|  |  | **Activity Guide: Circle-Triangle-Square** |  |
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# Instructions

Given 3 places to work with, make as many *unique* patterns as you can using only circles, triangles and squares.

The diagram on the right shows a few examples of some 3-place patterns.

*NOTE: Order matters, so, for example: Circle-Triangle-Square is a different pattern than Square-Circle-Triangle, even though both have one of each shape.*

# Challenge 1 -F**ind all of the 3-place patterns**

**Record** all of the unique 3-place patterns you can find in the template started below.

***Suggestion:*** *think about trying to find the patterns in an organized or systematic way, rather than just randomly.*

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# Challenge 2 - m**ake a** system for generating all t**he** patterns

Now that you’ve listed out all of the 3-place patterns of circles, triangles, and squares, let’s put them in a systematic order. *You can use any system you like, as long as you create and follow a clear set of rules for getting from one line to the next.*

**Suggestion:** Use the space below to reorder the patterns on the other side of the page using a consistent system. Number each line to make sure you have them all.

**Jot down the rules of your system below.**

***Suggestion****: to test your rules, have someone follow them to see if they can recreate your organized list above.*