WORD OBJECT MODEL

VBA is an object-oriented language, thus it will be most effective to understand the Word Object Mode and how to manipulate it. Objects are grouped into collections which are an object unto themselves. Objects may have child objects and/or parent objects. Objects also have methods and properties. When you are trying to figure out how to do something, you must identify the relevant object and property or method. Sometimes you start with the property or method and work backward to the object. Look in the help file for better understanding of the object model.

Some key objects are present in the table below:

Object	Parent Object	Contents
Window	Application	All the (open) windows
Pane	Window	The window panes for a given window
Document	Application	An open document
Section	Document	Sections are used to hold text formatted differently than the

		base document, including multiple columns and different page orientation and/or margins
Footnotes	Document	

There are special properties that return a particular object.

`ActiveDocument` returns a document object for the document that is active, i.e. the document with the focus.

`ActiveWindow` returns a window object for the active window, i.e. the window with the focus.

`SeekView` returns or sets a view object with the document element displayed in print layout view. It uses the wdSeekView constant to specify which view: main document, header, footer, endnotes, footnotes. There are several variations of header and footer: current, first, even, primary.

Moving Around in a Word Document

By "moving", we mean moving the cursor. This is accomplished with methods of the `Selection` object. The selection can be extended or collapsed to an insertion point. The principal methods are those that reflect the keyboard direction keys: Home, `End`, `Up`, `Down`, `Left`, `Right`.

Use the Select property to return the Selection object. If the Selection property used without an object qualifier, the object is assumed to be the active pane of the active document window. It may be advisable to not assume what the active pane is.

A window has more than one pane if the window is split or the view is not print layout view and information such as footnotes or comments are displayed. From this, it seems safe to assume that the first pane is the one that opens when the document is first opened.

Similarly, don't assume the cursor is in the main body of the document, it might be in a header/footer or footnote. The

following code will incur a runtime error if the document is not in print layout view.

```
If
ActiveDocument.ActiveWindow.View.SeekView
<>

ActiveDocument.ActiveWindow.View.SeekView
= wdSeekMainDocument
```

To close all but the first pane

```
MsgBox
ActiveDocument.ActiveWindow.Panes.count

If
ActiveDocument.ActiveWindow.Panes.Count
> 1 Then

For i = 2 To
ActiveDocument.ActiveWindow.Panes.Count

     ActiveDocument.ActiveWindow.Panes(i)
     .close

Next
```

```
End if

Msgbox
ActiveDocument.ActiveWindow.Panes.Count
```

Better

```
If ActiveDocument.ActiveWindow.View.Type
= wdPrintView Then

  If  ActiveDocument.ActiveWindow.View
  .SeekView <>

  ActiveDocument.ActiveWindow.View
  .SeekView = wdSeekMainDocument

  End If

End If
```

To go to the first character

```
Selection.HomeKey Unit: = wdString
```

As exemplified in the example above, `wdString` is one value of the wd units constant. Other values of the constant are:

wdCharacter, wdWord, wdSentence, wdParagraph, wdSection, wdCell, wdColumn, wdRow, wdTable.

To go to the first character and select the first paragraph:

```
Selection.HomeKey Unit: = wdStory
Selection.MoveDown Unit = wdParagraph
Count: = 1, Extend: = wdExtend
```

To release selection by moving cursor to the right:

```
Selection.MoveRight Unit: = wdCharacter,
Count = 1
```

To move down 8 paragraphs:

```
Selection.MoveDown Unit: = wdParagraph,
Count: = 8
```

To move to the start of the current line:

```
Selection.HomeKey Unit: = wdLine
```

To move to the end of the current line:

```
Selection.EndKey Unit: = wdLine
```

To move to the end of the document

```
Selection.EndKey Unit: = wdStory
```

Move cursor:

```
Selection.MoveRight Unit: = wdCharacter,
Count: = 1, Extend: = wdExtend
```

Collapse a range or selection to the start or ending position. After a range or selection is collapsed, the starting and ending points are equal. You can optionally specify the direction in which to collapse the range, as start or end.

- If you use wdCollapseEnd to collapse a range that refers to an entire paragraph, the range is located after the ending paragraph mark (the beginning of the next paragraph).
- Using wdCollapseEnd to collapse a selection that refers to the last table row cause the cursor to be located after the end of the table.
- Using wdCollapseStart to collapse a selection that refers to a table row causes the cursor to be located in the first cell of that row. If you collapsed a group of rows, say after

inserting them, the cursor is located in the first cell of the first row.

```
Selection.Collapse
```