2   Overview of the Numbers Interface

Numbers has features that are shared with, or are similar to, features found in other Apple applications such as Keynote and Pages. This section lists these features. Understanding features including Inspectors and the Media Browser are essential when learning about any Apple software.

To explore the features described in Section 1, launch Numbers and open any Template.

2.1   The Number's Interface

Key: 1 – Menu Bar; 2 – Sheets Pane; 3 – Styles Pane; 4 – Header Rows with Reference Tabs showing; 5 – Tool Bar; 6 – Format Bar; 7 – Table; 8 – Inspector; 9 – Media Browser.

The Numbers' window contains a customizable Tool Bar, a Format Bar, a Sheets Pane, a Styles Pane, a Function Pane and the Sheet Canvas.

2.2   The Tool Bar

The Tool Bar contains several icons. These control common functions. Some Tool Bar Icons are greyed-out, meaning they can not be used. They become active once a Cell or Object is selected. The Tool Bar can be customised to display buttons for commands based on user preference. From left to right:

- View – This changes the View Mode. Moving from Layout View to Print View is a regular operation.
- Sheet – This is a quick way to add new Sheets. Other methods are using the Menu Bar > Insert > Sheet, or right-clicking (or control–clicking) inside the Sheet Pane.
- Table – This allows pre-formatted Tables to be added to Sheets. Table formatting will be described in Section 5 – Working With Tables. Tables can be added here can be re-formatted at any time.

- Reorganize – This opens a Sort dialogue box that can reorder Columns. Similar functions can be accessed from a Table's Reference Tabs. Reorganize is greyed-out until a Table or Cell is selected.
- Function – This can be used to add Sum, Average, Minimum, Maximum, Count and Product functions. It will also launch the Function Browser which contains more complex formulae. At the bottom of the Function menu is Formula Editor. Rather than access this command here press the equals (=) key to open the Formula Editor. Function is greyed-out until a Table Cell is selected.
- Formula List – This opens a pane below the Sheet Canvas that lists any formula used in the open document. A great way to check and modify formula.
- Charts – This is the most convenient way to add Charts to a Sheet. Charts on a Sheet are list in the Sheet Pane. There are nineteen charts types. These are listed in Section 10 – Charts.
- Text Box – This adds a simple text box. These can be used to enhance the design of sheets by adding titles and labels.
- Shapes – This adds simple primitive shapes, arrows, stars and speech bubbles to a Sheet.
- Comment – Use this to add virtual sticky notes to a Numbers document; ideal when expressing ideas in collaborative projects. The Comment icon will sometimes grey-out depending on the items selected.
- Share – This is used to upload files to iWork.com Public Beta. iWork.com is a convenient way to share work online with anyone. Because it is web-based, iWork files can be shared from Macs or iPads simply and securely.
- Inspector – This opens and closes the Inspector panel. The Inspector is described in Section 2.7 – The Inspector.
- Media – This opens and closes the Media Browser. The Media Browser description can be found in Section 2.9 – The Media Browser.

Download free eBooks at bookboon.com

- Colors – This opens and closes the Color Picker. The Color Picker works across the Mac's operating system, meaning it can be accessed from most Apple applications. Use it to pick and modify colours.
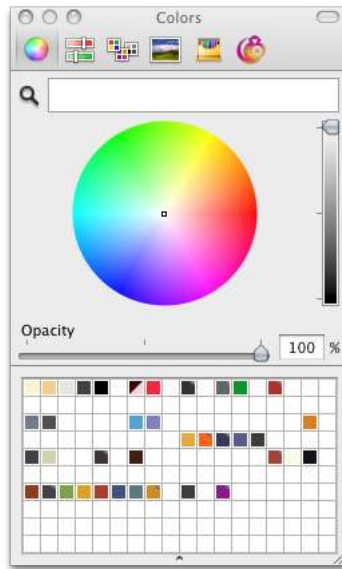
To sample a colour from any part of the computer screen, select the magnifying glass found in the Color Window and hover over the colour to be sampled. Click to sample.

The colour wheel, tone slider and Opacity sliders can be used to modify a sampled colour, or used to create a new one.

At the bottom of the Color Window is a colour well. If it is not visible double–click the dot on the bottom centre of the Colour Window. The colour currently displayed at the top of the Color Window can be dragged down to the colour well to save it for future use. Colours saved in this way are available in any application that supports the colour wheel. This means custom colours generated in Numbers can be used in Keynote or iMovie et cetera.

- Fonts – opens and closes the Fonts Panel. Like the Color Picker, the Fonts Panel is system wide, meaning it too can be accessed from most Apple applications.

2.3   Customising the Tool Bar

Adding extra buttons can be a great way to speed up working or to remember seldom used commands. To customise the Tool Bar right-click or Control Click the Tool Bar and choose the Customize Toolbar… option. Drag the desired icons to available spaces on the Tool Bar. Suggestions for three useful additions are made below.

- Send to iWeb – iWeb is an easy to use web site and blog creating application. The future of iWeb is in doubt. In 2012 a major upgrade or replacement application maybe announced. This icon is a quick method of sending either a Numbers document or PDF version of a Numbers document to iWeb.

- Alpha – this icon remains greyed-out until a picture is selected. Pictures, most likely photographs, can be imported into Numbers. Alpha, or as it is listed in the Format Menu, Instant Alpha makes parts of photographs or pictures transparent. In the illustration the aeroplane has been cut–out from the sky. With a picture selected try Instant Alpha. The application describes what steps to take.

- Adjust – opens the Adjust Image window. This dialogue box can be used to adjust the Brightness, Contrast and Saturation of a picture. There are several image parameters that can be used to finesse imported photographs, though often just clicking the Enhance button will improve a picture.

Note: Many Apple applications can have their Tool Bar customised in this way. This concludes our look at the Tool Bar.

2.4   The Format Bar

The Format Bar displays contextual information. For example, when a table or cell within a table is selected the Format Bar displays font formatting and cell formatting controls. When a Chart is selected the Format Bar displays parameters for controlling the Chart.

2.5   The Sheets Pane

The Sheets Pane displays any Sheets, Table and Charts in the current Numbers document. Numbers can contain multiple Sheets and a Sheet can contain multiple Tables. These are listed in the Sheets Pane and displayed on the Canvas. Multiple Sheets can be used to create sheets that contain working calculations, the results from which can be displayed on a separate Sheet, thus hiding the working calculations. Each Sheet can contain multiple Tables. In terms of accounting this means a sheet could contain Cash Flow, Sales, Expenditure and Bank Account Data as separate Tables on a single Sheet.

2.6   Styles Pane

When presenting data it is desirable to display information clearly, perhaps using a house style. Numbers contains several Style Presets that can be modified or created from scratch so that Tables fit a corporate identity or personal taste. To apply a style to a Table, drag a style preset thumbnail from the Styles Pane on to a Table.

2.7   The Inspector

The Inspector is a key feature in Apple's iLife and iWork software. Users new to Apple Mac software need to embrace the use of the Inspector. Inspectors control nearly all the parameters in iWork software. Numbers, Pages and Keynote have some unique Inspectors and some in common. For instance all the applications have a Document Inspector but each contains slightly different parameters.

The Inspector is launched by either clicking the Inspector icon in the Toolbar or Menu Bar > View > Show Inspector.

Numbers has ten inspector tabs. They are:

➢   Document Inspector –

The Document Inspector should be used to set up a document. Divided into three sections, the top section is Printer Setup. If a printer is available it can be selected using Format For. After doing that the Paper Size can be chosen.

The next section is Spotlight. Completing the fields for Author, Title, Keywords, and Comments is recommended practice. It makes documents easier to search for, especially if using the Mac's Spotlight search. All of these fields are for metadata. Author and Title are self-explanatory. Adding Keywords helps classify a document. For example a Numbers document designed for a swimming club could have the keywords, 'swim, pool, coaching, gala, Senior Swim Team'. The list could go on. There are five keywords here. Keywords are denoted by commas, 'swim, pool,…' 'Senior Swim Team' is one keyword. Searches can be case-sensitive, but using 'swim' and 'Swim' as keywords is not strictly necessary. When choosing keywords it is helpful to invoke the spirit of the librarian. A less rigorous form of applying metadata is using the Comments field. Here paragraphs of descriptive text add be added. In the example of the Swimming Club Numbers document, the comments field could read, 'Our swimming club membership list. Includes: a full list of coaches and their qualifications; subscription payments; our teams, Junior Boys, Junior Girls…'

The last section is Require Password To Open. For additional security a password can be entered to lock a Numbers document. The password would then be required everytime the document is opened.

➢   Sheet Inspector –
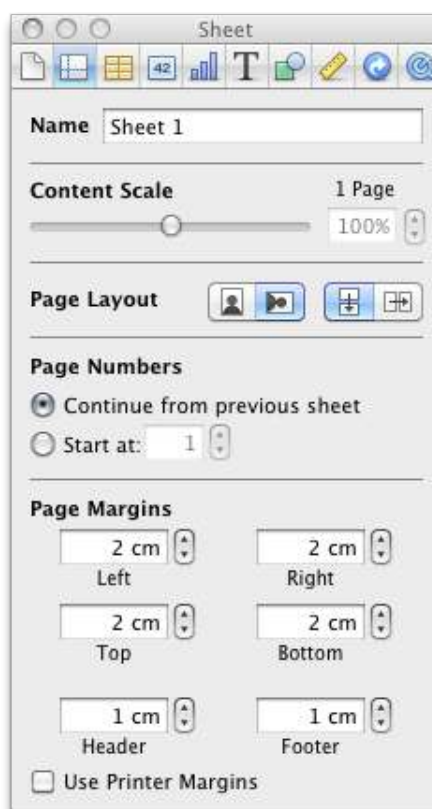
The Sheet Inspector should only be used when Numbers is set to Show Print View, in this mode users can assess changes made to the parameters in this Inspector. The top section is one method for renaming Sheets. Below that Content Scale becomes active in Print View, allowing Sheets to be scaled for accurate print output. The Slider or the number field can be used for scaling content. Page Layout is used to determine page orientation.

When printing Sheets that do not fit on a single sheet of paper. adding page numbering is a convenient way to account for all the printed sheets. Page Number and Page Count along with File Name and Date can be added in Print View; usually in the Header or Footer of the Sheet. In the example page numbering has been added to Print View; the Sheet spans two print pages:
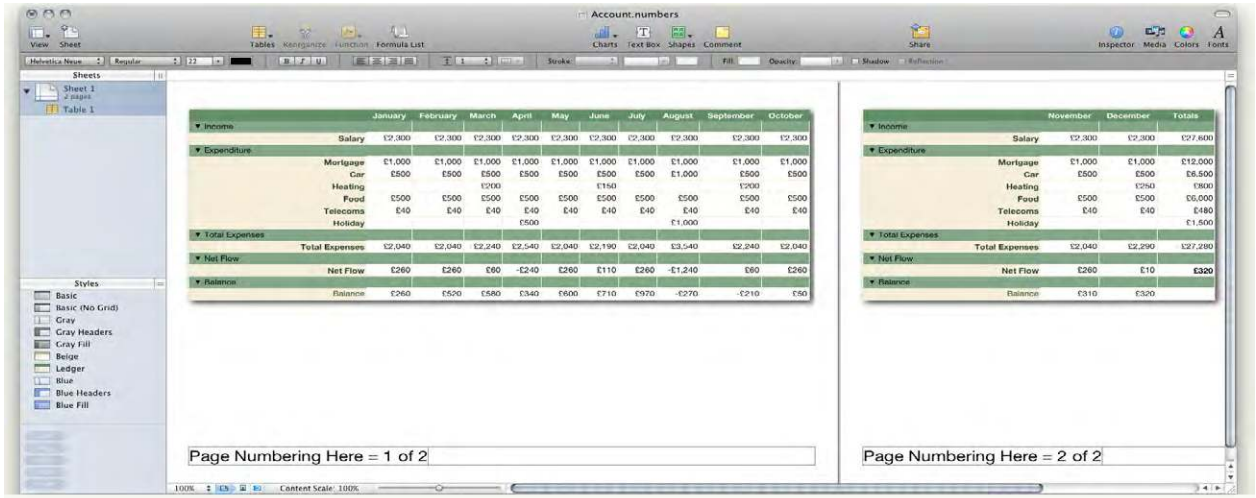
Page Margins can be set in the last section, which includes settings for Header and Footer.

➢ Table Inspector –

Download free eBooks at bookboon.com
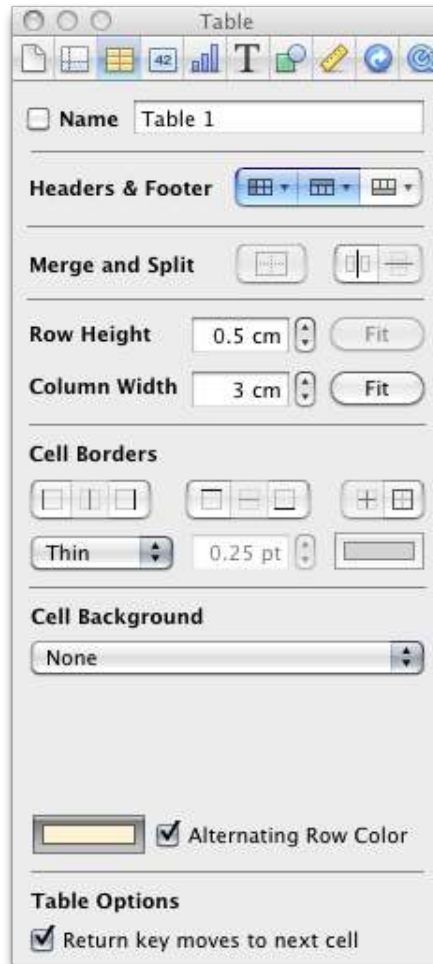
The Table Inspector can be used to rename Tables. Unlike the Print View Header and Footer mentioned previously the Table Headers & Footers add Header Rows and Header Columns to Tables. This section also allows Footer Rows to be added to Tables.

The Table Inspector can be used to Merge Cells or Split Cells. Note that Right–Clicking or Control–Clicking a Cell invokes a Context Menu that can be used to Merge or Split Cells, along with other useful functions not found in the Table Inspector.
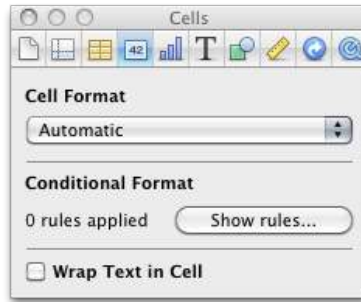
Row Height and Column Width are self-explanatory. Measurements for Cell dimensions can be entered here, or the Fit buttons used to automatically size Cells to fit their content.

Cell Borders are the ruled lines that appear around a Cell and Table. Use the parameters in the Cell Borders section to format Cell Margins.

Cell Background can be used to colour single or multiple Cells. The Alternating Row Color option is a great way to help the left to right reading of data in large spreadsheets.

➢ Cells Inspector –

Numbers will automatically format Cells, type 31/8/05 into a Cell and it will appear as 31 Aug 2005. This predictive function of Numbers is useful but to override, or preset Cell formatting, use the Cell Inspector.

Conditional Formatting can be used to change the type style of a Cell if the conditions of a rule are met. In the illustration if the test results fall between 25% and 50% the text become white type, on a red background.

Wrap Text in Cell forces lines of text to fit within the width of the column in which they sit.

Download free eBooks at bookboon.com
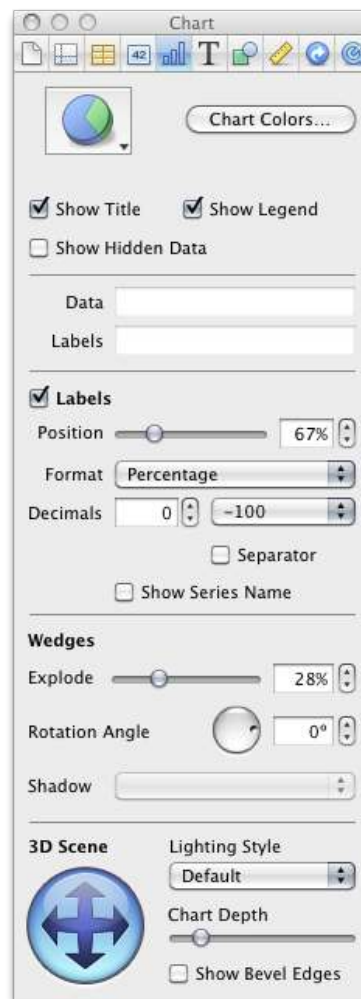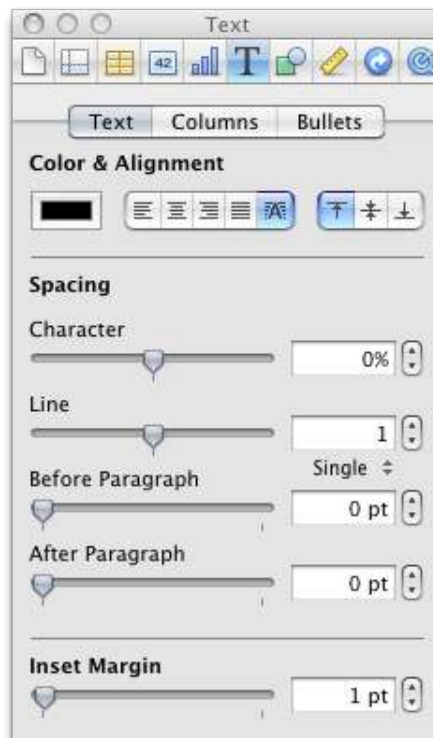
➢   Chart Inspector –

The Chart Inspector provides control over chart renditions. The basic controls allow the chart type to be changed via the Chart Icon; this menu mirrors the menu found in the Tool Bar. The Edit Data… button opens a floating window in which the Chart Data can be changed; very useful when information needs to be updated in a hurry.

Chart Colors… opens a floating window from which preset colour palettes can be applied to charts. Palettes include 3D Texture Fills, 2D Image Fills and 2D Color Fills. Try using the Apply All button to a Chart. If you do not like the colours in the Chart try dragging a different Fill from Chart Colors window or drag colours from the Color Window.

3D Charts have a special section at the bottom of the Chart Inspector. Click–drag the blue button to rotate a Chart and try changing the Lighting Style and the Chart Depth.

More advanced functions found in the Axis and Series tabs, such as Linear and Percentage Scale, will not be covered in this book as they are self-evident to statisticians, but for others would require lengthy explanations that are not in the remit of this book.

➢   Text Inspector –

Text can be controlled from five locations:

- The Format menu Fonts
- Format menu Text
- The Fonts window, launched from the Tool Bar or using Command T
- The Format Bar
- The Text Inspector.

Each location has some unique and some shared functions.

The Text Inspector has three tabs, Text, Columns and Bullets.

The Text tab can be used for Character alignment horizontally, and also vertically. The colour of type can be changed here also, though the unique parameters here are the Spacing controls. Character Spacing, also known as Tracking, adjusts the space between letters, whereas Line Spacing, also known as Leading, adjusts the height of lines of type.

Pressing the Return key to create extra space between paragraphs is considered bad practice by graphic designers. To control the space between paragraphs it is better to use the Text Inspectors, Before Paragraph and After Paragraph controls.

Inset Margin can be used to create space between the data in a Cell and the Cell border. Doing this aids legibility.

Download free eBooks at bookboon.com
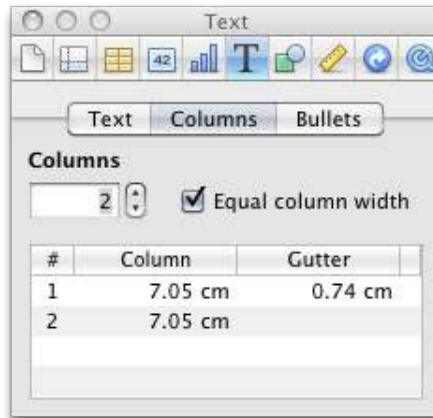
The Columns tab can only be used on Text Boxes and not as a way to modify Cells in a Table. When a Text Box is selected, the Columns tab can be used to set the amount of Columns in the Text Box and to set the space between the Columns, known as Gutter.
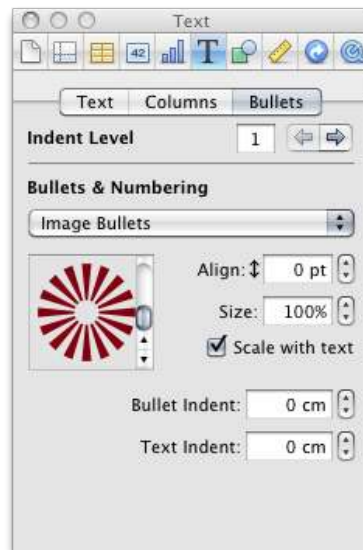
Download free eBooks at bookboon.com

The Bullets Tab can be used to add bullets to text in either Text Boxes or Cells in Tables. There are six types of bullets, here an Image Bullet has been selected. To change the bullet type click on the menu labelled here as Image Bullets. Experimenting with the other parameters here will clearly illustrate their functions.

➢ Graphic Inspector –
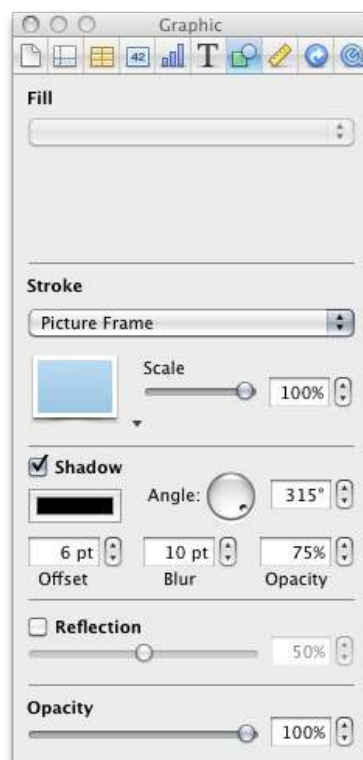
The Graphics Inspector controls the appearance of objects in Numbers. Although the Graphic Inspector can be used on Tables, this Inspector is best used on Text Boxes or Shapes. Here a Shape contains an Image Fill that has been set to Scale To Fill. Text can be added to a Shape box. The Stroke is set to Picture Frame. Shadow and Reflection have been applied. With so many parameters here the best way learn is to experiment. Start this process by creating two text boxes. Use the Graphics Inspector to stylize one box. Ensure that Shape is selected then go to Format > Copy Style. Select the second text box and go to Format > Paste Style. The second Shape will take on the general appearance of the stylized one.

➢ Metrics Inspector –
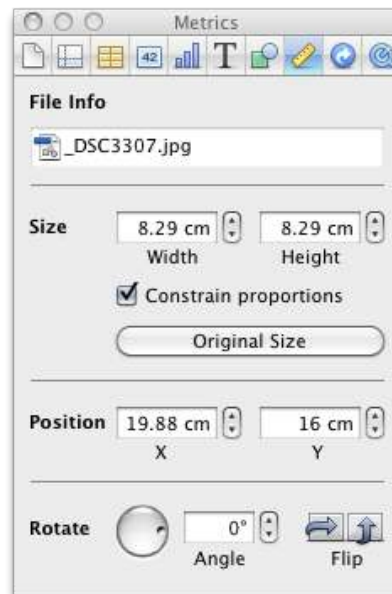
The Metrics Inspector is used to control the size and position of objects on the Sheets Canvas. This includes Tables and Charts which cannot be rotated, whereas Text Boxes and Pictures can. The File Info field is useful as it displays the file name of any image imported into Numbers. Graphic files, such as photographs, are embedded into Numbers. This means the original file used for importing can be moved or deleted. File Info displays the information required to locate originals so long as they have not been deleted.

➢   Hyperlinks Inspector –

The most common form of hyperlink are links to webpages. In Numbers text can be converted into a hyperlink. To make a link select the text and in the Hyperlink Inspector click *Enable as a Hyperlink*. If the link is to a webpage choose that as the Link to: option and type or copy and paste the address for the webpage into the URL: field. Note that links can be used to generate an email. Once created it might to desirable to temporarily disable hyperlinks. Accidental clicks will open web browser or email software. Checking *Make all hyperlinks inactive* will do this.

➤ QuickTime™ Inspector –

- If audio files or video has been added to a document, the QuickTime Inspector can be used to set new start and finish points for the clip. For example in a sixty second video clip if only the middle thirty seconds are required, moving the Start point to the time index to 00:00:15.00 and the Stop point to 00:00:45.00 would achieve this.
- A Poster Frame is a frame from the selected video that is displayed to represent the video. Perhaps the starting frames of the video are black. Choosing another frame from the video might be more illustrative.
- The repeat options are self-explanatory and the Volume slider and Control sections are ubiquitous.

2.8   Text and Graphics

Data can be imported from a variety of sources. Importing spreadsheet data is outlined in Section 7 – Importing Data.

As with all iWork applications, Numbers stores graphics and other media within the file itself, with the except of Fonts (see below). This makes for easy transfer of files from workstation to laptop et cetera. A consequence of this is that iWork documents may have large files sizes though there is an easy remedy in the Reduce File Size command. Though only run the Reduce File Size command on copies of Numbers files as this operation will lower the resolution of some images.

Fonts cannot be embedded into a Numbers document. Care must be taken to ensure all computers on which a Numbers document is to be shared have the same fonts installed. This is more relevant if non–standards fonts are used; ones that do not ship with an Apple Mac.

2.9   The Media Browser

The Media Browser appears in most of Apple's application software. It is a system wide utility that is accessed from within programs such as Numbers. It has a distinct icon displaying a frame of film, a picture frame and two musical notes.

The Media Browser can be launched from the Toolbar or View > Media Browser. It contains three tabs, Audio, Photos and Movies.

Spreadsheets help crunch data, though to explain that data pictures can often help. Numbers allows users to import sound, pictures and movies via Insert > Choose, or the Media Browser.

Audio – contains tracks from current user's iTune account. Garage band projects, these might include voice–overs or podcasts, and audio from other applications such as Aperture or Final Cut.

Photos – contains images stored in iPhoto, or Aperture if it is installed.

Movies – contains video files stored in iMovie, the current user's Movies Folder or in iTunes. If Final Cut or Aperture are installed video files from those applications will also appear here.
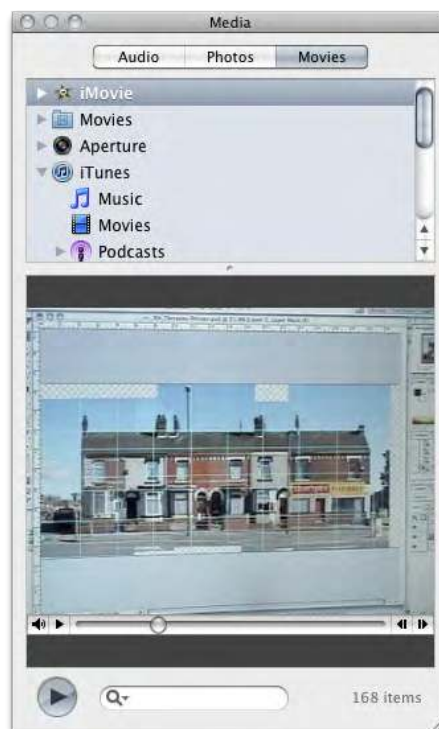
If several media files, say photographs, are to be placed into Numbers and they are not in iPhoto or Aperture they will not appear in the Media Browser. A quick way to add files to the Media Browser, without importing them into a host application such as iPhoto, is to place them into a Folder in Finder and, with both that Finder window and the Media Browser visible, drag the Folder from Finder into the top pane of the Media Browser.

The bottom pane of the Media Browser contains thumbnails of the respective media files. Double–clicking the thumbnail previews the file. In the case of Photos it enlarges the thumbnail to fill the Media Browser pane.

To insert a media file or files simply select them in the Media Browser and drag them onto the Numbers Sheet.