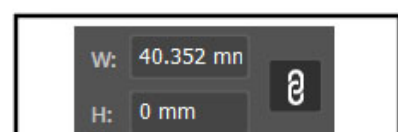
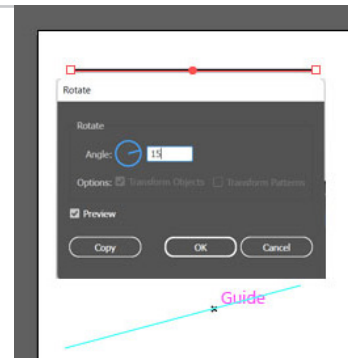
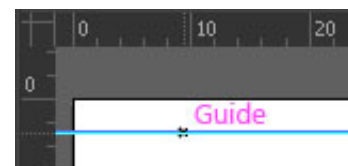
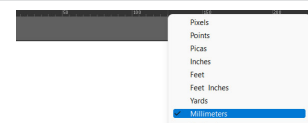
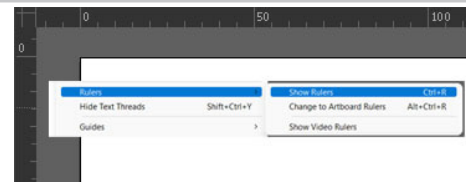
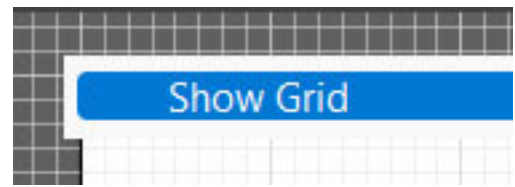


WORKSHEET 6

FURTHER TOOLS AND TIPS

GRIDS, GUIDES & MEASUREMENTS

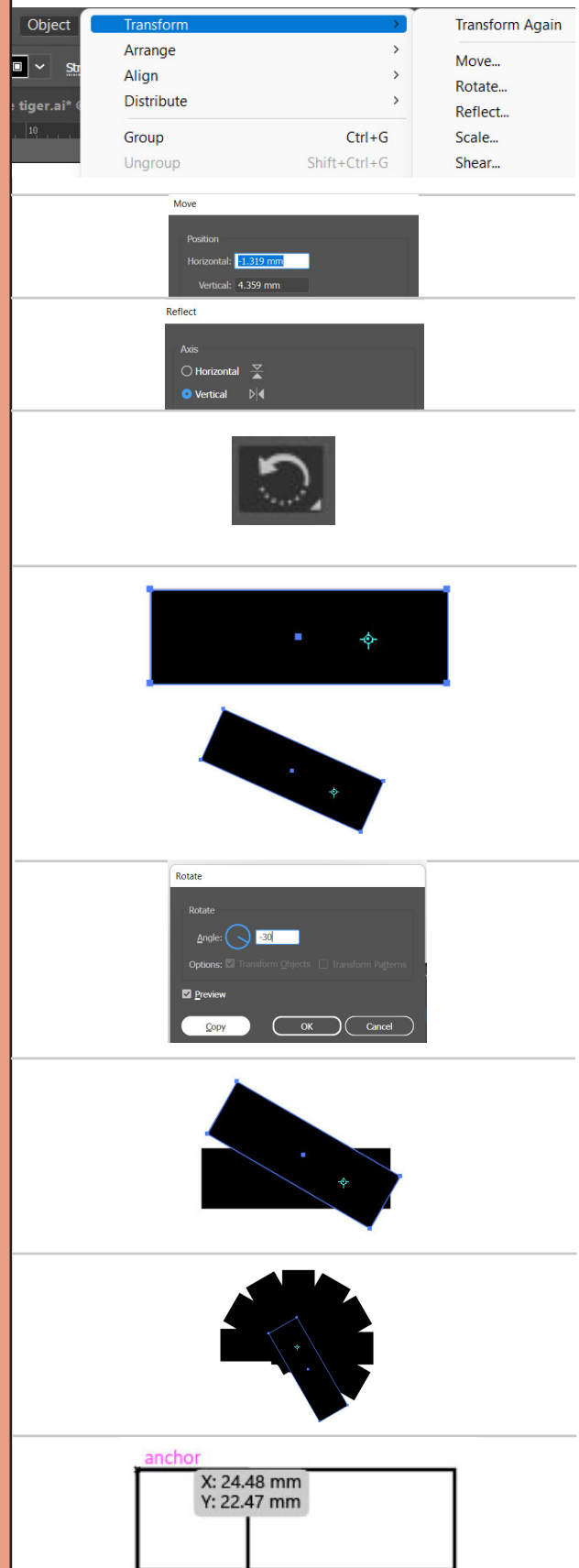
- * You can turn on grid view via the View menu, selecting "Show Grid" you can also select "Snap to Grid" so that your designs will snap to the grid points
- * Also in the View menu is Rulers where you can choose "Show Rulers" to make rulers visible at the top and side of your workspace
- * If at any point you need to change the units of these you can do it by right clicking on the ruler
- * You can click and drag from the rulers to create guidelines on your page, releasing when the line is in the right position
- * Holding shift while creating guidelines will snap them to units on the ruler
- * Dragging from the top left corner of the rulers while holding command will create two crossed guides
- * You can create your own guidelines for angles by drawing a line segment, using the Object menu to Transform and "Rotate" by exact degrees and then going to the View menu and selecting Guides "Make Guides" this turns your line into a guideline
- * The Measure tool does not snap to points so it is best to draw a line segment to measure your designs or see the properties pane



It is a good idea to create four guides on their own layer. This way you can easily turn them on and off using the eye visibility button

They can also be locked so that you don't accidentally move them while moving designs around your workspace

- * In the Object menu are Transform options, including Move, Rotate, Reflect, we talked about rotate in the last section
- * Move can be used to move your object precise measurements
- * Reflect can be used to mirror your object
- * As well as allowing you to drag and rotate using the selection tool Illustrator also has a Rotate Button
- * When you click on an object with the rotate button you will see blue crosshairs appear on your shape, this is the rotation point, you can click anywhere on your shape to move the centre of rotation and then click and drag to rotate
- * You can also press the option/alt key while clicking rotate to bring up a pop up box which will allow you to enter an exact angle
- * If in this popup you press "Copy" rather than okay then the shape will be duplicated, duplicating the rotation as well
- * To continue duplicating and incrementally rotating press Command and D on the keyboard
- * To snap anchors on two shapes together, press command then drag and move the shape by the anchor



Command + D is a really useful tool that is used to repeat the previous transformation. If you have moved a shape 1 cm left and 2cm down, command + D will move it the same distance again.

As you work with more shapes don't forget that you can combine shapes in groups and then treat them as a whole. Group is found in the Object menu or by right clicking

KEYBOARD SHORTCUTS

- * If you hover the mouse over the tools you will be able to see their keyboard shortcuts. Two really useful ones are V and A
- * V is the selection tool
- * A is the direct selection tool



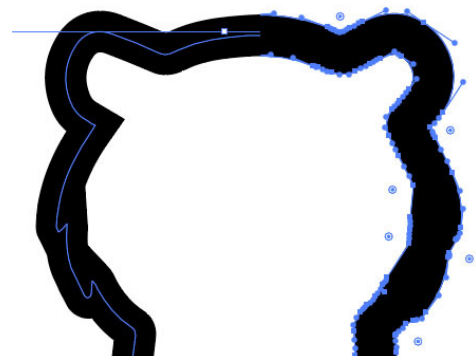
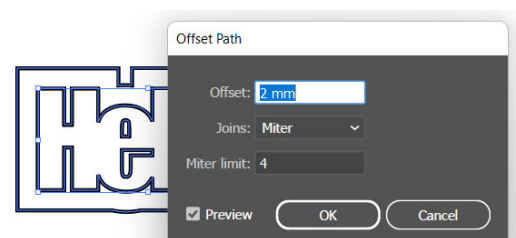
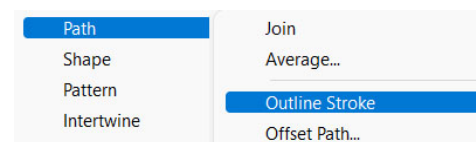
USING TEXT

- * When using Text, after typing select your text, go to the Object menu and click "Expand" this will turn your type into vectors with anchors and paths
- * With this you can move the letters next to each other and combine to make a laser cuttable shape
- * Or add a line underneath to join everything up



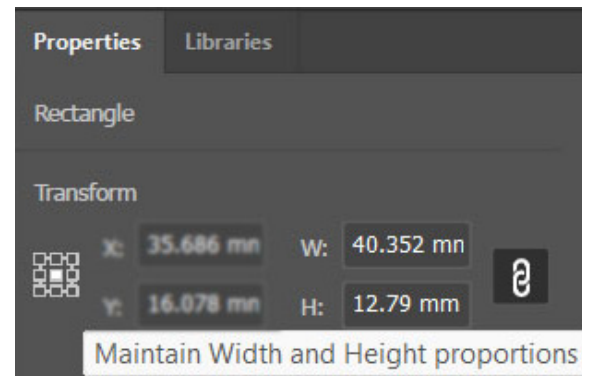
OFFSET & OUTLINE

- * In the Object menu under path there are two useful options Offset Path and Outline Stroke
- * Offset creates a path offset from your own by a defined distance, wither inside or outside
- * It can be used to create borders or cutlines around or within a design
- * Outline can be used in conjunction with stroke weight
- * If you increase the stroke weight your line will have and inside and an outside
- * Outline creates paths from both the inside and outside, turning the line into a shape



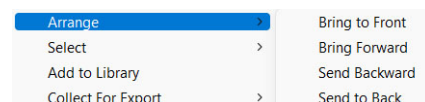
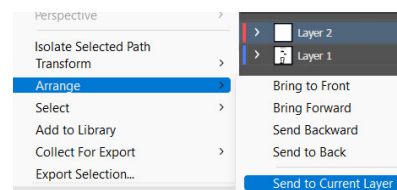
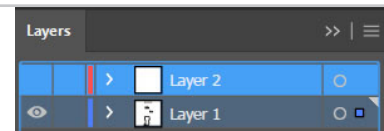
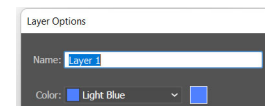
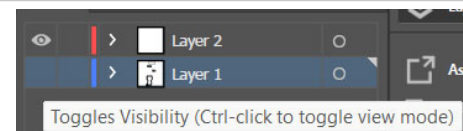
TRANSFORM PROPERTIES

- * Width and Height are shown in the Transform section of the Properties box on the right hand side. You can see exact measurements here and also make precise changes to the size of your shapes
- * The lock button next to the measurements will lock the proportions. So you can alter one side and the other will adjust accordingly



LAYERS & ARRANGING

- * It is really useful to organise things in Layers, such as having a Cut line layer, and engrave layer and a guidelines layer.
- * Layers can easily be hidden and shown by clicking the eye button
- * Double clicking the layer will allow you to rename it
- * Or double click the icon to change the identifying colour
- * You can change the order of layers by dragging them
- * To move an object to another layer select the object, select the target layer and right click. Go to Arrange and click "Send to Current Layer"
- * Also in the Arrange options you can re-order shapes within a layer



ARTBOARDS

- * Artboards are the white pages within your Illustrator Document, you can add and edit them from the artboard panel at the right hand side

