Your task today is to make a "key" in Gravit. By key I mean two shapes which fit together like a key. Here is a simple example:


Key shapes apart


Key shapes put together

How to do this? Here are the steps: (and here is a video link if you prefer to see how to do it.)

1. Create a new Gravit project (US Letter - Portrait, $8.5 \times 11$ inches).
2. Make a reasonably large circle (maybe 3 inches or so across). Duplicate it, put one on each side of the paper like this:
3. Create the key pattern using at least three rectangles. The pattern must be made of rectangles that vary in their horizontal arrangement and size. Here are good examples and a bad example. You only need to make one arrangement of these rectangles, I'm showing you a few examples. Start by making one rectangle. Then duplicate it twice, and make each copy a different height. Then drag them around to look something like one of these two good examples:


Good example


Another good example

This one is bad, see how two of the rectangles are more oriented up and down?
4. Select just the rectangles and use the Create Compound Shape > Union function to combined them. Click on the Convert to Path button to make them a single path.
(continued on next page)
5. Drag the "key" over the right-hand circle so that the shapes overlap, something like this:

6. Select the key and the circle and choose the Create Compound Shape > Union function. Then convert the Path. You now have a key object. Next we will remove the key shape from the other circle.
7. Duplicate this circle key thing. Place a copy overlapping the left hand circle. Your situation should look something like this:


Notice the copy of the key shape below, you have to have a copy of it like that.
8. Select the top two shapes (the left circle and one of the key shapes) and choose "Align Middle" to get them aligned. Then choose Create Compound Shape > Subtract. You should get something like this:

9. Line up your pieces so they are next to each other but not overlapping. Use the Align Middle button. Your situation should look like this:

10. Lastly, turn off the fill and turn on the border.
11. Save your project as "Gravit Key" and then your name. Create a Share link, turn that in for the Google Classroom. You're done! See you next Zoom class.

If you need help, here is a video where I do the whole thing.

