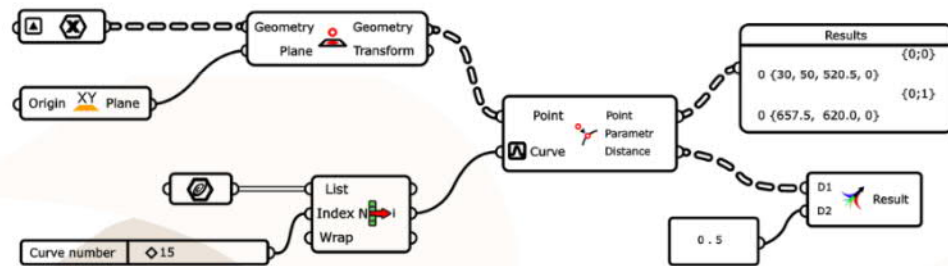










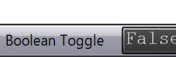

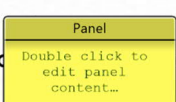
Learn  
Grasshopper  
*with Kris*

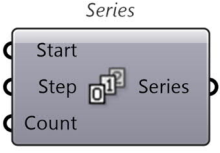

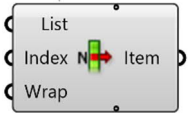
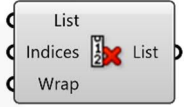





# COMPONENTS GLOSSARY



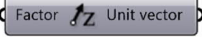

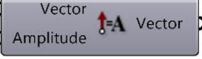
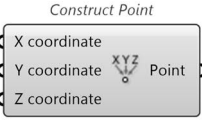

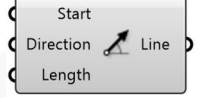



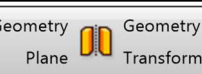

FUNDAMENTALS

# Components Glossary

Placing	Name and description	Picture
P.G.Pt	Point Point parameters are capable of storing persistent data. You can set the persistent records through the parameter menu.	
P.G.Crv	Curve Represents a collection of Curve geometry. Curve geometry is the common denominator of all curve types in Grasshopper.	
P.G.Brep	Brep Represents a collection of Brep geometry. Brep stands for 'Boundary REPresentation' and all surfaces and polysurfaces in Rhino are Breps. If a Brep has only one face, it is considered a surface in Grasshopper.	
P.G.Geo	Geometry Parameter Represents a collection of 3D Geometry	
P.G.Data	Data Contains a collection of generic data.	
P.P.Int	Integer Contains a collection of integer numbers.	
P.I.Toggle	Boolean Toggle Boolean (true/false) toggle.	
P.I.Slider	Number Slider A slider is a special interface object that allows for quick setting of individual numeric values. You can change the values and properties through the menu, or by double-clicking a slider object. Sliders can be made longer or shorter by dragging the rightmost edge left or right. <u>HINT</u> : 0..0.250..3 - Creates slider with value 0.250, min value is 0 and max is 3 Accuracy 0.001	
P.I.Panel	Panel A panel for custom notes and text values. It is typically an inactive object that allows you to add remarks or explanations to a Document. Panels can also receive their information from elsewhere. If you plug an output parameter into a Panel, you can see the contents of that parameter in real-time. All data in Grasshopper can be viewed in this way. Panels can also stream their content to a text file. Shortcut: Type in canvas searching box „//“ to insert panel. <u>HINT</u> : Change to <Multiline Data> to hold more than one item.	

Placement	Name and description	Picture
S.S.Series	<p>Series</p> <p>Create a series of numbers. The numbers are spaced according to the {Step} value. If you need to distribute numbers inside a fixed numeric range, consider using the [Range] component instead.</p>	
S.L.Lng	<p>List Length</p> <p>Measure the length of a list. Elements in a list are identified by their index. The first element is stored at index zero, the second element is stored at index one and so on and so forth. The highest possible index in a list equals the length of the list minus one.</p>	
S.L.Item	<p>List Item</p> <p>Retrieve a specific item from a list.</p> <p><u>HINT 1:</u> Zoom to component and add element (at top and bottom) by clicking +</p> <p><u>HINT 2:</u> If you would like to choose last element write in index -1</p>	
S.S.Culli	<p>Cull Index</p> <p>Cull (remove) indexed elements from a list.</p>	
S.L.Rev	<p>Reverse list</p> <p>Reverse the order of a list.</p>	
S.T.Merge	<p>Merge</p> <p>Merge a bunch of data streams.</p>	
M.O.Larger	<p>Larger</p> <p>Larger than (or equal to)</p>	
M.T.Rad	<p>Radians</p> <p>Convert an angle specified in degrees to radians.</p>	
T.E.Mirror	<p>Mirror</p> <p>Mirror an object.</p>	

# Components Glossary

Placement	Name and description	Picture
V.V.X,Y,Z	Unit X,Y,Z Unit vector parallel to the world {x,y,z} axis.	
V.V.Vec	Vector Unit X,Y,Z Construct a vector from {xyz} components	
V.V.Amp	Amplitude Set the amplitude (length) of a vector.	
V.P.Pt	Construct Point Construct a point from {xyz} coordinates. HINT: Type in canvas searching box 0.0.0 to create point with 0,0,0 coordinates	
C.P.Line	Line Create a line between two points.	
C.P.LineSDL	Line SDL Create a line segment defined by start point, tangent and length.	
T.E.Move	Move Translate (move) an object along a vector.	
T.E.Rotate	Rotate Rotate an object in a plane.	
T.A.Scale	Scale Scale an object uniformly in all directions.	
T.E.Mirror	Mirror Mirror an object.	
C.A.Len	Length Calculate curve total length	
C.D.Divide	Divide Curve Divide a curve into equal length segments.	