# Beyond the Whiteboard 1: Building Blocks

What are building blocks?

- Writing (annotation), text (typing), shapes and images are the basic building blocks of any flipchart.
- By manipulating and combining these simple items, you can create interesting, useful and reusable flipcharts.
- Although the ideas here aren't particularly complex, ActivInspire can be a little unstable – save your work often when developing flipcharts, in case it crashes. Although it will try to recover your work, it doesn't always do a good job…

TECHNICAL NOTE: In this document, I refer to all the building blocks as "objects" for simplicity. ActivInspire usually uses "objects" to refer to text, shapes and images only; it calls writing, "annotation".

Marquee and Sizing Handles

When you click once on an object, a number of icons and symbols appear around it. These are the marquee and sizing handles. (The position of the marquee handles changes if the object is rotated.)

Marquee handles

Sizing handles
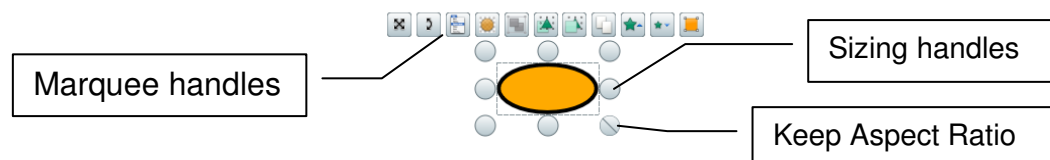
Keep Aspect Ratio

Clicking and dragging the sizing handles will enlarge, shrink, stretch and squash the object. One of the handles has a diagonal line running through it – this is the "Keep Aspect Ratio" handle, and allows you to enlarge and shrink the shape without distorting it. It is usually in the bottom right corner, but not always, particularly if an object has been rotated – check before resizing!

Note that, you **cannot resize text** with the sizing handles. Resizing only changes the surrounding rectangle the text fits inside – the width determines how the typing is split over separate lines.

Typed text   Typed text   Ty pe d tex t
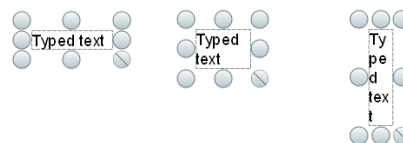
If you want to change the size of the text, you need to edit it (double-click or use the **Edit Text** marquee handle described below), highlight the text, then change the **font size** in the formatting toolbar.

Marquee Handles

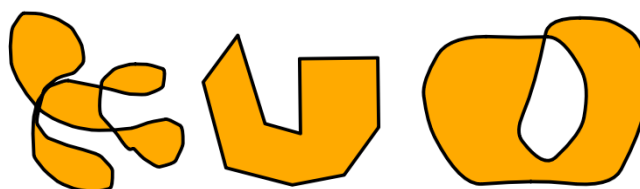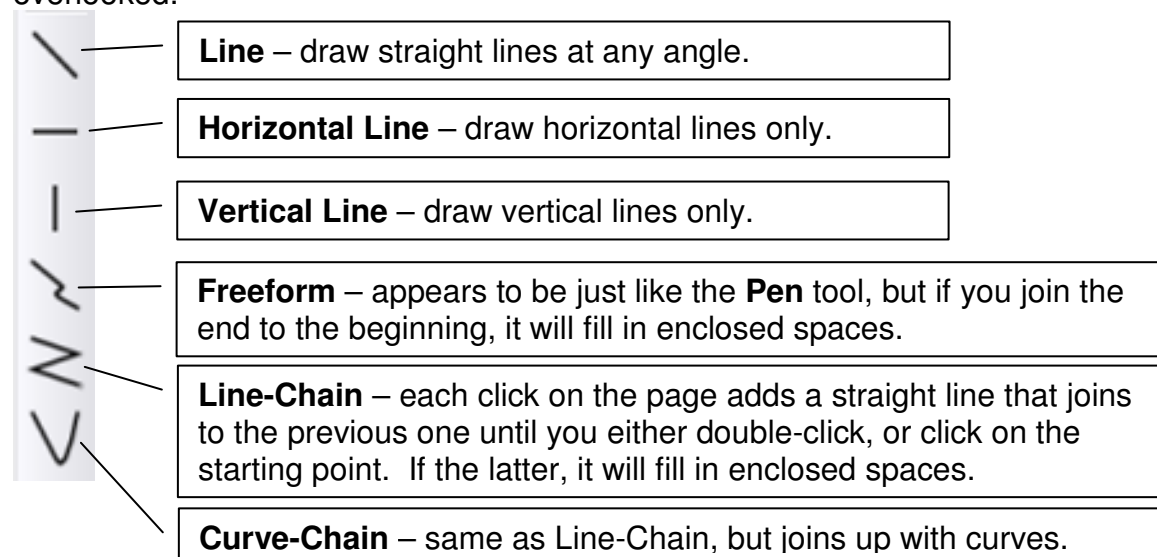| Icon	Title	Description
	Freely Move	Click and drag to move an object. The "Freely" part indicates that this will break any special "behaviour" rules set for objects, so should be used with caution. (See the session on **Containers & Restrictors**.)
	Rotate	Turns the object. Usually, it will rotate around its centre, though this can be changed by certain settings (covered in a later session) and tools (e.g. the XY Origin maths tool). (*I've also come across an occasional "bug" when an object is turned immediately after being moved; on rare occasions it will turn around its centre's previous position instead of its current one.*)
	Edit Menu	This is equivalent to right-clicking an object, giving access to Cut, Copy, Paste as well as many other relevant options. Worth investigating are the options under **Transform** and **Reorder**.
	Translucency Slider	This button turns into a slider when you click it. Drag it to "fade" an object, or make it disappear altogether (though there are other ways to hide an object described in future sessions).
	Group	Select more than one object, and you can group them together by clicking this button. It turns yellow to show you have selected a group. Click again to ungroup.
	Bring Forward	Moves the object in front of others on the "stack". Learn more in the **Layers & Magic Ink** session.
	Send Backward	Moves the object behind other on the "stack". Learn more in the **Layers & Magic Ink** session.
	Duplicate	Saves you having to Copy and Paste, as it does it all in one click. You can press Ctrl+D on the keyboard too.
	Increase Size	Makes the object bigger, keeping the object in proportion. Doesn't work well on Grouped objects. You're better off using the sizing handles.
	Decrease Size	Makes the object smaller, keeping the object in proportion. Doesn't work well on Grouped objects. You're better off using the sizing handles.
	Edit Shape Points	*Only applies to* **Shape** *objects.* This allows you to change the geometry of a shape, in some cases quite dramatically. Drag the point(s) to alter it.
	Edit Text	*Only applies to* **Text** *objects.* This allows you to edit what you've written, and also brings up the Format Toolbar to change font colour, style, size, etc. Double-clicking a text object has the same effect.

If a particular option is not available for an object, it will either appear "greyed out" (disabled), or won't appear at all.

Both the marquee and sizing handles can be customised (see the session on **Profiles & Customisation**).

Special Shapes

Above the list of available 2D shapes are six line tools that shouldn't be overlooked.

Line – draw straight lines at any angle.

Horizontal Line – draw horizontal lines only.

Vertical Line – draw vertical lines only.

Freeform – appears to be just like the **Pen** tool, but if you join the end to the beginning, it will fill in enclosed spaces.

Line-Chain – each click on the page adds a straight line that joins to the previous one until you either double-click, or click on the starting point. If the latter, it will fill in enclosed spaces.

Curve-Chain – same as Line-Chain, but joins up with curves.

From left to right, examples of Freeform, Line-Chain and Curve-Chain shapes.

Freeform and **Curve-Chain** can create very organic-looking shapes, while **Line-Chain** allows you to create very precise yet complex shapes.

WARNING: the two Chain tools suffer from a bug; if you try to select another tool from the toolbox while using them, you'll end up with a line on the page that cannot be selected or deleted! Make sure you double-click to end the line, or join the end to the beginning before selecting another tool.

Connectors

Connectors are lines and arrows that join Shapes and, once attached, stay anchored. If one shape is moved, the connector stretches between its two anchor points.

Unfortunately, the choice of connectors is very limited, and you can't rotate them.

Originally, I recommended avoiding connectors altogether. However, their ability to latch onto objects and stretch around the page does have some uses – see the notes for the last session, **Containers & Restrictors***.*

"Fuzzy Felt" (Drag a Copy)

Drag a Copy creates a copy of an object / image as you need it. Use this method instead of creating multiple copies of "counters" or "markers" and stacking them on top of each other.

Property Browser	F9
Action Browser	F10
Cut	Ctrl+X
Copy	Ctrl+C
Paste	Ctrl+V
Duplicate	Ctrl+D
Delete	Del
Transform	▶
Reorder	▶
Locked	Ctrl+Shift+L
Grouped	Ctrl+G
Hidden	Ctrl+Shift+I
Drag a Copy	Ctrl+Shift+J

Set Up

1. Create or load an image for the object you want to use as a counter.
2. Right-click on the object (or select the Edit Menu marquee handle ▣).
3. Select **Drag a Copy** from the bottom of the menu.
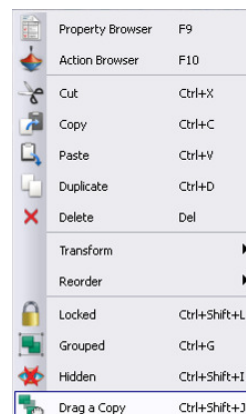
Usage

- Whenever you try to move the object (the "master copy") by dragging it, a new copy will appear and you'll be dragging that instead.
- If you need to move the "master copy", left click it once then use the Freely Move marquee handle ⊠.
- If you edit the "master copy" (change its shape, colour, etc.), all new copies you drag after that will have the new attributes.

Applications

- Creating a limitless supply of counters or markers.
- Creating diagrams using specialised symbols, such as circuit diagrams, sheet music, maps, etc.
- Writing specialised notation in "neat", e.g. mathematical symbols, chemical formulae, etc.

In effect, you can create a palette of special shapes and images that you can rearrange on the page as you need to (a bit like "Fuzzy Felt"). This allows you to use ideas and activities for quick questions in a starter or plenary that might otherwise involve long set-up times. You can also use such pages as special "Build" flipcharts, to quickly create complex diagrams, copying the results into another flipchart for use in a lesson.
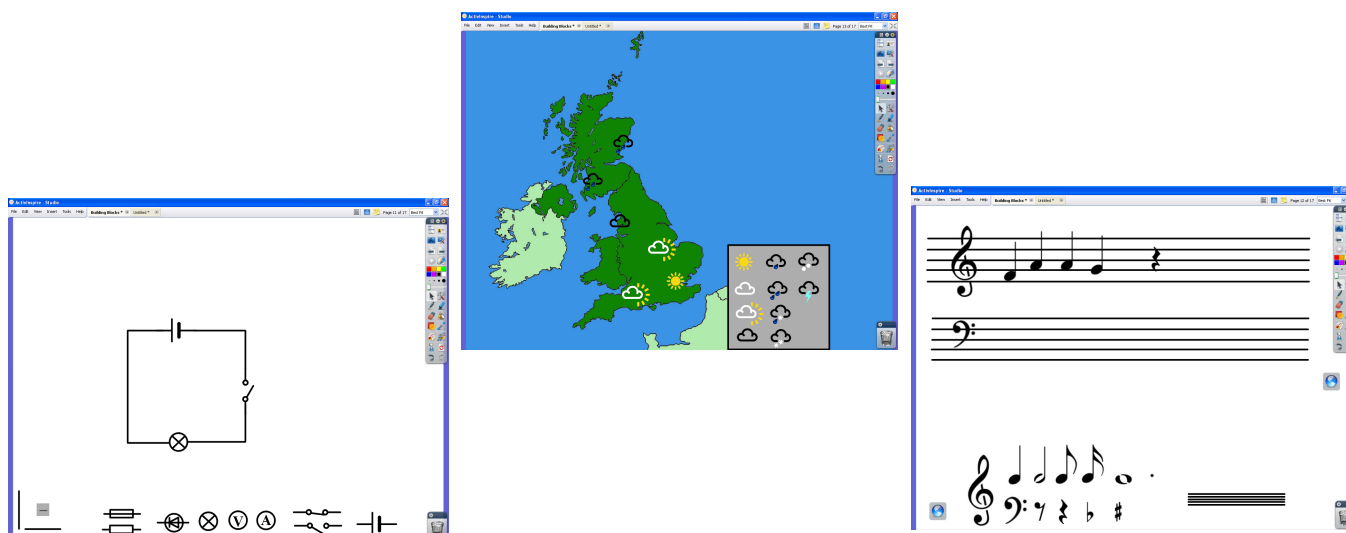
"Notelets"

Rearranging handwritten notes on the board can be awkward, and look a little untidy. This technique attempts to solve both problems. It uses **Properties**, which are covered in more detail in **Advanced Whiteboarding**.

Set Up

1. Create a Shape suitable for writing inside, like a square or rectangle.
2. Turn it into "Fuzzy Felt" with **Drag a Copy** (see above).
3. Open up the shape's **Properties**:

    a. Select the **Edit Menu** marquee handle   .
    b. Click on the top item, **Property Browser**.
       This opens the Property Browser (in the window where the Page Browser is displayed).
4. Find "Container" written on a blue background. *(Don't be put off by all the information here – it's covered in a later session.)*
5. Click the plus (+) sign next to it to open the Container section.
6. Find the property item labelled "Can Contain" – it should be the top item.
7. Click on the drop down list next to it and select "Anything". *(Initially, it most likely says, "Nothing".)*
8. You can now close the **Property Browser**.
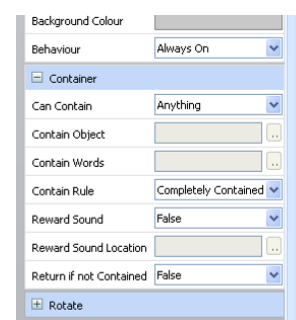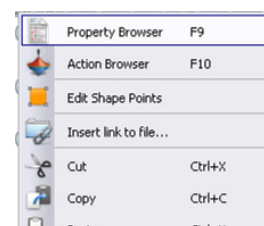
Usage

1. Drag a Copy to get a new copy.
2. Write on the shape, *making sure all the writing stays within the boundaries of the shape*.
3. Now, when you move the shape about, the writing will move with it, without you needing to use the "Group" button.

Notes

• Be sure to drag the shape and not the writing – it's possible to drag the writing outside of the shape by mistake.
• You can resize the notelet before writing on it – either change the "master copy" (which will affect all future copies), or just change one of the dragged copies.
• If any of your writing falls outside of the notelet, it will be left behind when you drag the shape.
• Don't write on the "master copy" and expect to be able to tear off like a normal post-it notepad; all your new copies will have the same writing on!
• Although you can **place typed** words onto a notelet, you cannot type straight onto one – the typing won't stick to the shape.

Applications

• Rearrange discussion notes.
• Use different coloured notes to record different types of information.
• Write terms of algebraic expressions on notelets and reorder them.
• Create a sequence of steps for a task / algorithm and mix them up, the correct ordered to be reassembled during a lesson.