

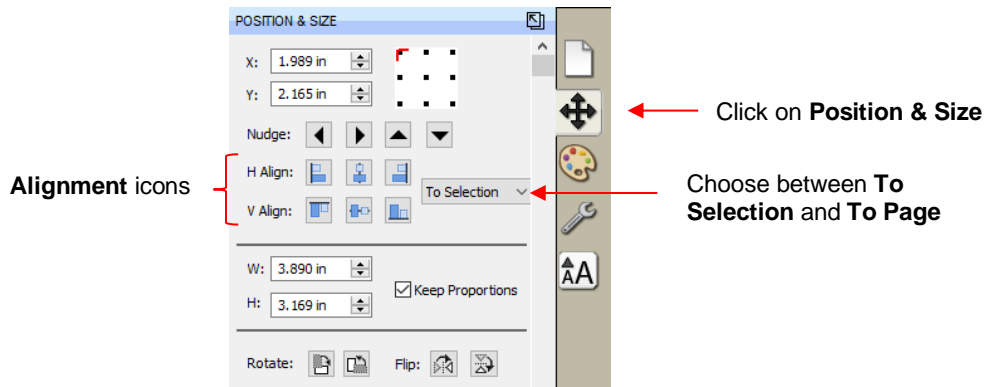
SCAL6 Align and Distribute Expanded Tutorial

- This tutorial contains some of the same instructions presented in the SCAL6 User Manual plus complete illustrations of each align and distribute option.

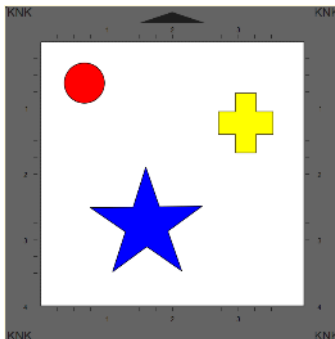
3.18 Alignment

- There are fourteen functions used to align shapes, seven of them with respect to the **Cutting Mat** (referred to as **Page**) and another seven with respect to one another (referred to as **Selection**). After selecting two or more shapes, these functions can be accessed using either of the following:

- ◇ Go to **Object>Alignment**
- ◇ Click on an alignment icon from the **Position & Size** window on the **Properties Panel**:






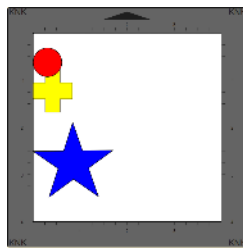
- The following three shapes, in their current relative positions, will be used to illustrate what happens when each alignment function is applied. Note that a small custom mat was created to facilitate screenshots:



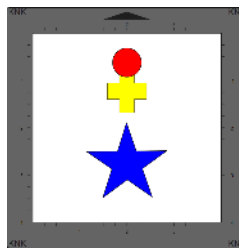
3.18.1 Align to Page

- Make sure the alignment mode is set to **Align to Page**. To do this, either:
 - ◇ Go to **Object>Alignment** and make sure **Align to Page** is checked
 - ◇ Select **To Page** on the **Position & Size** panel
- With the shapes selected, the horizontal alignment options are:

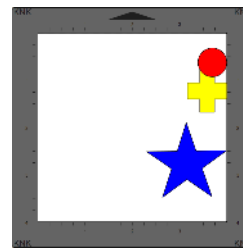
- ◇ **Align Left** aligns shapes along the left side of the **Cutting Mat**. 
- ◇ **Align Horizontal Center** aligns shapes through the center of the **Cutting Mat**. 
- ◇ **Align Right** aligns shapes along the right side of the right side of the **Cutting Mat**. 



Align Left




Align Horizontal Center




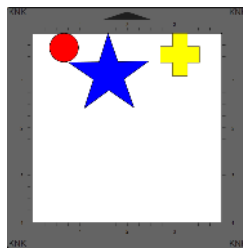
Align Right

- With the shapes selected, the vertical alignment options are:

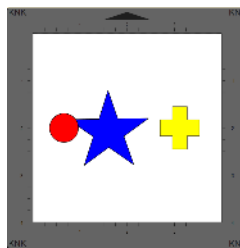
- ◇ **Align Top** aligns shapes along the top side of the **Cutting Mat**. 

- ◇ **Align Vertical Center** aligns shapes through the center of the **Cutting Mat**. 

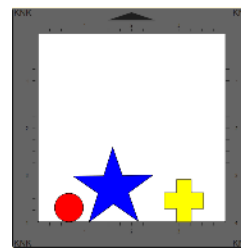
- ◇ **Align Bottom** aligns shapes along the bottom side of the **Cutting Mat**. 



Align Top



Align Vertical Center

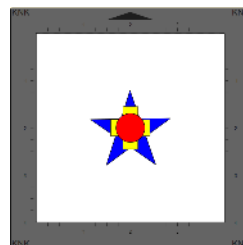


Align Bottom

- To center all three shapes in the middle of the **Cutting Mat**, use either:

- ◇ A combination of **Align Horizontal Center** and **Align Vertical Center**:  

- ◇ Go to **Object>Alignment>Align Centers**



Align Centers

3.18.2 Align to Selection

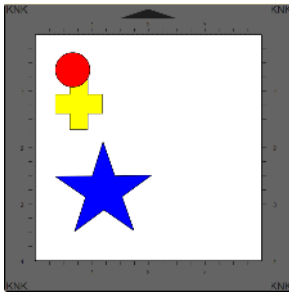
- First, make sure the alignment mode is set to **Align to Selection**. This is done by either making sure **To Selection** is chosen on the **Position & Size** panel or by going to **Object>Alignment** and making sure **Align to Selection** is checked.

- With the shapes selected, the horizontal alignment options are:

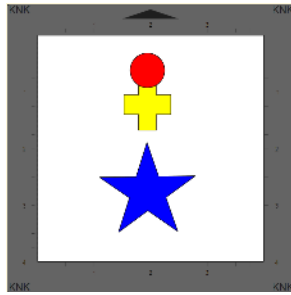
- ◇ **Align Left** aligns shapes along the left side of the leftmost shape of the group. 

- ◇ **Align Horizontal Center** aligns shapes to a vertical axis through the center. 

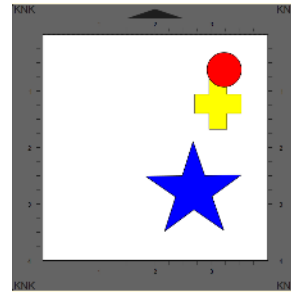
- ◇ **Align Right** aligns shapes along the right side of the rightmost shape of the group. 



Align Left





Align Horizontal Center



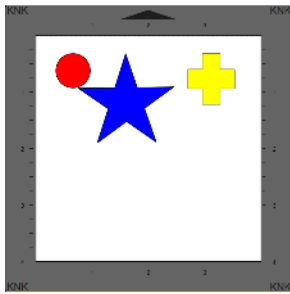
Align Right

- With the shapes selected, the vertical alignment options are:

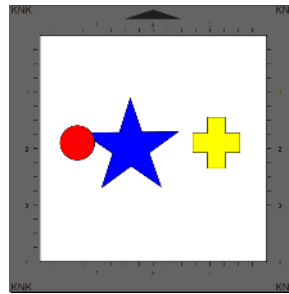
- ◇ **Align Top** aligns shapes along the top side of the uppermost shape of the group. 

- ◇ **Align Vertical Center** aligns shapes to a horizontal axis through the center. 

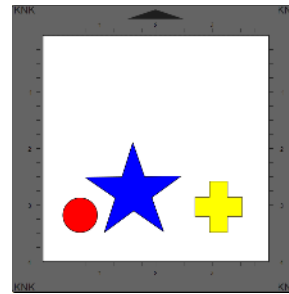
- ◇ **Align Bottom** aligns shapes along the bottom side of the bottommost shape of the group. 



Align Top



Align Vertical Center

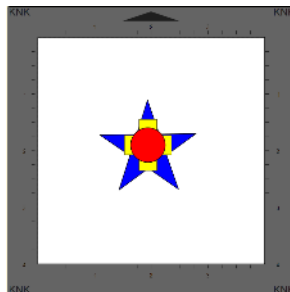


Align Bottom

- To center all three shapes, use either:

- ◇ A combination of **Align Horizontal Center** and **Align Vertical Center**:  

- ◇ Go to **Object>Alignment>Align Centers**



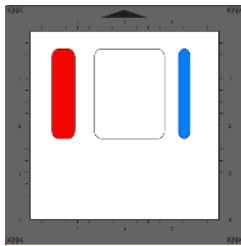
Align Centers

3.19 Distribute

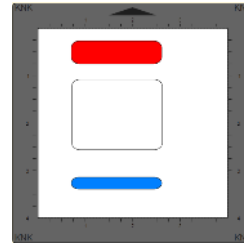
- The **Distribute** function rearranges the spacing between shapes. Similar to the **Alignment** function, you can **Distribute to Page (Cutting Mat)** or you can **Distribute to Selection** (selected shapes). There's also a third, called **Distribute to Selection Below**, which distributes based on whatever shape is positioned at the

lowest level on the **Layers Panel** and its difference in size relative to the outermost shape in the opposite direction of the distribute option (and yes, this is confusing, but will be explained in *Section 3.19.3*)

- After selecting the shapes, these functions can be accessed by going to **Object>Distribute**.
- The following three shapes, in their current relative positions, will be used to illustrate what happens with each distribute function when **Distribute to Selection** or **Distribute to Page** is applied. Note that a small custom mat was created to facilitate screenshots:



Will be used for horizontal distribute examples

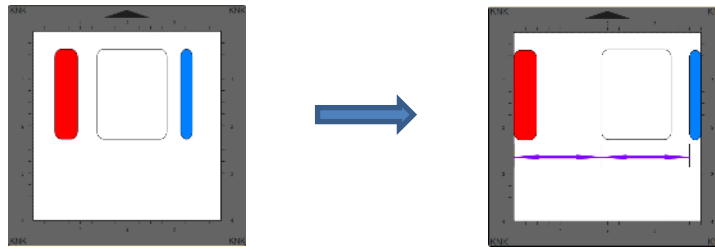


Will be used for vertical distribute examples

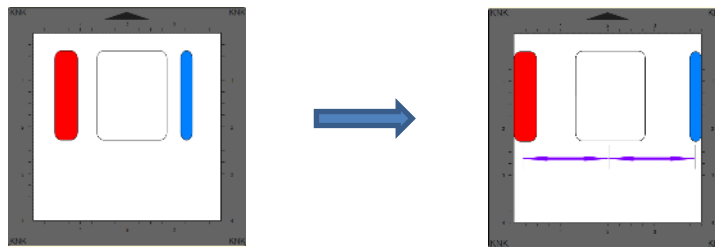
3.19.1 Distribute to Page

- Select the shapes and go to **Object>Distribute** and then make sure the **Distribute to Page** option is checked. In this mode, the two outermost shapes will align with the **Cutting Mat** and then other shapes will be evenly spaced from one side of the mat to the other, according to which additional option is chosen. All options, with screenshots, are presented. The purple arrows indicate equal spacing.
- With the shapes selected, the horizontal distribute options are:

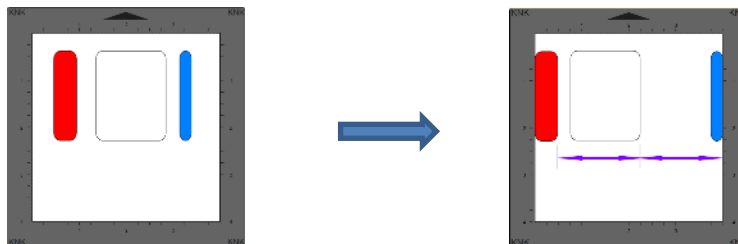
- ◇ **Distribute Left:** spaces shapes so that the left sides of each shape are the same distance apart:



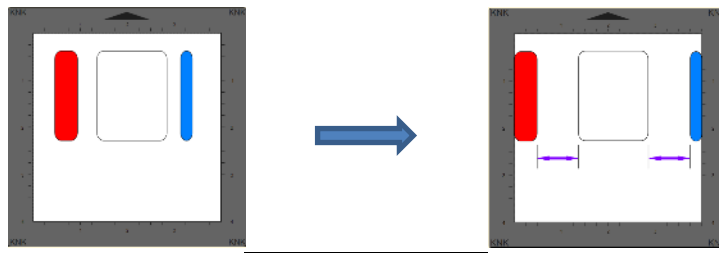
- ◇ **Distribute Center Horizontally:** spaces shapes so that the centers of each shape are the same distance apart:



- ◇ **Distribute Right:** spaces shapes so that the right sides of each shape are the same distance apart:

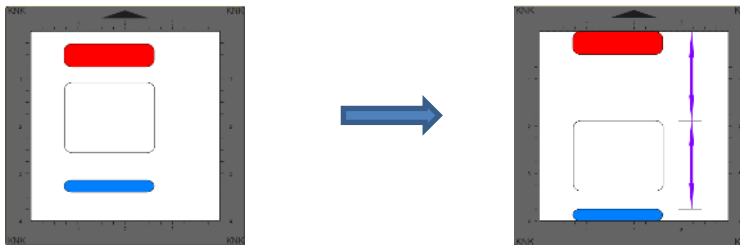


- ◇ **Distribute Space Horizontally:** spaces shapes so that the gaps between the shapes are the same.

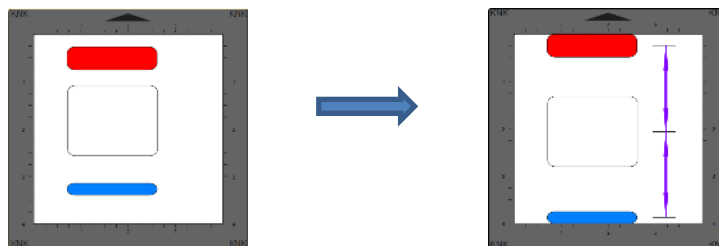


- With the shapes selected, the vertical distribute options are:

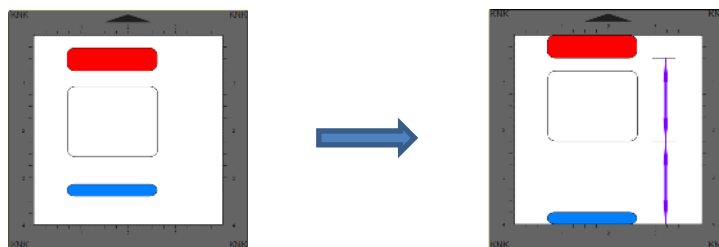
◇ **Distribute Top:** spaces shapes so that the top sides of each shape are the same distance apart:



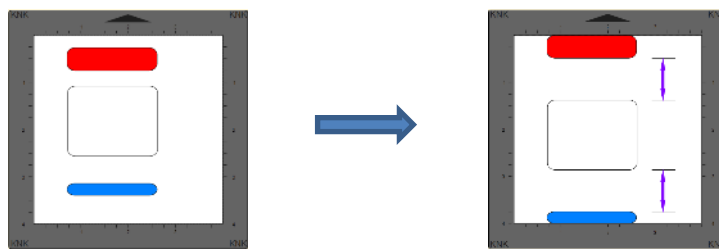
◇ **Distribute Center Vertically:** spaces shapes so that the centers of each shape are the same distance apart:



◇ **Distribute Bottom:** spaces shapes so that the bottom sides of each shape are the same distance apart:



◇ **Distribute Space Vertically:** spaces shapes so that the gaps between the shapes are the same.



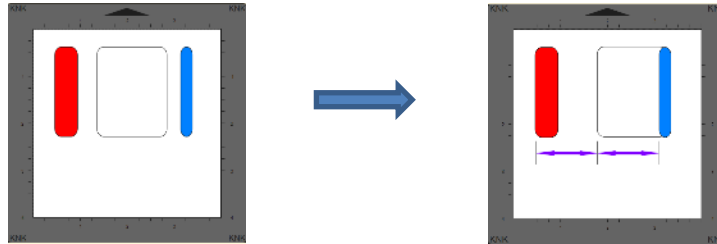
3.19.2 Distribute to Selection

- Select the shapes and go to **Object>Distribute** and then make sure **Distribute to Selection** is checked. In this mode, the two outermost shapes will remain in position and then other shapes will be evenly spaced,

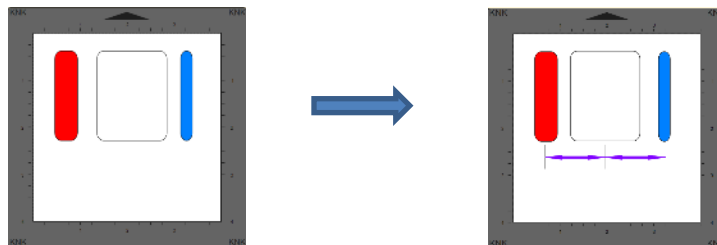
according to which additional option is chosen. All options, with screenshots, are presented. Again, the purple arrows indicate equal spacing.

- With the shapes selected, the horizontal distribute options are:

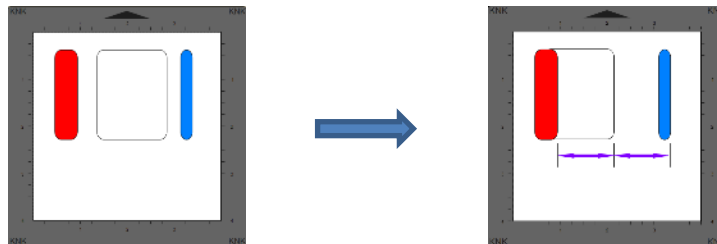
◇ **Distribute Left:** spaces shapes so that the left sides of each shape are the same distance apart:



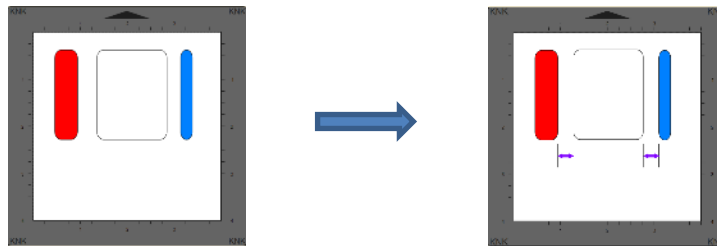
◇ **Distribute Center Horizontally:** spaces shapes so that the centers of each shape are the same distance apart:



◇ **Distribute Right:** spaces shapes so that the right sides of each shape are the same distance apart:

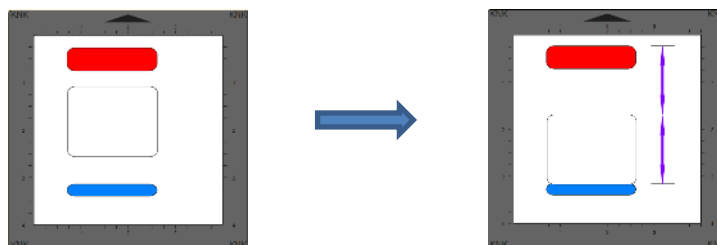


◇ **Distribute Space Horizontally:** spaces shapes so that the gaps between the shapes are the same.

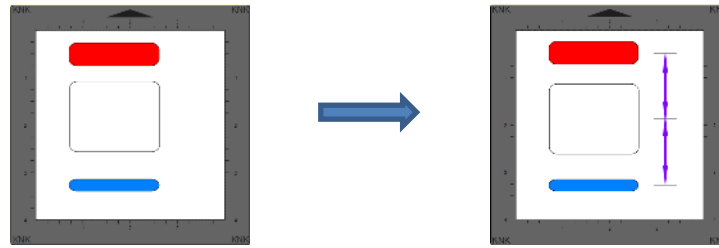


- With the shapes selected, the vertical distribute options are:

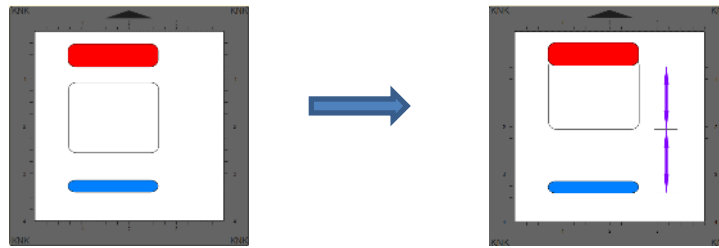
◇ **Distribute Top:** spaces shapes so that the top sides of each shape are the same distance apart:



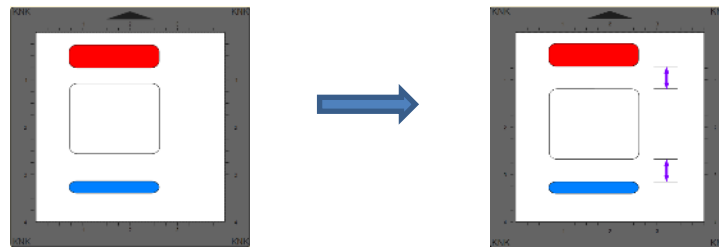
- ◇ **Distribute Center Vertically:** spaces shapes so that the centers of each shape are the same distance apart:



- ◇ **Distribute Bottom:** spaces shapes so that the bottom sides of each shape are the same distance apart:



- ◇ **Distribute Space Vertically:** spaces shapes so that the gaps between the shapes are the same.

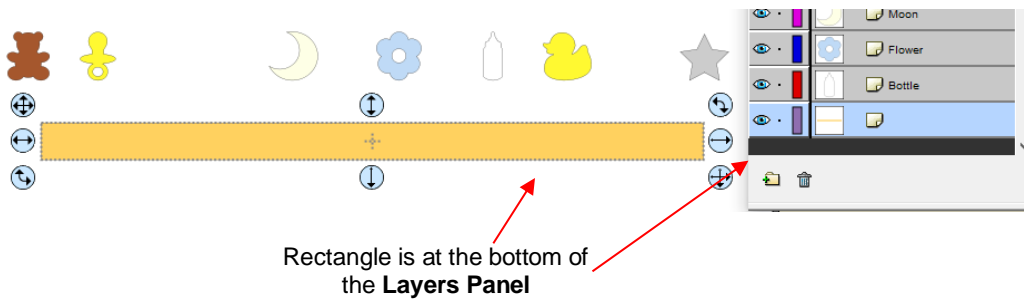


3.19.3 Distribute to Selection Below

- This option is used to evenly distribute several shapes relative to another shape (called the **Reference Shape**) that needs to be positioned at the bottom of the **Layers Panel** (thus the term “**Selection Below**”).
 - ◇ It will also move the shapes at the furthest ends of the selection to align with the bounding edges of this **Reference Shape** and then the distribution will be based on whichever menu option you’ve chosen, just like previously shown in *Section 3.19*.
 - ◇ Thus, you always need a minimum of 4 shapes so that one can be the **Reference Shape** and the other 3 can be spaced as desired.
- In the following example, several shapes are to be spaced along a rectangle for the purpose of making a welded border:



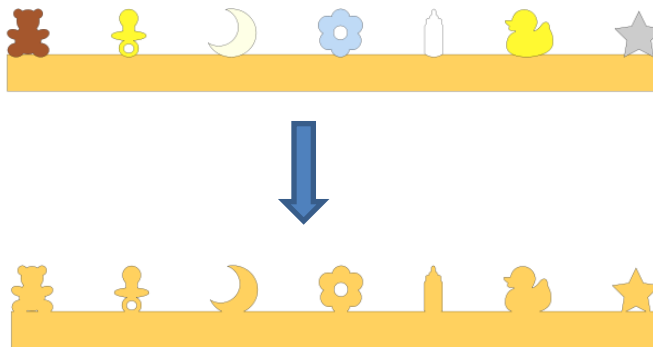
- Make sure the rectangle is the bottommost layer on the **Layers Panel**:



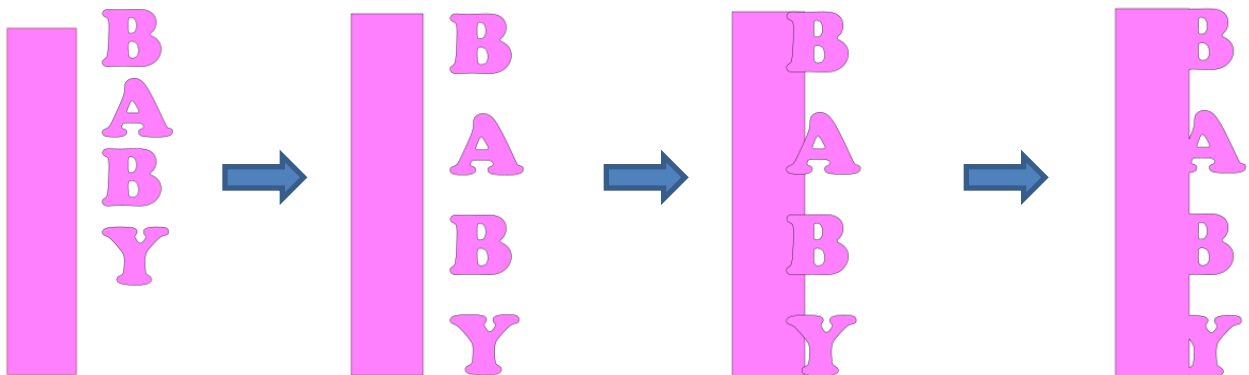
- Select all of the shapes and go to **Object>Distribute** and then make sure **Distribute to Selection Below** is checked. Go back to **Object>Distribute** and select one of the options in the horizontal section. In this example, **Distribute Space Horizontally** will be selected. The result is that the leftmost shape (the teddy bear) aligns with the left side of the rectangle, the rightmost shape (the star) aligns with the right side of the rectangle, and the remaining shapes are positioned so that the same amount of space is between each one:



- The shapes can now be moved down to overlap the rectangle and everything selected and welded (using **Path>Union**):



- The same technique could be used to distribute letters along a rectangle in a similar manner:



Individual letters and a rectangle are created. The rectangle is the bottommost layer.

Using **Distribute to Selection Below** and the **Distribute Space Vertically** option, the letters are equally spaced and aligned with the top and bottom of the rectangle. Then moved over to overlap the rectangle.

Path>Union is applied.