Illustrator: Pattern

1. Pattern
    a. Make a single shape
    b. Drag it to the swatch panel - it's now a pattern swatch
    c. Double click the pattern swatch to open Pattern Options
        i. Experiment with tile type, brick offset and height/width
    d. Note that Color of patterns are fixed, so keep the elements you used to make a pattern on a separate layer, so you can make versions of that pattern with different colors as needed.
    e. To rotate the fill pattern within a shape:
        i. Select the shape
        ii. Double click the Rotate Tool
            1. Check Preview
            2. Check Transform Patterns
            3. Uncheck Transform Objects
    f. To change the scale of the pattern within a shape:
        i. Select the shape
        ii. Double click the Scale Tool
            1. Check Preview
            2. Check Transform Patterns
            3. Uncheck Transform Objects
    g. To move pattern within in the shape:
        i. Hold tild key (~), it's under the escape button, and drag with the Selection Tool
    h. Complex repeating shape
        i. Set Grid
        ii. Shape tool > make a square, lock it
        iii. Create a pattern within that square that will repeat when tiled
            1. Use a custom brush to make shapes that go beyond the square
            2. Object > Path > Outline Stroke
            3. Object > Path > Simplify

4. Put rectangle layer on top

5. Pathfinder > divide

6. Object > Ungroup

7. Select the parts of your pattern outside the square, and move them to opposite side of the square, so they repeat

iv. Group your pattern elements, and drag them to the swatch panel to create a pattern swatch

v. NOTE: within the Pattern Options Panel, there is a Pattern Tile Tool, which will do some of the above steps for you and may save time for complex patterns. Either way, you have to design a pattern that repeats well.

2. Skewing a Shape with Pattern Fill

a. Illustrator Preferences > General > Transform Pattern Tiles (check)

b. Object > Envelope Distort > Envelope Options > Distort Pattern Tiles (check)

c. Select object to be skewed

d. Object > Envelope Distort > Make with Mesh > 1 column & 1 row > OK

e. Select object, open Free Transform Tool

i. Try Free Distort first

f. Start with another simple object and experiment with additional columns and rows under Object > Envelope Distort > Make with Mesh