# REPEAT AND ALIGN

## PR 486: INTRO TO DIGITAL DESIGN TOOLS

## **REPEAT AND ALIGN**

You've learned that you can use the option + alt key to duplicate a shape and drop it wherever you want on your canvas. But what if you want to create grids of many shapes or do repeats?

You can do these things using the alignment tools, or you can automate the process a little more with the Repeat tools.

**NOTE:** The main difference is that if you make your grid manually and align it with the alignment tools, you can change each item individually. With the Repeat tools, changing one item changes *all* the items.

Say you've drawn a circle and duplicated them and haphazardly placed them on your canvas, like this:



You can align these circles horizontally and vertically using the align panel. Go to Window > Align to make the panel visible (it's usually paired with the Pathfinder tool).

It looks like this:



You can do two things here: Align Objects (the top) and Distribute Objects (the middle). You an ignore the bottom icons.

Distribute Objects allows you to apply even spacing in between all your objects.

With both Align and Distribute, you have the choice of aligning your objects along a horizontal plane or a vertical plane (you can see this visually in the icons).

Simply select all the objects you wish to align – choose one row or column for best results – and apply the alignment and/or distribution you like until you get the result you want.

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## **REPEATING OBJECTS**

If you'd like a more automated way to arrange your objects, use the Repeat function. It's under Object > Repeat. You would usually use the Radial or Grid options. (For Mirror, you can go to Object > Transform > Reflect unless you needed to mirror many of the same object.)

To use the repeat, you only need to draw *one* shape. Remember that if you use this tool, if you change the appearance of one object (fill or stroke), all of them will change appearance.

Radial is for putting objects in a circular shape (think the numbers on a clock, or the stones in Stonehenge). To do this, draw a single shape and then select Object > Repeat > Radial. You'll get something like this:



Your objects may overlap! You can fix this! Look for these options in the top bar: Radial Repeat S G 3.25 in

The first number is the number of objects in the repeat (so in this case, 8 stars). The second number is the radius of the entire circle. You may need to make this number bigger so your objects start to separate.

You may notice several arrows and handles in a radial repeat:

- Handles
- Radius
- "Scissor"
- Number of Objects



Handles work the same way they would with a regular shape: You can stretch, bend, resize the entire radius of shapes (this would make your individual objects smaller or larger).



Radius enables you to make the radius of the entire circle larger. Drag outward to make it larger, drag inward to make it smaller. This will make your objects overlap (in small spaces) or space them out (if your radius is large).



The Number of Objects arrows change the number of objects in the repeat. Drag up to increase, drag down to decrease.



The "scissor" cuts out objects from the radius. Let's say you wanted things arranged in a circle but wanted to cut out two of the stars. Drag either arrow to the left or right until an object disappears and you can "cut" it out that way.



If you'd like your objects in an old-fashioned grid, select Object > Repeat > Grid.



Just as with radial, you will have some options in the top bar, but they don't control the number of objects in the grid. Instead, they control the space between your objects, vertically (the first number) and horizontally (the second number). Grid Repeat 前(0.1389)前 唱(0.1389)前

You'll notice arrows on your grid too, just like with radial. They're a little easier to work with.



The oval handles serve a special purpose: They expand the grid area to reveal more objects! Once you set your spacing, slide the oval handles to reveal more (or less) objects until you have the exact number you want.

