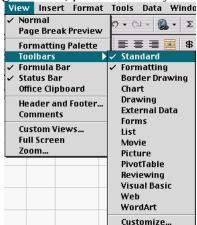
# **Creating a Poster Using MS Excel**

1. Start MS Excel program.



2. In the "View" Menu scroll to "Toolbars," and then make sure there are check marks in front of "Standard" and "Formatting." If not, please do so by

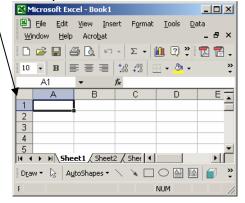


click on it.

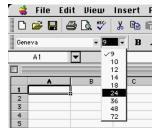
3. Your toolbars may have opened in a clumsy place on your screen. If so, place the cursor on the shaded bar at the top of the toolbar and hold down the mouse button to drag it. Drag the toolbar upward until you hear a click. The new toolbar is now grouped with the rest of the toolbars at the top of the screen.



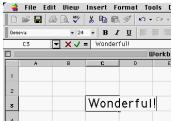
4. Click in the rectangle in the upper, left-hand corner (left of cell "A" and above cell "1") of the spreadsheet to select the entire spreadsheet.



5. Hold down the mouse button on the triangle next to the font size and select **24**.



- 6. Click once on cell **C3** to select it.
- 7. Type "Wonderful!" and press the **Enter** key.

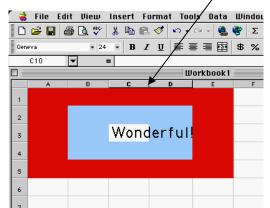


- 8. Hold down the mouse button on cell **A1** and drag the cursor to cell **E1** to select all those cells and then let go the mouse button (do not click any where else).
- 9. Hold down mouse button on the triangle next to the paint bucket icon and drag the cursor to the red color box and let go the mouse button.



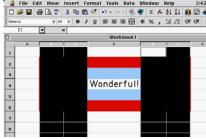
- 10. Hold down the mouse button on cell **A5** and drag to **E5** to select all those cells. Let go.
- 11. Click on the paint bucket icon. *Red is* still selected!

- 12. Select cells **A2** to **A4**. Click on paint bucket icon. *Red is still selected!*
- 13. Select **E2** to **E4**. Click the pain bucket icon. *Red is still selected!*
- 14. Select **B2** to **D2**. Click on the triangle next to the paint bucket and drag down to select blue. Let go.
- 15. Select **B4** to **D4**. Click the paint bucket icon. *Blue is still selected!*
- 16. Select **B3**. Select the pain bucket icon. *Blue is still selected!*
- 17. Select **D3**. Click the paint bucket icon. *Blue is still selected!*
- 18. In the column heading, place your cursor directly on the line that separates column **C** and column **D**. (Note: your cursor turns into a two-way arrow.)

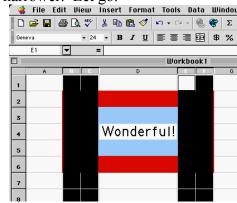


- 19. Hold down the mouse button and drag the two-way arrow to the right to expand the width of the column C so that the words "Wonderful!" fit in the column. Let go.
- 20. Click anywhere on the spreadsheet to clear the highlight and view your poster.
- 21. In the row heading marked with numbers, click on the number "1" to select that row.

- 22. Click "Insert" and then "rows" to insert a row above row 1.
- 23. In the column heading, click on "A" to select that column.
- 24. Click "Insert" and then "columns" to insert a column to the left of column "A."
- 25. Select columns **B** and **C** by dragging across them. Let go. Then, hold down the "## (apple)" key (PC you press "Ctrl" key) as you drag cross columns **E** and **F**. Let go. All four columns should be highlighted.



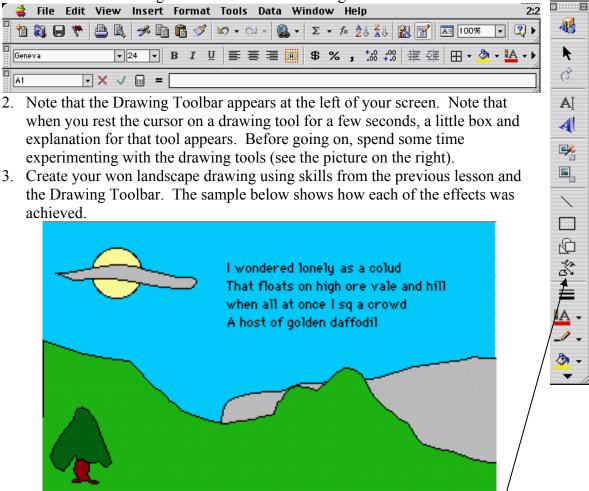
26. In the column heading, put the cursor over the line to the right of any selected column. Drag the two-way arrow to the left to make all selected columns narrower. Let go.



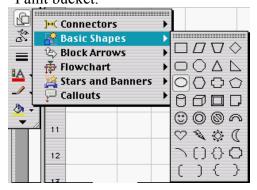
27. Click anywhere on the sheet to remove the highlights from the columns and view your poster.

# **Drawing Using any MS Office Programs**

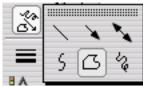
1. Click on the Drawing button to select the drawing tools.



- 4. Create blue background by selecting cells **A1** to **E15**. Select a "Fill Color" from the "Paint Bucket."
- 5. Create the sun by selecting the oval tool (which is in the **AutoShapes**) and dragging. Select a **Fill Color** from the "Paint bucket."



6. Create trees and cloud by selecting the Lines – Freeform tool. Hold down button to draw irregular lines. Click to start and stop straight lines. Doubleclick to end drawing. Select a color from "Paint Bucket."

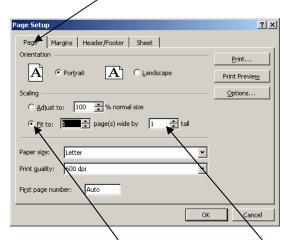


7. Add a text box by selecting the Text Box tool. Type your text in the box. Select "No Fill" in the Paint Bucket tool if you want the colors of the picture to show through the text box. DO MORE STUFF!

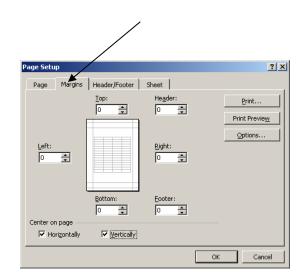
## **Printing MS Excel**

The following "Page Setup" guidelines will adjust the Spreadsheet (Excel) to print everything in a single page. It will also make automatic horizontal and vertical center adjustments.

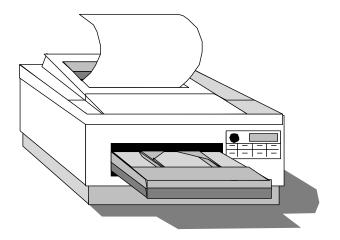
- 1. Click the "File" and then click "Page Setup."
- 2. You will see a new "Page Setup" window like the one below. If you get a new window but not exactly same window as the one below, click on the "Page" tab within the "Page Setup" window.



- 3. Click on the circle that is in front of the "Fit to" so that it will look like the picture above. Also, make sure that the number of page is "1."
- 4. Click on the "Margins" Tab within the "Page Setup" window. You will see a window like the one below. Change all the numbers to "0" like the picture below.



- 5. Now click on the both of the square boxes at the bottom and in front of words "horizontally" and "vertically." It will create a check mark in the square box.
- 6. Click OK.
- 7. Now you are ready to print.



# **Creating Grid Papers**

INTRODUCTION: Spreadsheets can provide powerful support for mathematics instruction. Many materials and teaching strategies are most directly and efficiently developed using spreadsheet formats rather than a word process.

Spreadsheet formats are rarely used by teachers because spreadsheets were originally designed with business accounting in mind and all instructional manual available today emphasize those types of tasks. Most teachers have never really had the opportunity to develop spreadsheet skills that are relevant to instructional needs.

Consequently, it is not unusual to find teachers struggling with a word processor trying to develop supportive materials that just don't fit a word processor. Word processors are very good at word-wrapping and paragraph formatting, but if you want a quick, practical quality way of developing materials that support mathematics instruction (e.g., measurement, problem solving and geometry) the spreadsheet will do much better job.

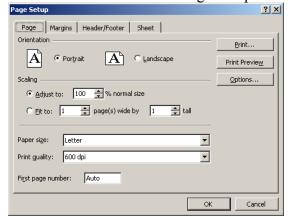
The examples given here will illustrate how spreadsheets can be used with mathematics instruction in three ways:

- 1. as a practical means for developing highquality grid papers of all types.
  - a. multi-purpose inch-grids for primary children
  - b. multi-purpose centimeter-grids for intermediate and secondary children
  - c. a wide variety of special-purpose grids for specific math topics
- 2. as a practical means for creating graphics of concrete manipulative for instructional activities, for example:

- a. connecting cubes and inch blocks for primary grades
- b. base ten blocks for primary and intermediate grades
- c. centimeter rods (Cuisenaire rods) for intermediate and secondary grads.
- 3. for creating special problem-solving formats in which children make an organized list, draw a picture, estimate an answer from a draw a picture, estimate an answer from a drawing, manipulate shapes by moving them around into different configurations, and other strategies for solving a problem.

SET-UP INSTRUCTIONS: Before you begin to construct any of the samples, make the changes on the **Page Setup** so that your spreadsheet will print out correctly.

In the "File" Menu select "Page Setup..."



In the Page Setup Window, make the following choices:

#### In the Page folder

Orientation select: Portrait Scaling select: Fit to 1 page

#### In the Margin folder

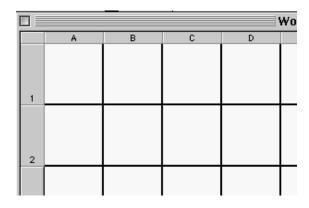
Top	select	.6
Bottom	select	.5
Left	select	.4
Right	select	.4
Header	select	.6
Footer	select	.6

#### In the Sheet folder

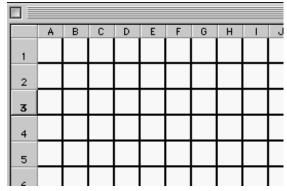
Make sure Gridlines is not selected. That way you will see the gridlines as you work on the spreadsheet, but they will not print out.

#### I. Creating Grid Papers

- 1. <u>Inch-grid</u> for primary children.
- a) Click on the small, gray rectangle in the upper, left-hand corner (left of column "A" and above row "1"). That will select the entire worksheet.
- b) In the "Format" menu, select "Column-Width", type "9.86" and then click "OK." All columns are now 1-inch wide.
- c) In the Format menu, select "Row-Height," type "66" and click "OK." All rows are now 1-inch high.
- d) Click on cell A1 to select it. Use the Border Tool to select a border for the cell.
- e) Copy cell A1. Paste it on B1 to G1
- f) Copy cells A1 to G1. Past it on cells A2 to **A9**.



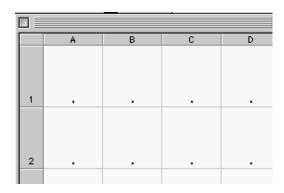
- 2. Centimeter-grids for intermediate and secondary children. Follow the same procedure as described for inch-grids with the following changes:
- Make the column width **3.29**
- Make the row height 25
- After adding border to A1, paste it on cells B1 to S1
- Copy cells A1 to S1. Paste them to cells A2 to A25.



- 3. Inch-Dot-Grids (Geoboard grid) for primary and intermediate grades. Use the inch-grid spreadsheet and make the following changes:
- a) Click on the gray rectangle in the upper, left-hand corner. That will select the entire worksheet.
- b) Drag on the "Border" tool to select no borders. All borders are now gone.
- c) Use the Font buttons to drag and select "Palatino" and "14" point font.
- d) Click on cell A1 to select it. Type a period (".").



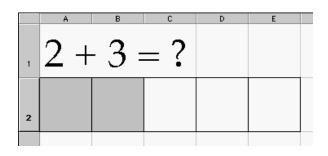
- e) Click on the center justify icon
- f) Copy cell A1 to the same cells as you did when making inch-grids. (see above



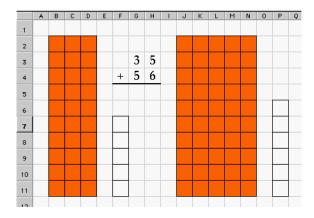
- 4. <u>Centimeter Dot Grids</u> for intermediate and secondary grades. Use the centimeter-grid spreadsheet and make the following changes:
- Click on the gray rectangle in the upper, left-hand corner. *That will select the entire worksheet.*
- Drag on the "Border" tool to select no border. *All borders are now gone.*
- Use the Font buttons to drag and select "Palatino" and "10" point font.
- Click on cell **A1** to select it. Type a period (".").
- Copy cell **A1** to the same cells as you did when making centimeter-grids. (see above)

### II. Creating Graphics of Concrete Manipulative

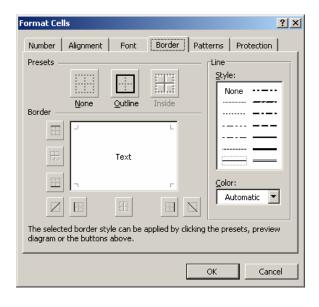
- 1. <u>Primary Sample</u>: Addition with inch cubes or connecting cubes (Unifix Cubes). Use the inch grid spreadsheet and make the following changes:
- a) Remove all borders just as you did when you made dot-grids.
- b) Format the entire sheet for **Palatino** 48 point font.
- c) Type a number sentence "2+3=?"
- d) Use the Border and Pain Bucket tools to make a complementary graphic in the cells below the number sentence



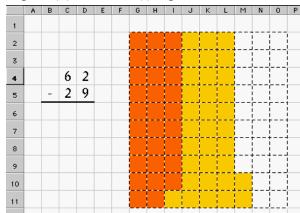
- 2. Intermediate/Secondary Sample #1:
  Addition with centimeter rods
  (Cuisenaire rods) or base ten blocks.
  Use the centimeter grid spreadsheet
  and make the following changes:
- a) Remove all borders just as you did when you made dot-grids.
- b) Format the entire sheet for **Palatino 18** point font.
- c) Type an addition problem as shown below. (NOTE: I have placed one numeral in each cell – helps kids keep things lined up and make the typing simple. ALSO: When you type the "+" sign, you must precede it with a single quote symbol ('). That way, the computer knows you do not intend to write an equation and will not treat the plus sign as the start of an equation. The same is true for other operational symbols like subtract (-), multiply (\*), divide (/), less than (<), greater than (>), and equals (=). When you precede these with a single quote symbol ('). the quote symbol will not show on the spreadsheet!
- d) Use the Border, Paint Bucket, Copy and Paste tools to make complementary graphics in the cells near the problem. Children can cut out the graphics and paste them together as they work the problem, or draw the answer elsewhere on the page.



- 3. Intermediate/Secondary Sample #2:
  Subtraction with centimeter rods or base
  10 blocks. Use the centimeter grid
  spreadsheet, clear it of borders and change
  the font setting to **Palatino 18** point just as
  you did for Sample #1 above. Or, you can
  start with Sample #1, clear it of borders,
  patterns and texts, and make the following
  changes:
- a) Select a 10-by-10 cell area to one side for children to draw answers. Drag over the area to select it. Note: The Border tool does not permit you to select a dotted line, but the "Format" menu does.



- b) In the Format menu select Cells. Then select the Border folder and make the following choices:
- 1. dotted line button under Style
- 2. drag to the color blue in the color menu
- 3. do this last: under Border click on the Left, Right, Top and Bottom buttons.
- c) If you choose to shade in the first number of the problem on the grid, use the "Paint Can" to select a light color or light-gray so kids can easily draw over it. I chose very light blue. Since this handout is printed black and white, it comes out a light shade or gray.
- d) After setting up one problem, use
  Copy and Paste to place it in all the
  other problem positions to save time.
  Then edit each problem to make it
  different. (I did not do the last step in
  my sample.) Don't forget to enter the
  single quote symbol (') before typing a
  plus (+) or minus (-) sign.



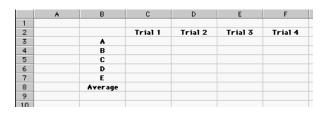
# Formatting in MS Excel

Another useful way of utilizing MS Excel is to use the Spreadsheet tools to enhance the worksheets as well as classroom management.

#### I. Sample Science Worksheet

1. Type in the labels for your chart. And then, use the formatting buttons to **Bold** 

and Center text.

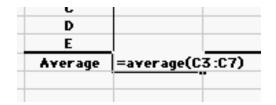


2. Hold down the mouse button on the triangle next to the **Borders** tool to select borders for your chart.



	Trial 1	Trial 2	Trial 3	Trial 4	1
Α					
В					
C					
D					
E					
Average					

3. Click the cell **C8**. Type an equation to average numbers in that column by typing "=average(C3:C7)." *Note: You must type in the column letters and row numbers correct for your chart, but the rest of the equation shown in the sample will be the same*. Click "Enter." Some garbage appears in the cell. That's OK.



4. Type in the numbers 1 to 5 in the cells directly under "Trial 1." The correct average, 3, should appear on cell **C8**.

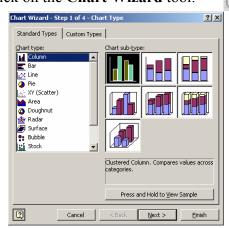
	Trial 1	
Α	1	
В	2	
С	3	
D	4	
E	5	
Average	3	

- 5. You will now fill the same the equation to the bottom of all the other columns by clicking the cell **C8** through **G8** and then click "Edit" menu, "Fill" and then select "Right." When you do this, the MS Excel will automatically change the formula to appropriate cell names (i.e., =average(C3:C7) will change to =average(D3:D7) in column **D8**).
- 6. At first, some more garbage may appear at the bottom of the columns. Ignore it. Now type more numbers into the empty cells to test your equations.

	_	_			
	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
A	1	6	11	16	21
В	2	7	12	17	22
C	3	8	13	18	23
D	4	9	14	19	24
E	5	10	15	20	25
Average	3	8	13	18	23
E Average	5	10 8	15	20	25

7. Now you will make a chart which shows the title and numbers that appear in the "Average" row of your chart. Select cell **C8** to **G8** by dragging the cursor across them.

8. Click on the **Chart Wizard** tool.



- 9. Follow the "Chart Wizard" directions and make any changes you wish. Click "Next"
- 10. When you done, click "Finish." The chart appears.

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
A	1	6	11	16	21
В	2	7	12	17	22
C	3	8	13	18	23
D	4	9	14	19	24
E	5	10	15	20	25
Average	3	8	13	18	23
25 20 15 10 5 0	2	3	4	5	□ Average

11. Change the values of any numbers and watch the averages cells and chart change as you change the values. You can double-click on the chart to select it, and then double-click on any part of the chart to see an editing window for that part. Take some time to explore the editing windows

	Trial 1	Trial 2	Trial 3	Trial 4	Trial 5
Α	26	6	11	16	21
В	27	7	12	17	22
C	28	8	13	18	23
D	29	9	14	19	24
E	30	10	15	20	25
Average	28	8	13	18	23
30 25	1	Ave	rage		-
	2	Ave	rage	, 5	□ Average

12. Try making your own form for science lessons. How could you format a spreadsheet that helps children learn how to control variables? Observe? Classify things? Form good hypotheses? Make charts of their observations? Compare similarities and differences? Operationalize definitions? Plan ways to

- test a guess? Plan a project for a science fair?
- 13. Can you think of similar strategies for social studies lessons? Classroom management such as grade book?

#### **II. Most Commonly Used MS Excel** Functions by Teachers.

The following information has to be typed in the formula bar (or in the cell). If you don't see the formula bar, click "View" and then "Formula Bar."

- 1. =average(C3:C9) This will return the average (arithmetic mean) in a range of cells C3 to C9.
- 2. =sum(C3:C9) Add all numbers in a range of cells C3 to C9.
- 3. Getting the letter grade (using "Lookup" Table" command) is little more complicated. Follow the steps below.
- a) We can ask Excel to look at the numerical average in one column (I am using the column "M" as an example) and compare it to a list which defines the grading scale, for the purpose of assigning a letter grade to the average (on column "N").
- b) First you need to create a table some where within the work area (I am using cells A1 to B5).

0 |E|

70 D 76 C

86 B

- c) The information to the left. defining the grade scale must be entered in ascending order from top to bottom. The number 5 entered to the left of a letter must be the lowest number grade that would equal that letter grade.
- d) Highlight the entire range from A1 to B5.
- e) Go to the **Insert** menu, select **Name** and choose **Define**.
- f) Give a name to this lookup table; I called mine "grades."

- g) Next write an equation which will look at a student's numerical average, look at functioned named **VLOOKUP**. The equation must specify three elements:
- i. The location of the numerical grade to be compared (M7 in the example).
- ii. The name of the lookup table (mine was named "grades").
- iii. The location of the letter grade in the lookup table (2)



1											<b></b>	Vork	cbook	2 📰
	Α	В	С	D	Е	F	G	Н	1	J	К	L	М	N
1	0	F												
2	70	D												
3	76	С												
4	86	В												
5	93	Α												
6			Name	T1	T2	T3	P1	P2	H1	H2	НЗ	H4	Avg	Grade
7			Ann	89	78	100	88	92	100	95	78	88	90	В
8			Bill	68	87	72	60	80	65	100	50	42	72	D
9			Carol	98	87	100	78	99	80	100	88	95	91	В
10			Doug	78	68	92	88	76	95	99	88	72	82	С
11			Elaine	89	78	100	88	92	100	95	78	88	90	В
12			Frank	79	69	97	95	82	99	93	75	78	85	С
13			Gloria	98	87	100	78	99	80	100	88	95	91	В
14			Howard	78	68	92	88	76	95	99	88	72	82	С
15			Imogene	89	78	100	88	92	100	95	78	88	90	В
16			John	62	78	76	72	60	70	60	78	88	69	F
17			Kesha	79	69	97	95	83	99	93	75	78	86	C .
18														_
19			T 1-3 =	tests 1	-3		_	Tests	= 409	8				
20			P 1-2 = pr	rojects	1-2		Pr	o ject:	= 50	98				
21			H 1-4 = ho						k = 1					
22														

4. If you want to see all possible function in MS Excel, click on the little triangle next to the ∑ icon on the menu bar and then select "More Functions..." This will show all the functions you will ever need using MS Excel.

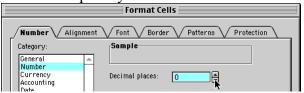
#### III. Formatting Data (decimal places)

Averages can be displayed to whatever precision you wish to use. I used one decimal place, although you may wish to use zero decimal places. Zero decimal places would keep the grades in a format like they are reported to students. An advantage of using zero decimal places would be to avoid confusion regarding rounding grades. To

a list of grades, and assign a letter grade to the student. This is done with a illustrate this consider the following grade: A grade of 75.49 would round to 75 with zero decimal places. However, at one decimal place that grade rounds to 75.5 and students would have the expectation that the grade would round to 76. Using zero decimal places will allow Excel to round without confusion to some students.

#### How to Format

- 1. Highlight the column to be formatted by clicking on the letter at the top of the column.
- 2. From the **Format** menu choose **Cells**
- 3. From the **Format Cells** window choose **Number** and then select the number of decimal place you want to use.



#### **Spreadsheet Project**

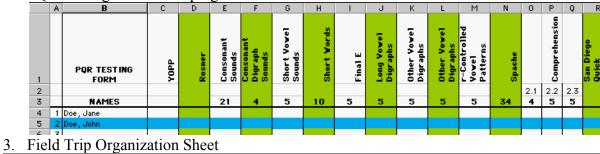
- 1. Create two totally different worksheets or handouts of your choice. Please do not make all simple ones. See the samples. At least one worksheet should include graph(s).
- 2. Create one grade book or classroom management form. You need to use the formulas to do the auto-calculations including the letter grades. Please input at least ten student names and at least five data such as test scores or homework assignments.
- 3. Save the files in your folder in the sharedrive and in your personal disk for the back-up.
- 4. Print all three files. Write your name on all three handouts and turn them in to the instructor.

# **Sample Classroom Management Forms**

1. Weekly Lesson Plan Forms

	Α	В	C D	E F	G <b>H</b>	l J
1		JANE DOE 2ND GRADE		Date:		
2		8:00-8:45 MATH	8:45-9:00	9:00-10:00 READING	10:15-10:45	10:45-
3		8:45-9:00 Opening Exercises	Sponge Activity	10:00-10:15 RECESS	LANGUAGE	SOCIAL S
5		ON MONDAY ONLY all students	While teacher	O 10.00 Harraktan Missin	Head heads Coattion	Charm about
				9-10:00 Houghton Mifflin	Hand back Spelling	Story abou
6		arrive at 8:00.	does paperwork,	Literary Reader	Test from Friday	American
7		8-8:45 Math Tiles	children write			
8	0		language sponge			
9	N		activity sendtence.			
10		8:45-9:00 Flag Presentation				
11		Green Attendance folder is taken				
12	Y	to office. Lunch count in brown				
13		envelope is taken to cafeteria				
14		Update calendar		10-10:15 Recess		
15		Sponge Activity on White board		Duty:()yes()no		
17		8-8:45 Math	While teacher	9-10:00 Houghton Mifflin	Hand back Spelling	Story abou
18		Sponge Activity	does paperwork,	Literary Reader	Test from Friday	American
19	т	Sponge Activity	children write	Litter ar g Keader	rest from Friday	Ailler Icali I
20	Ü		language sponge			
21	E		activity sendtence.			
22	S		doctring bendenoe.			
23		8:45-9:00 Flag Presentation				
24		Green attendance folder is taken				
25		to office. Lunch count in brown				
26	•	envelope is taken to cafeteria		10-10:15 Recess		
27		Sponge Activity on White board		Duty: ( ) yes ( ) no		
20						
29		l8-8:45 Math		I I9-10:00 Houghton Mifflin I	Hand back Snelling	l IStoru abou

2. PQR Testing Record Keeping Form



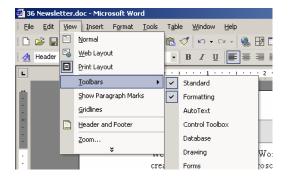
	Α	B B		D	E	F	G	Н	Τ	J	К	L	М	N	0
1		Field Trip Organization		Trip:											
2		Jane Doe - Grade 2			Date of Trip:										
3					Time:										
4					Arrangements:										
5					Contact:										
6					Address:										
7					Phone No:										
0						П									$\overline{}$
9	L	NAMES	Permission NAMES Form Returned		Mondy Received		Parent Helper	$\prod$		Р	hone	e nu	mbe	r	
10	1	Doe, Jane						Ш							Ш
11	2	Doe, John						П							
12	3														
13	4							П							
1.4	E														$\Box$

# **Creating Newsletter and Resume Using MS Word**

We will be using Microsoft Word to create the Newsletters. Microsoft Word is the word processing component of the Microsoft Office suite. In many ways, Word is the electronic typewriter of the computer, but it has many features than a typewriter.

#### **Starting the Microsoft Word**

- 1. Start the Microsoft Word.
- 2. Make sure you have the Standard and Formatting tool menus on the window. In order to check this, click "View" and then "Toolbars." You should have a "check" in front of "Standard" and "Formatting." (See below)



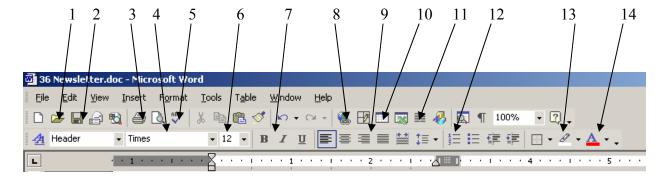
#### **About different Tools**

When you move the cursor on top of the buttons (icons), it will show the name of the button. See example on the right.



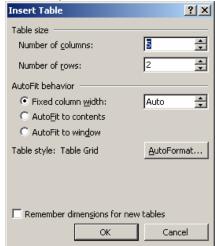
Here are some of the most commonly used buttons while creating a document.

- 1. Open a Word document.
- 2. Save the current document.
- 3. Print the current document
- 4. Change the font style
- 5. Check Spelling and Grammar
- 6. Change font size
- 7. Change font style (bold, italic, and underline)
- 8. Insert Hyperlink
- 9. Justify the paragraph
- 10. Insert Tables
- 11. Create documents in columns (e.g., this page has two columns)
- 12. Auto bullet and number
- 13. Highlight the text
- 14. Change the text color



#### **Inserting Table**

1. Click on "Table" and then "Insert." Select "Table." You will a new window (see below).



2. Change the number of columns and rows you want and then click "OK."

# **Inserting Clip Arts and Pictures from** your file

- 1. Click "Insert" and then "Picture." Select "Clip Art."
- 2. Select the clip art of your choice and then click "OK."
- 3. If you want to insert your own picture or clip art, click select "From File..." instead of "Clip Art."
- 4. Navigate the folder system to find the clip art or picture of your choice. And then click "OK."

#### Cropping your clip arts or pictures

1. Click on the picture you will see a floating toolbar looks similar to the one below.

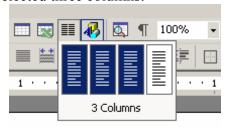


2. If you don't see it, click on "View" and then "Toolbars." Select "Picture."

- 3. Click on the icon
- 4. Click on one of the small square dots around the picture (pick the side you want to crop).
- 5. Click and drag toward inside of the picture and when you reach the area you want to crop, let go the mouse.

#### **Creating columns**

- 1. Highlight the text and pictures you want to create columns.
- 2. Click on the "Column" button (see #11 on previous page).
- 3. Select the number of the columns you want. The example below, I have selected three columns.

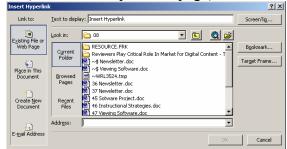


4. Your text will be reformatting with columns.

#### **Inserting Hyperlink**

1. Type in the text that you want displayed as the hyperlink by clicking in the text (highlight the text you want to hyperlink).

2. Click on the "Insert Hyperlink" button (see #8 on the previous page).

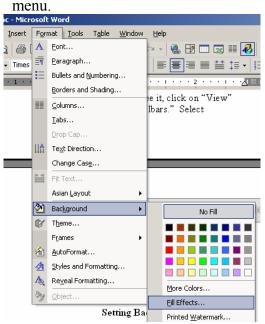


- 3. Type in the URL next to "Address."
- 4. After clicking "OK," the text appears on the page underlined in blue. To test the link, you must be connected to the Internet. Hold down the "Ctrl" key on the keyboard and click the hyperlink.

#### **Setting Background Effects**

When you use the "fancy" backgrounds, you won't be able to print the file with the backgrounds. However, the backgrounds can be viewed on the web pages. So please Click "View" and select the view choice you desire (e.g., for normal typing use "Normal," for print view use "Print Layout," and for web view use "Web Layout").

1. To set back ground effects on the page, select Background from the Format



2. From the Background options, select Fill Effects, then select the Texture tab.

Select one of the textures (a light background is preferred for printing purposes by clicking on it and then click "OK."



#### **Newsletter Project**

- Create a Newsletter for your class and a resume for your future employment.
   (Visit the web site to see the samples. <a href="http://www.csus.edu/indiv/l/limb/courses/edte330ar.htm">http://www.csus.edu/indiv/l/limb/courses/edte330ar.htm</a>).
- 2. Use all the tools on previous two pages (i.e., tables, clip arts, columns, hyperlinks, and background effects) on your newsletter.
- 3. You don't have to use all the tools on your resume.
- 4. Save the newsletter file and the resume file in your folder in the sharedrive.

  Also, save a back-up copy in your floppy disk.
- 5. Turn in the hard copies to the instructor
- 6. You will eventually post this resume and the newsletter on your web site.

# **Instructional Strategies for Educational Digital Media**

Introduction: Instructional strategies used for educational software are the same as those used by teachers everywhere. Depending on the content, an instructional strategy may work particularly well with a computer – taking advantage of the computers peculiar strengths. In other instances a teaching strategy might actually work better WITHOUT a computer. Following are some examples of the major teaching strategies used by teachers and computers.

#### Searches



Children use "search engines" in references to find answers. The most engaging use of references begins with a problem to

solve rather than a "topic" to look up – see Problem Solving. Examples: Grolier's Interactive Encyclopedia, How Things Work, Musical Instruments, Atlas 3-D, Animals! 2.0, Dinosaurs, Encarta 96, Mammals: A Multimedia Encyclopedia, and many, many more.

#### **Drill & Practice**



Children practice skills and their level of skill attainment is assessed. Examples: Page-turner practice reading programs like Arthur's Teacher Troubles, Just

Grandma & Me, Imo & the King, Baba Yaga & the Magic Geese, Harry & the Haunted House, Little Monster at School, Little Samurai and skills-centered programs like A to Zap!, First Phonics, Graph Club, Jumpstart Kindergarten, Kid Phonics, Supersonic Phonics, Math Rabbit, Math Town, Math Workshop and Sticky Bear's Reading Room.

#### **Tutoring**

New concepts and/or skills are presented,



practiced and assessed. Example: Kid keys, Kid Phonics, Ultra Key Typing Tutor.

#### **Problem Solving**



Children use critical thinking strategies to solve problem – mistakes are viewed as learning opportunities – knowledge & skills are refined through

application. Examples: Set-up problem solving situation like Oregon Trail, and developing answers to interesting problems by using references like those mentioned earlier.

#### Simulation



This is a virtual reality which imitates the real world. These are experiences not easily provided in the classroom or often experienced in life. Developed correctly, simulation can be the most powerful strategy

employed in educational software because simulation is a particular strength for computers. Students control what happens and observe the consequences of their decisions. (Want to play Global Thermo-Nuclear War?) Examples: Sim City, Oregon Trail, A.D.A.M. the Inside Story, How Your Body Works, the Way Things Work and "field trip" simulations of which there are several examples in the lab.

# **Evaluating the software**

1. Software Organization in the Green Cabinet:

You will need to get a CD-ROM from the green cabinet to evaluate the software. The CDs are stored in cardboard boxes or plastic CD cases. They are stored in alphabetical order according to their titles and using the common convention of dropping unimportant words at the beginning of titles like "The..." or "A..." so, a CD entitled "The Wonderful World of Animals" will be filed under "W."

#### 2. Checking Out Software:

Use the name card you created when you took the picture (if you don't have it anymore, make one). Insert it in the exact place where you found your software on the shelves of the green cabinet. When you return the software to its same location at the end of class, you should retrieve your name card.



#### 3. Suggestions:

The software stored in the lab is composed mostly of those programs found most useful by public school teachers and the faculty who teach in the lab – though we have kept a few examples of software for the sake of their flaws. The software cabinet will be unlocked during class time only for a few classes so that you can review the software stored there. You should take advantage of the opportunity and review as much of the software as you can. Once you begin developing specific projects with the software, there is usually no much opportunity to review.

#### **Educational Digital Media Project**

You may work with other classmates but you are responsible for your own write ups.

- 1. Evaluate two software (one reference tool software and one technology assisted instructional software).
- 2. Fill out the forms on pages 43-46 of the handout and turn them into the instructor.