

Useful Commands	
Update-Help	Downloads and installs newest help files
Get-Help	Displays information about commands and concepts
Get-Command	Gets all commands
Get-Member	Gets the properties and methods of objects
Get-Module	Gets the modules that have been imported or that can be imported into the current session
Get-Service	Gets the services on a local or remote computer
Get-Process	Gets the processes that are running on the local computer or a remote computer

Flow Control	
if(){ } Elseif(){ } Else{ }	
while() { }	
For(\$i=0; \$i -lt 10; \$i++) { }	
Foreach(\$file in dir C:\) {\$file.name}	
1..10 foreach{\$_}	

Importing, Exporting, Converting	
Export-CliXML	Import-CliXML
ConvertTo-XML	ConvertTo-HTML
Export-CSV	Import-CSV
ConvertTo-CSV	ConvertFrom-CSV

Assignment, Logical, Comparison Operators	
+=, -=, *=, /=, %=, +, -, =	Assigns one or more values to a variable
-and, -or, -not, -xor, !	Connect expressions / statements
-eq, -ne	Equal, not equal
-gt, -ge	Greater than, greater than or equal
-lt, -le	Less than, less than or equal
-replace	"Hi" -replace "H", "P"
-match, -notmatch	Regular expression match
-like, -notlike	Wildcard matching
-contains, -notcontains	Check if value in array
-in, -notin	Reverse of contains, notcontains

Case-Sensitive Comparison	
-ceq, -cne, -clike, -cnolike, -cnotmatch, -ccontains, -cnotcontains	

Case-Insensitive Comparison	
-ieq, -ine, -ilike, -inotlike, -inotmatch, -icontains, -inotcontains	

Setting Security Policy	
View and change execution policy with Get-Execution and Set-Execution policy:	
Get-Executionpolicy	
Set-Executionpolicy	- Restricted - AllSigned - RemoteSigned - Unrestricted

Aliases for Common commands			
Gcm	Get-Command	Fl	Format-List
Foreach,%	Foreach-Object	Gcim	Get-CimInstance
Sort	Sort-Object	Cat,gc,type	Get-Content
Where,?	Where-Object	Sc	Set-Content
Diff,compare	Compare-Object	h,history,ghy	Get-History
Dir, ls, gci	Get-ChildItem	r,lhy	Invoke-History
Gi	Get-Item	Gp	Get-ItemProperty
Copy,cp,cpi	Copy-Item	Sp	Set-ItemProperty
Move,mv,mi	Move-Item	Pwd,gl	Get-Location
Del,rm	Remove-Item	Gm	Get-Member
Rni,ren	Rename-Item	Sis	Select-String
Ft	Format-Table	Cd,chdir,sl	Set-Location
Gcm	Get-Command	Cis,clear	Clear-Host

Part of Cmdlets		
Get-EventLog	Get-WinEvent	Get-Date
New-Item	Set-Item	Move-Item
Copy-Item	Remove-Item	Compare-Object
Get-Content	Set-Content	Add-Content
Start-Sleep	Start-Job	Get-CimInstance
Get-Credential	Test-Connection	New-PSSession
Test-Path	Split-Path	Get-History
Get-ADUser	Get-ADComputer	New-ISESnippet
Get-WMIObject	Out-File	Out-String

Arrays, Objects	
\$arr = "a", "b"	Array of strings
\$arr = @()	Empty array
\$arr[5]	Sixth array element
\$arr[-3..-1]	Last three array elements
\$arr[1,4+6..9]	Elements at index 1,4, 6-9
\$arr[1] += 200	Add to array item value
\$z = \$arA + \$arB	Two arrays into single array
[pscustomobject]@{x=1;z=2}	Create custom object
(Get-Date).Date	Date property of object

Comments, Escape Characters	
#, <#...#>	Comment, Multiline Comment
""test""	Escape char `
`t	Tab
`n	New line
`	Line continue
&	The call operator, "invocation operator"

Common Automatic Variables	
\$\$	Last token of the previous command line
\$?	Boolean status of last command
\$^	First token of the previous command line
\$_, \$PSItem	Current pipeline object
\$profile	The standard profile (may not be present)
\$PsVersionTable	Details about the version of PowerShell