Table of Contents
Data Validation.................................................................................................................................................. 2
Data Validation Dialog Box.......................................................................................................................... 3
INDIRECT function........................................................................................................................................ 3
Cumulative List of Keyboards Throughout Class.......................................................................................... 4
Data Validation

1) Data Validation means that you “validate that the correct data goes into the cell”.
2) Data Validation feature in in the Data Tools group in the Data Ribbon Tab:

![Data Tools Group in Excel](image)

3) Data Validation allows you to “pick from a list of rules to limit the type of data that can be entered into a cell.”

4) Caveat about adding Data Validation to a cell:
   1. If incorrect data is in cells BEFORE you add DV, when you add DV, it won’t automatically tell you about the incorrect data.
      i. Unless you: Data menu, Data Tools group, Data Validation, "Circle invalid data".
   2. If you Copy and Paste something into a cell that has a Data Validation Rule, the Copy and Paste action will overwrite the Data Validation.
Data Validation Dialog Box

1) Keyboard for Data Validation dialog box: Alt, D, L

2) Data Validation dialog box looks like this:

3) Allow text box:
   - Whole Number:
     1. Choose comparative operator
     2. Set limits
   - Decimal:
     1. Choose comparative operator
     2. Set limits
   - List:
     1. Values in "Source" text box can be:
        i. Ranges of cells
        ii. Defined Names
        iii. Range from Excel Table
        iv. Values typed in separated by commas
   - Date:
     1. Choose comparative operator
     2. Set limits
   - Time:
     1. Choose comparative operator
     2. Set limits
   - Text length:
     1. Choose comparative operator
     2. Set limits
   - Custom:
     1. Logical Formula that evaluates to TRUE (value allowed) or FALSE (value not allowed).

4) Input Message
   - Text that shows up if you click in the cell with DV

5) Error Alter
   - "Stop" means that you cannot violate the rule
   - "Warning" gives an option to adhere to or not adhere to the data validation
   - "Information" just gives information without enforcement of rule.

INDIRECT function

6) INDIRECT function takes text that represents a reference and converts it back to a reference.
Cumulative List of Keyboards Throughout Class:

1) Esc Key:
   i. Closes Backstage View (like Print Preview).
   ii. Closes most dialog boxes.
   iii. If you are in Edit mode in a Cell, Esc will revert back to what you had in the cell before you put the Cell in Edit mode.
2) F2 Key = Puts formula in Edit Mode and shows the rainbow colored Range Finder.
3) SUM Function: Alt + =
4) Ctrl + Shift + Arrow = Highlight column (Current Region).
5) Ctrl + Backspace = Jumps to Active Cell
6) Ctrl + Z = Undo.
7) Ctrl + Y = Undo the Undo.
8) Ctrl + C = Copy.
9) Ctrl + X = Cut.
10) Ctrl + V = Paste.
11) Ctrl + PageDown =expose next sheet to right.
12) Ctrl + PageUp =expose next sheet to left.
13) Ctrl + 1 = Format Cells dialog box, or in a chart it opens Format Chart Element Task Pane.
14) Ctrl + Arrow: jumps to the bottom of the "Current Region", which means it jumps to the last cell that has data, right before the first empty cell.
16) Ctrl + End = Go to last cell used.
17) Alt keyboards are keys that you hit in succession. Alt keyboards are keyboards you can teach yourself by hitting the Alt key and looking at the screen tips.
   i. Create PivotTable dialog box: Alt, N, V
   ii. Page Setup dialog box: Alt, P, S, P
   iii. Keyboard to open Sort dialog box: Alt, D, S
18) ENTER = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell DOWN.
19) CTRL + ENTER = When you are in Edit Mode in a Cell, it will put thing in cell and keep cell selected.
20) TAB = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell RIGHT.
21) SHIFT + ENTER = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell UP.
22) SHIFT + TAB = When you are in Edit Mode in a Cell, it will put thing in cell and move selected cell LEFT.
23) Ctrl + T = Create Excel Table (with dynamic ranges) from a Proper Data Set.
   i. Keyboard to name Excel Table: Alt, J, T, A
   ii. Tab = Enter Raw Data into an Excel Table.
24) Ctrl + Shift + " ( ` ) = General Number Formatting Keyboard.
25) Ctrl + ; = Keyboard for hardcoding today's date.
26) Ctrl + Shift + ; = Keyboard for hardcoding current time.
27) Arrow Key = If you are making a formula, Arrow key will “hunt” for Cell Reference.
28) Ctrl + B = Bold the Font
29) Ctrl + * (on Number Pad) or Ctrl + Shift + 8 = Highlight Current Table.
30) Alt + Enter = Add Manual Line Break (Word Wrap)
31) Ctrl + P = Print dialog Backstage View and Print Preview
32) F4 Key = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
   i. A1 = Relative
   ii. $A$1 = Absolute or “Locked”
iii. **A$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)

iv. **$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you copy across the columns)

33) **Ctrl + Shift + 4** = Apply Currency Number Formatting

34) **Tab key** = When you are selecting a function from the Function Drop-down list, you can select the function that is highlighted in blue by using the Tab key.

35) **F9 Key** = To evaluate just a single part of formula while you are in edit mode, highlight part of formula and hit the F9 key.
   i. If you are creating an Array Constant in your formula: Hit F9.
   ii. If you are evaluating the formula element just to see what that part of the formula looks like, REMEMBER: to Undo with Ctrl + Z.

36) **Alt, E, A, A** = Clear All (Content and Formatting)

37) Evaluate Formula One Step at a Time Keyboard: **Alt, M, V**

38) Keyboard to open Sort dialog box: **Alt, D, S**

39) **Ctrl + Shift + L** = Filter (or **Alt, D, F, F**) = Toggle key for Filter Drop-down Arrows

40) **Ctrl + N** = Open New File

41) **F12** = Save As (Change File Name, Location, File Type)

42) Import Excel Table into Power Query Editor: **Alt, A, P, T**

43) **Ctrl + 1 (When Chart element in selected)**: Open Task Pane for Chart Element

44) **F4 Key** = If you are in Edit mode while making a formula AND your cursor is touching a particular Cell Reference, F4 key will toggle through the different Cell References:
   i. **A1** = Relative
   ii. **$A$1** = Absolute or “Locked”
   iii. **A$1** = Mixed with Row Locked (Relative as you copy across the columns AND Locked as you copy down the rows)
   iv. **$A1** = Mixed with Column Locked (Relative as you copy down the rows AND Locked as you copy across the columns)

45) Keyboard to open Scenario Manager = **Alt, T, E**

46) **Ctrl + Tab** = Toggle between Excel Workbook File Windows

47) **Ctrl + Shift + F3** = Create Names From Selection

48) **Ctrl + F3** = open Name Manager

49) **F3** = Paste Name or List of Names

50) **Alt + F4** = Close Active Window

51) **Window Key + Up Arrow** = Maximize Active Window

52) **Ctrl + Shift + Enter** = Keystroke to enter Array Formulas that: 1) have a function argument that requires it, or 2) whether or not you are entering the Resultant Array into multiple cells simultaneously.

53) **Ctrl + /** = Highlight current Array

**New In This Video:**

54) Keyboard for Data Validation dialog box: **Alt, D, L**