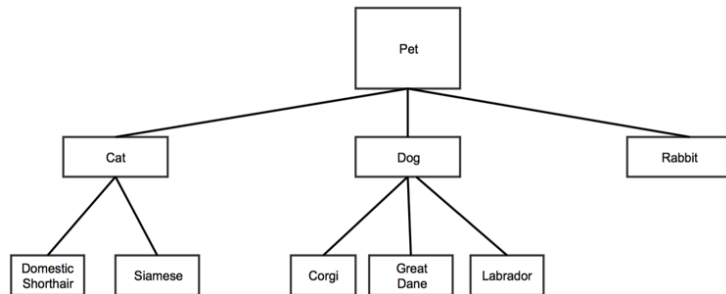


Bubble

Spreadsheet Format

You build bubble graphs from tree data structures. Here's a representation of a tree data structure:



Tree data structures are made of nodes, or elements on the tree. In the example above, each box represents a node.

Tree data structures are also hierarchical: each node (or element on the tree) has a *parent* node. In the example above, "Pet" is the parent of "Cat," "Dog," and "Rabbit". "Cat" is the parent of "Domestic Shorthair" and "Siamese."

Trees have a *root* node, which has no parent. "Pet" in the example above is the *root* node, since it has no parent.

You place nodes on the tree using two values: the name of the node, and the name of the node's parent. For example, you can place the Labrador node by knowing only "Labrador" (it's name) and "Dog" (it's parent). Remember, any node on the tree can be a parent.

A *leaf* is a node that isn't a parent (that is, it has no children). In the example above, "Domestic Shorthair", "Siamese", "Corgi", "Great Dane", "Rabbit", and "Labrador" are all leaf nodes.

Each row in the Tree spreadsheet represents a node on the tree.

	Column 1	Column 2	Column 3
Data Types	plain text	plain text	plain text

Contents	The word "node"	The name of the node's parent	The name of the node
	Note: <ul style="list-style-type: none"> Enter the word "node" in the first cell for every row 	Note: <ul style="list-style-type: none"> If this is the first node on the tree (called the <i>root</i>), write "root" in the cell Keep node names consistent across the spreadsheet Parents determine the bubble's color 	Note: <ul style="list-style-type: none"> Only leaf nodes will be labeled on the bubble visualization

For the sample tree above, the spreadsheet might look like this:

	Parent	Node
node	root	Pet
node	Pet	Cat
node	Pet	Dog
node	Pet	Rabbit
node	Cat	Domestic Shorthair
node	Cat	Siamese
node	Dog	Corgi
node	Dog	Great Dane
node	Dog	Labrador

Customization Options

Go to [Common Customization Options](#) for more settings

Bubble style

choose how you want to display the bubbles your graph

- "Grouped": the bubbles are grouped in a circular shape, with smaller bubbles dispersed among the larger ones
- "Spiral": the bubbles are in a spiral shape, from largest to smallest
- "Packed": the bubbles are grouped within different concentric circles, according to their relationships

Bubble spacing

decide how far apart to keep the bubbles from each other

- If you decided to [style the bubbles](#) as "Packed," this option will have no effect

- Type in a higher number to space bubbles farther apart, or type in a smaller number to space bubbles closer together

Group color

this property only applies to bubble graphs with "[packed](#)" style. Choose the color of the circles enclosing the packed bubbles.

- Click the colored square
- Learn more about [choosing colors](#)

Node color

choose the color of the nodes. This property only applies to bubble graphs with a "[packed](#)" style.

- Click the colored square
- Learn more about [choosing colors](#)