









Codeblocks Comments

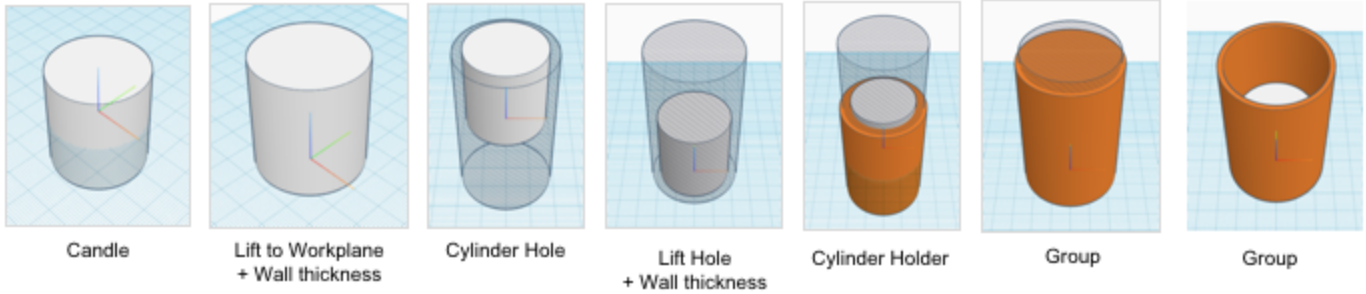
```
Create New Object quatrefoil
// This created a new object and named it. Naming it is important so that I can find it later in my blue "variables" blocks near the bottom of the shapes panel.
Add    < Radius 5 H 10 Sides 64 edge 0 Edge Steps 1
// This created a cylinder at the center of the workplane and changed its size.
Move: X: 0 Y: -50 Z: 0
// This moved the cylinder forward 50 millimeters from the center of the workplane.
Rotate around Axis x by 90 Degrees from Pivot
// This flipped the cylinder so that it is facing front.
Move: X: 0 Y: 25 Z: 9
// This moved the cylinder backward 25 millimeters and also positioned it 9 millimeters above the workplane.
Scale: X: .5 Y: 1 Z: 1
// This made the width of the cylinder half the size of the length and the depth. Its face is now an oval!
Copy  
// This duplicated the cylinder, but you may not be able to see it because it is in the same position as the original shape.
Rotate around Axis y by 90 Degrees from Pivot
// This rotated the copy of the cylinder by 90 degrees, making it look like a more interesting shape. It's actually called a quatrefoil!
```

```
Create New Object circle pattern
// This created a new object and named it.
Create Variable angle 30
// This is creating a placeholder for a piece of information that can change. In this case, the angle will change by 30 degrees at the end of each loop.
Repeat 12 Times
// This is starting a loop, which will repeat 12 times.
Add Copy of Object quatrefoil  
// This is adding a copy of the quatrefoil in the same position as the original one.
Rotate around Axis z by angle Degrees from Pivot X: 0 Y: 0 Z: 0
// This is shifting the position of the copy by rotating around the pivot point (set at the center of the workplane.)
Change angle by 30
// This is adding 30 degrees to the variable so that next time the loop repeats, the copy of the shape will rotate an additional 30 degrees from the original quatrefoil.
Delete Object quatrefoil
// This deleted the original quatrefoil because it is not needed anymore; however it knows it did an awesome job and everyone appreciates its participation in this design. Way to go, Quatrefoil!
```

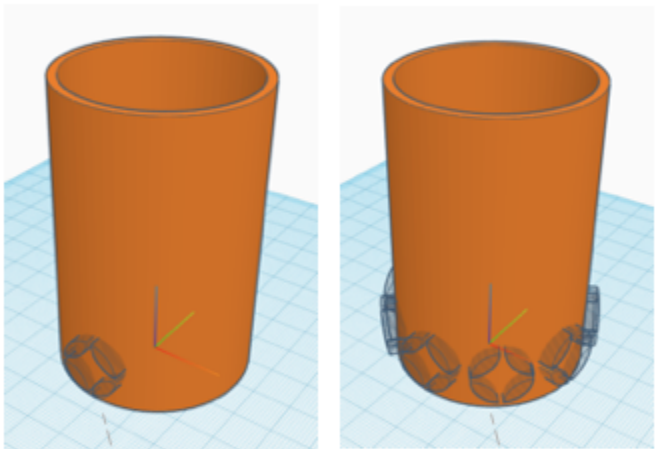
```
Create New Object rectangle pattern
// This created a new object and named it.
Create Variable distance 20
// This is creating a placeholder for a piece of information that can change. In this case, the distance will change by 20 millimeters at the end of each loop.
Repeat 3 Times
// This is starting a loop, which will repeat three times. It only needs to repeat three times to make a pattern with four rows because the base is already in place.
Add Copy of Object circle pattern  
// This is adding a copy of the circle pattern in the same position as the original.
Move: X: 0 Y: 0 Z: distance
// This is lifting the newest copy of the circle pattern up the Z axis by the distance determined by the variable.
Change distance by 20
// This is adding an additional 20 millimeters to the distance of the variable, so that each new copy that lifts up from the position of the original circle pattern is spaced 20 millimeters above the last copy.
// If you made it to this last comment, you deserve the Quatrefoil Badge of Honor for perseverance.
```

Tea Light Notes

Codeblocks Build

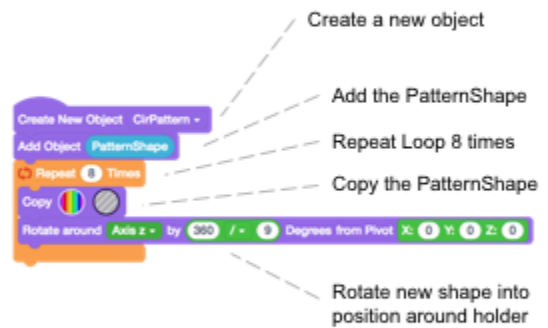


Circular Pattern



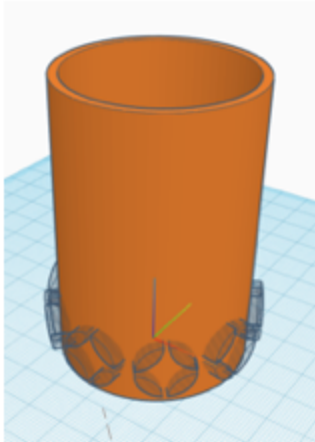
PatternShape

Circular Pattern

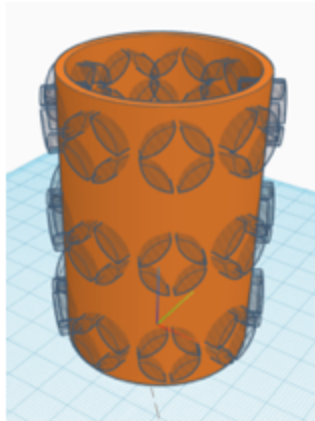


Tea Light Notes

Rectangular Pattern



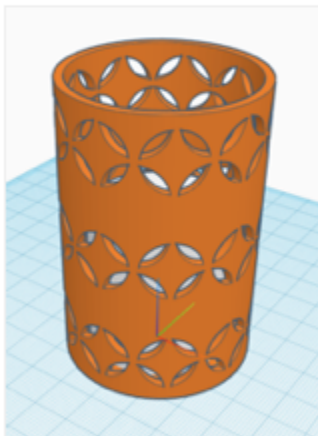
Circular Pattern



Rectangular Pattern



Create the Tea Light Holder



Complete tea light holder

