpaur, Karen.
101 great educational uses for your handheld computer. K12 Handhelds, 2003.




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Order of Operations

- Impact of technology in education
- Teacher feedback
- Overview of handheld computers
- Palm® OS devices and brands
- POWER activities to support teaching and learning


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Using Handheld Technology

- SEIRTEC Newsletter
- Volume 5, Number 2, 2002
- <http://www.seirtec.org/publications/NewsWire/Vol5.2.pdf>


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The Impact of Technology

- Interactive and enjoyable
- Learner-controlled and customizable
- Investigate and answer questions
- Tools to share knowledge
- Helps students find information
- Helps students evaluate information
- Increases communication skills


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The Real Story

- Research results varied
- One-to-one computing
- Expensive for hardware
- Access, access, access is missing
- Handheld computers fit the bill!

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Administrative Uses

Data management and tracking

- Grading
- Attendance
- Discipline
- Student information
- Student schedules
- Memos
- Curriculum and district documents

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Annette Lamb

- What can technology do that we cannot do without technology?
- How does technology fit into the learning experience?
- What does it take to make the use of technology worth the time and effort?

<http://www.eduscapes.com/sessions/beam/>

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What can technology do that we cannot do without technology?
How does technology fit into the learning experience?
What does it take to make the use of technology worth the time and effort?

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Teacher Feedback

- Equitable access
- Ease of integration
- Increased motivation
- Collaboration
- Individualization
- Productive lab time
- Easier revision
- Work can go home
- Empowered learners and teachers

Curtis, Michael, et.al. Palm computers: A complete resource for classroom teachers. ISTE, 2003. (p.17)

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Quick Overview

- Palm® OS and Windows PocketPC®
- Palm® OS devices
 - bigger price range span
 - work equally as well with PCs and Macs
 - longer battery life
 - more applications available

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Brands of Palm® OS devices

Palm 

Sony 

Garmin 

Alphasmart 

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Three little things...

- Expandability 
- Color vs. monochrome 
- Keyboard/thumb-board 


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POWER in the palm of your hand

Palm Skills Activities
Organizational Activities
Web Activities
Educational Activities
Reference Activities

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Palm Skills Activities



PALM SKILLS ACTIVITIES

- Paper Graffiti
- Scavenger Hunt
- Spelling Words Baton Race
- Making Emoticons

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Paper Graffiti

- Paper to Palm®
- Keyboarding and WP skills

Graffiti Practice Sheet
<http://kathyschrock.net/power/graffiti.pdf>
Graffiti Font (Mac/PC)
<http://palm.bemho.com/>

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Graffiti™ Practice Sheet

Name: _____

A A	B B	C C	D d	E e
F f	G G	H h	I i	J j
K k	L L	M m	N N	O o

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Scavenger Hunt

- Use Memo Pad to create a story
 - use a word that repeats as an entire word and also as a word fragment (i.e. and, sand, band)
- Beam the story to each other
- Use FIND to locate the word
- Brainstorm other roots and FIND

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Scavenger Hunt

- Use Memo Pad to create a story
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- Use FIND to locate the word
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Scavenger Hunt sample



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Spelling Words Baton Race

- Put words in Memo Pad
- Have them erase this list
- Divide the class into teams
- Student 1 opens & names memo
- Have student 1 write one word and beam it to student 2 who writes word 2 and beams it to student 3...
- Beam final list to teacher

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Making Emoticons :-)

- Brainstorm a list of emoticons
- Divide the class into three groups
 - Memo Pad and Graffiti
 - Memo Pad and on screen keyboard
 - Sketchy
- Beam to each other for identification
- Greeting cards summary

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Making Emoticons samples



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Organizational Activities

ORGANIZATIONAL ACTIVITIES

- Homework Memos
- Homework Categories
- Big Events with Big Clock
- Emergency!
- You've Got Homework!


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Homework Memos

- Open a new memo in Memo Pad
- Use the Date Due-Class as opening - i.e. 11/04/03 History
- Enter assignment data and DONE
- Enter all assignments
- Sort alphabetically

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Homework Memos




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Homework Categories

- Open Memo Pad and hit arrow
- Choose EDIT CATEGORIES
- Choose the NEW button
- Create organizational categories
- Open each memo and file it
- While category is open, tap the MENU and BEAM MEMO

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Homework Categories



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Big Events with Big Clock™

- Have students find a place and the time difference from their home
- Choose WORLD button
- Use MENU to go to SETTINGS-WORLD TIMES
- Enter city and number of hours
- Call on students randomly

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Big Clock samples

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Emergency

- Students gather emergency info
 - Poison Control Center
 - Parent's work number
 - Medical numbers
 - Neighbors
- Open the Address Book
- Add category: Emergency
- Add contacts and file in category

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Emergency

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You've Got Homework!

- Due Yesterday™
- Assignments and grades
 - Set up a class
 - Enter homework
 - Beam homework
 - Export to Date Book and To Do List

Class	Assignment	Due	Completed
His tory	Write response paper	9/5	<input checked="" type="checkbox"/>
	Choose term paper topic	9/27	<input type="checkbox"/>
	Writeup for our 2nd	10/3	<input type="checkbox"/>
Biology	Quiz on cell structures	9/28	<input type="checkbox"/>
	Write up lab report	10/1	<input type="checkbox"/>
	Take-home exam on	10/15	<input type="checkbox"/>
Algebra	Quiz on Chapter 1	9/13	<input checked="" type="checkbox"/>

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Web Activities


WEB ACTIVITIES

- HTML and You
- Web Access
 - Blazer
 - Email
 - ICQ/AIM
 - FlingIt!

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HTML and You

- Memo Pad or Freewrite™
- Create an HTML template
- Create different templates and beam



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Web Access


- Palm OS 5
- Wireless and Internet capabilities



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Web Access

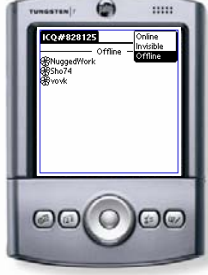
- E-mail
- Must have an account first
- Collaborative project



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Web Access


- ICQ
- Must have an account first
- Collaborative project



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Web Access

- FlingIt!™
- Desktop and handheld app
- Captures site and move them to the handheld



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Educational Activities

Kathy Schrock: Power in the Palm of Your Hand

EDUCATIONAL ACTIVITIES

- Journaling
- Book Logs
- Moonstruck
- Learning by Heart
- Patriots
- Mapping
- Beam My Book!
- Cells for You
- Read Aloud
- Roman Numerals
- Match Who?
- Animation Math
- It's in the Stars
- Flash™ Stories
- KWL
- Quizzler
- Tessellation
- CityZen

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Journaling


- Many different types of journaling
- Use journaling graphic organizers
- Use FreeWrite™ and beaming

Double-Entry Journal	
Quotation → phrase or sentence I especially like	My thoughts about the quotation.

http://www.sdcoe.k12.ca.us/score/actbank/1dentry.htm ©2003. Kathy Schrock. All rights reserved.

Book Logs

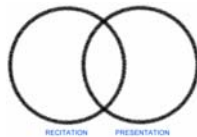
- Databases of favorite books
- Books are rated and shared
- BooksLog™
 - Title
 - Author
 - Genre
 - Rate
 - Notes
- Logs are beamed to one another
- Booktalks and "selective beaming"



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Learning by Heart

- Recitation vs. presentation
- ByHeart™ reads Memo Pad memos
- Quiz mode tests students
- Use a Venn diagram to brainstorm presentation vs. recitation



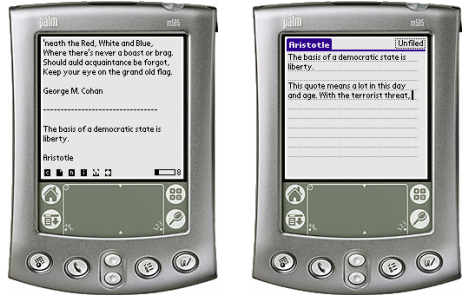
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Patriots

- Read patriotic quotations via the Palm Reader application and PalmPatriot e-book
- Reflect on quotations using the FreeWrite™ application
- Beam thoughts to others

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Patriots samples



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Cells samples

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Roman Numerals

- Use Memo Pad to write Roman numerals
- Beam to each other
- Write corresponding number
- Use Converter™ to convert numbers to Roman numerals and back again

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Roman Numerals samples

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Match Who?

- MatchWho™ creates portraits
- Various features are selectable
- Activity
 - Create a portrait, name, and save
 - Share with partner
 - Write a descriptive paragraph
 - Share another for a longer time
 - Brainstorm methods used

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Match Who samples

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Funny Faces samples

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Animation Math

- Sketchy™
 - Drawing tool
 - Animation properties
- Animated Math Problem
 - Create cells of the problem
 - Animate the problem
 - Play the animation

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Animation Math

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Hey, what's your sign?

- Determine astrological sign
- Include the common symbol
- Use SkyChart™ to locate "their" constellation (find at night?)
- Have "like sign" students research their sign's myth
- Math spreadsheet and graph

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MoonPhase

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Flash™ Stories

- Make animated stories using Macromedia Flash™ on the computer
- Using Kinoma Producer, convert the Flash movies to PDB files
- Using Kinoma Player, students can beam and share their movies
- Students write short stories to go along with all the movies.
- Create instructional movies.

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Kinoma sample Flash movie

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Kathy Schrock: Power in the Palm of Your Hand

KWL

- **K** - Stands for helping students recall what they **KNOW** about the subject.
- **W** - Stands for helping students determine what they **WANT** to learn.
- **L** - Stands for helping students identify what they **LEARN** as they read.

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KWL sample (iKWL)

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Quizzler

- Formative assessment
- Multiple choice

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Tesselation

- Pattern creation
- Regular and irregular polygons

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CityZen

- World map
- Includes a database of country, city, lake and ocean names
- Zoom in and out
- Measure distances
- Test your knowledge


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CityZen sample screens

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Reference Activities



REFERENCE ACTIVITIES

- Business Card Exchange
- Handheld Dictionary
- Ready to Convert?
- Periodic Table of the Elements

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Business Card Exchange

- Open Address Book and choose NEW
- Enter personal information
- Enter birthdate
 - Menu, Options, Rename Custom Fields
 - Add birthdate to field (mm/dd/yy)
- Beam business card
 - Menu, Select Business Card
 - Menu, Beam Business Card

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Business Card Exchange

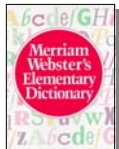


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Handheld Dictionary

- NoahLite™ handheld dictionary
- Keep it close at hand
- Lesson plan about Noah Webster
 - http://www.education-world.com/a_lesson/lesson027.shtml

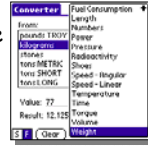


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Ready to Convert?

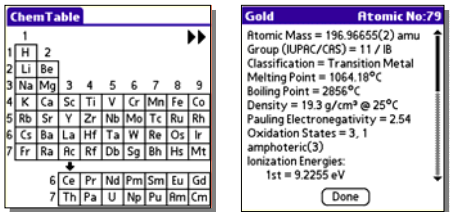
- Converter™
 - conversions in area, density, length, temperature, volume and weight
- Converting Shoe Size
 - Shoeboxes in shoe store
 - Conversions and travel



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Periodic Table

- ChemTable™
 - information about each element



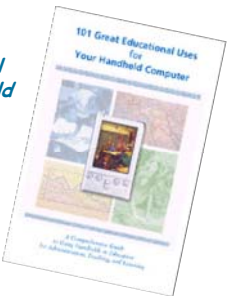
The screenshot shows the ChemTable interface. On the left is a periodic table with a cursor over Gold (Au). On the right, a detailed information panel for Gold is displayed:

ChemTable	Gold	Atomic No.: 79
Atomic Mass = 196.96655(2) amu		
Group (IUPAC/CRS) = 11 / IB		
Classification = Transition Metal		
Melting Point = 1064.18°C		
Boiling Point = 2856°C		
Density = 19.3 g/cm³ @ 25°C		
Pauling Electronegativity = 2.54		
Oxidation States = 3, 1, amphoteric(3)		
Ionization Energies:		
1st = 9.2255 eV		

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Presentation includes information from:

Fasimpaur, Karen.
101 great educational uses for your handheld computer. K12 Handhelds, 2003.



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101 Great Educational Uses

- Administrative
 - Keep your schedule
 - Track student progress on specific skills
 - Conduct authentic assessment
 - Use a calculator (even a graphing calculator!)
 - Instantly access student information, such as schedules, demographics, or parent contacts
 - Organize your reading lists
 - Take notes at a meeting or in a class
 - Record and tabulate grades
 - Track computer hardware and software inventory
 - Access a database of curriculum standards
 - Evaluate teacher performance and record observation notes

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101 Great Educational Uses

- Communication and collaboration
 - Send an email message
 - Collaborate on a graphic organizer
 - Make a presentation
 - Distribute school activity information to students
 - Exchange information with a colleague
 - Share a downloaded Web page with someone
 - Send assignment information home to parents
 - Have students turn in an assignment electronically
 - Get parents' sign-offs
 - Transfer a file from your PC for instant access
 - Write an e-book and share it with others
 - Send and receive instant messages
 - Conduct group writing activities
 - Record voice notes
 - Access online educational events and news

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101 Great Educational Uses

- Teaching and learning
 - Take and store digital photos for a project
 - Make a spreadsheet
 - Draw a picture
 - Make a concept map summarizing a chapter
 - Form, visualize, and solve equations
 - Keep track of your class schedules, assignments, and grades
 - Record observations on a field trip
 - Read an e-book
 - Study and compose music
 - Graph data
 - View and use maps

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101 Great Educational Uses

- Teaching and learning
 - Increase content accessibility for those with disabilities
 - Program your own handheld application
 - Look up a word in a dictionary
 - Use flashcards
 - Use a tutorial for self-study
 - Take notes and write a research paper
 - Take notes in class
 - Practice handwriting
 - Study a foreign language
 - Listen to historic speeches
 - Take part in a collaborative simulation
 - Conduct research on the Web

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101 Great Educational Uses

- Teaching and learning
 - Make a timeline
 - Look up a word in a thesaurus
 - Create an outline
 - Study for a test
 - Keep a journal
 - Access writing prompts and editing checklists
 - Learn about concepts in measurement
 - Practice multiplication tables
 - Access the periodic table
 - Manage a collaborative project
 - Make a photo album
 - Read about the latest current events
 - Build vocabulary through word games
 - Have classes create their own mobile information channels
 - Read historical primary source documents


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TechDis PDA Project


<http://www.techdis.ac.uk/PDA/>

This project examines the accessibility and usability of Personal Digital Assistants within an educational setting.

- usability of a PDA as Assistive Technology
- accessibility of the PDA to those with a functional disability



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"This handheld computer is very useful for teaching. It displays my lesson plan, calendar, key files, and an extensive menu of put-downs for hecklers and classroom clowns."

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THE END

Online support page
<http://kathyschrock.net/power/>
(Presentation last updated: 11/5/03)