How to Fold a

Basic Origami

Triangular Tessellation
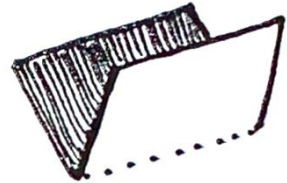

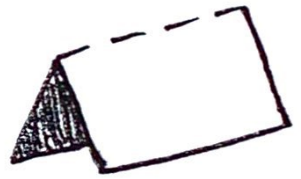Stella Moon

Basic Folds

· · · · · · · · · · · · · · · Valley Fold

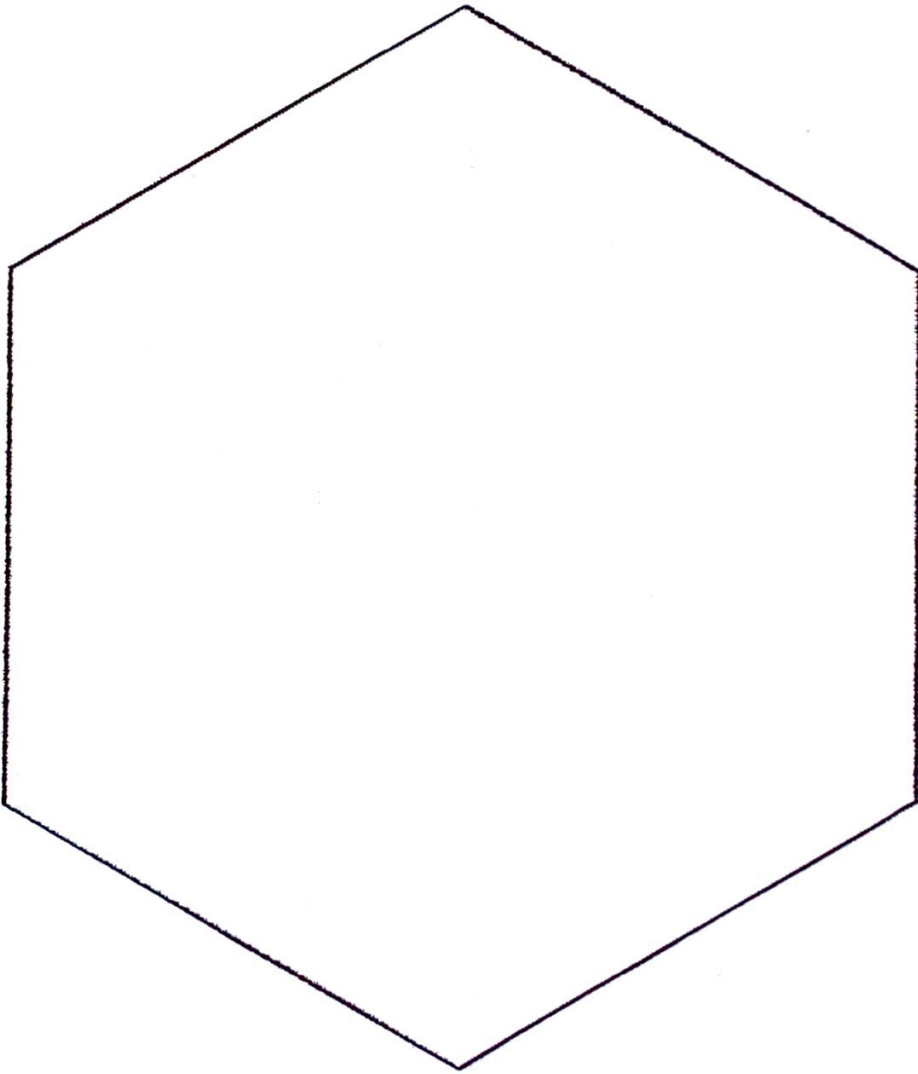- - - - - - - - - - - - Mountain Fold

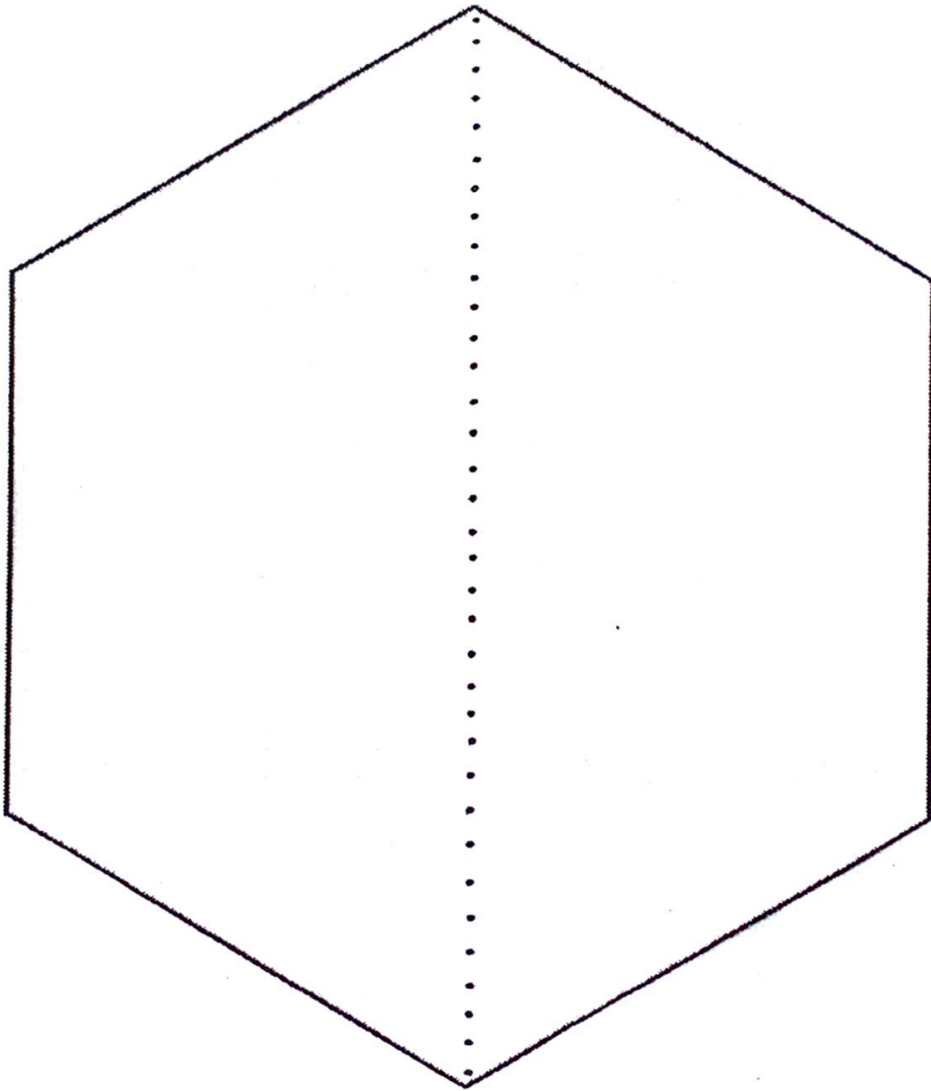——————————— Solid line indicates already folded crease
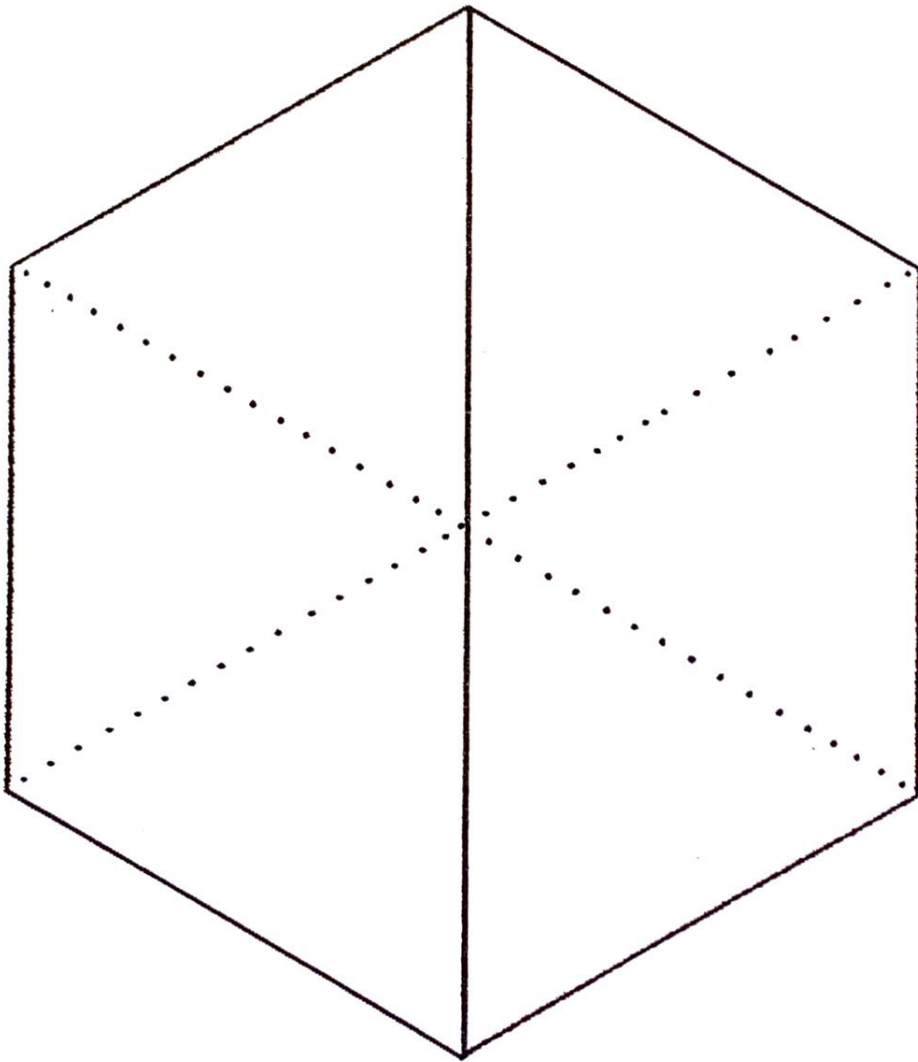
Fold from edge to edge

1. Begin with a hexagonal sheet of paper.
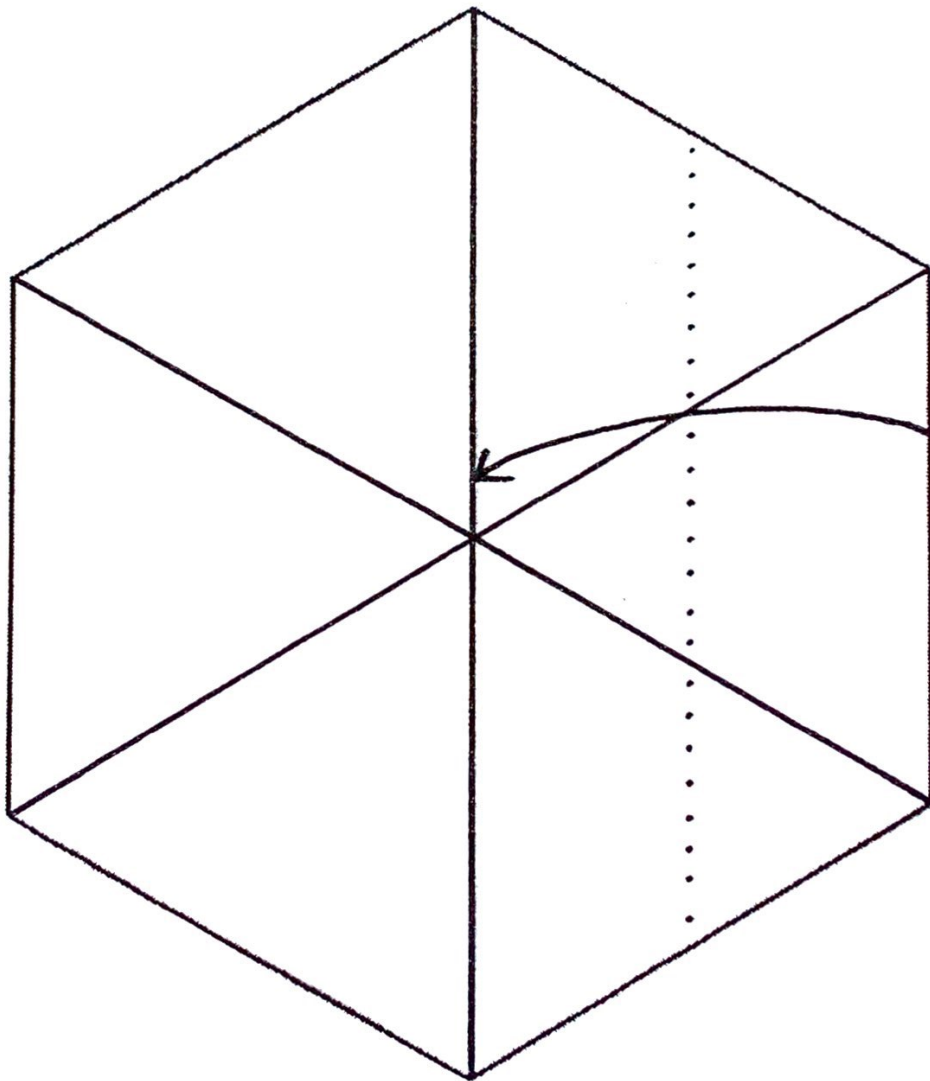Any size of paper will work.

2. Fold in half from one vertex to the opposite then unfold.
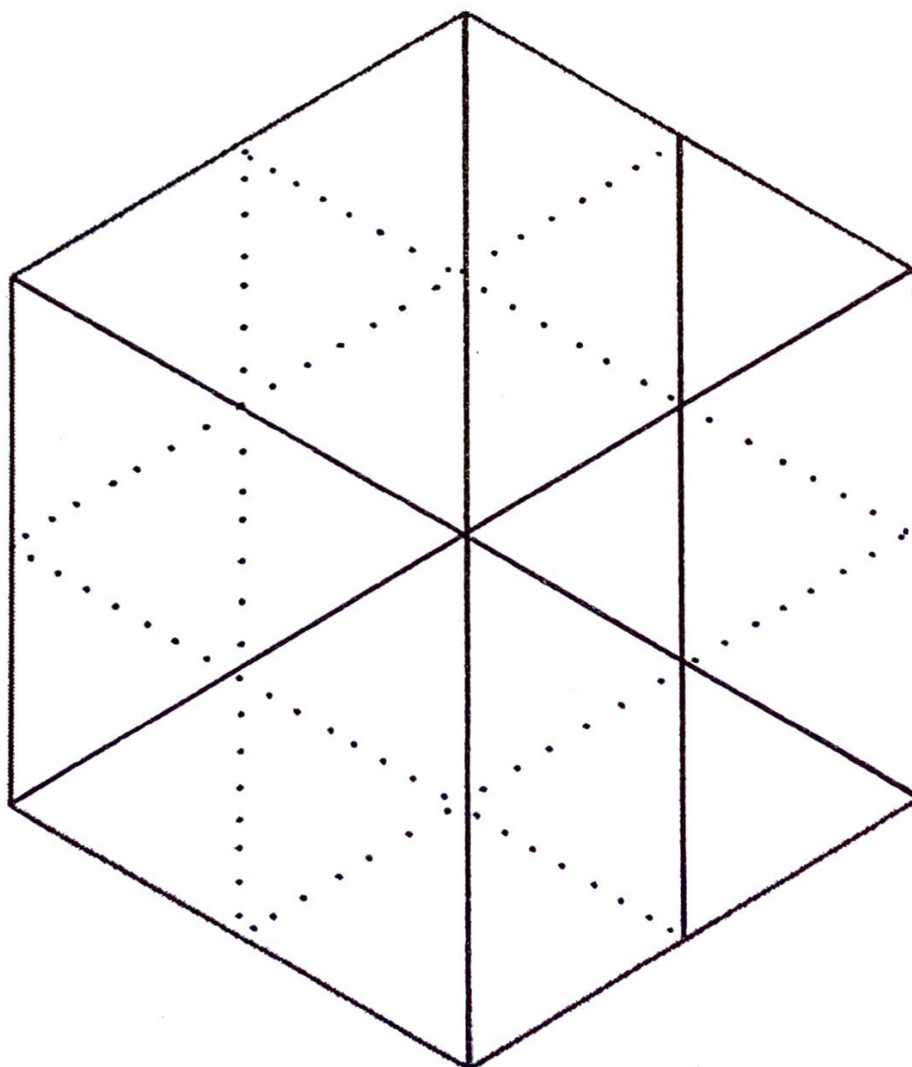
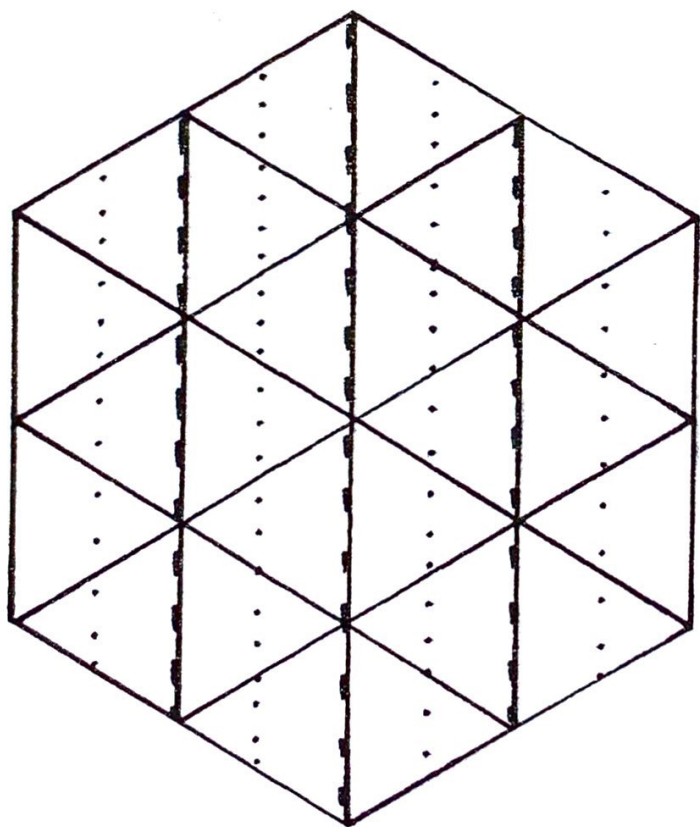3. Repeat step 2 for the other two vertex-to-vertex diagonals.

4. Fold one edge to the center line then unfold.
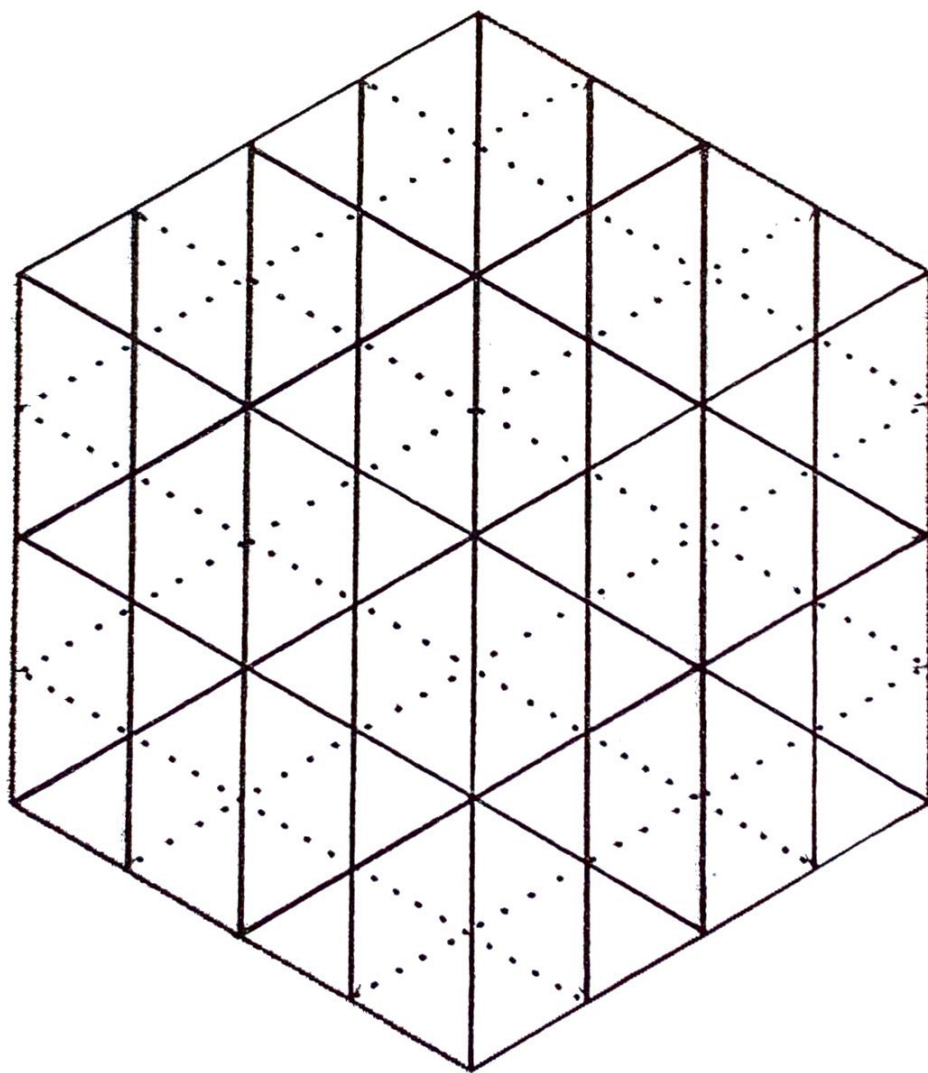
5. Repeat step 4 for the other five edges.

6. Continue to bisect each section by folding each line to its adjacent line, creating a fan-like pattern. Then unfold all folds.
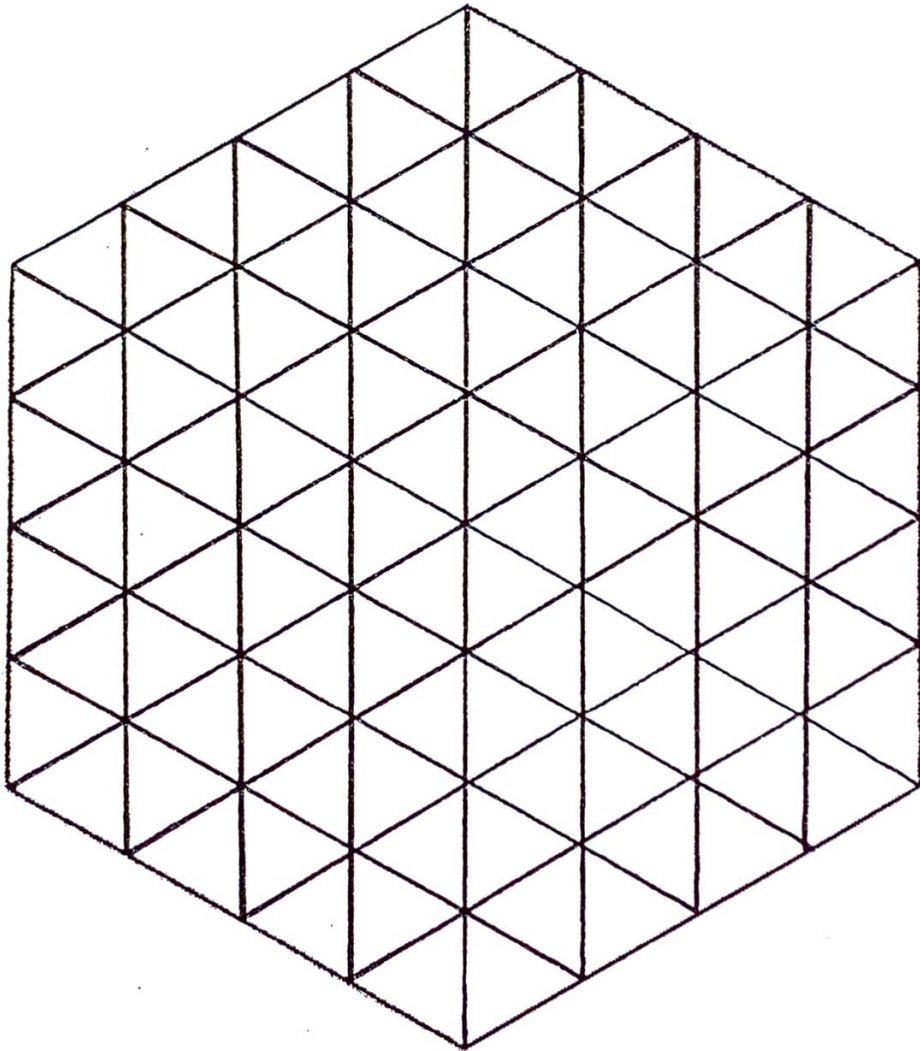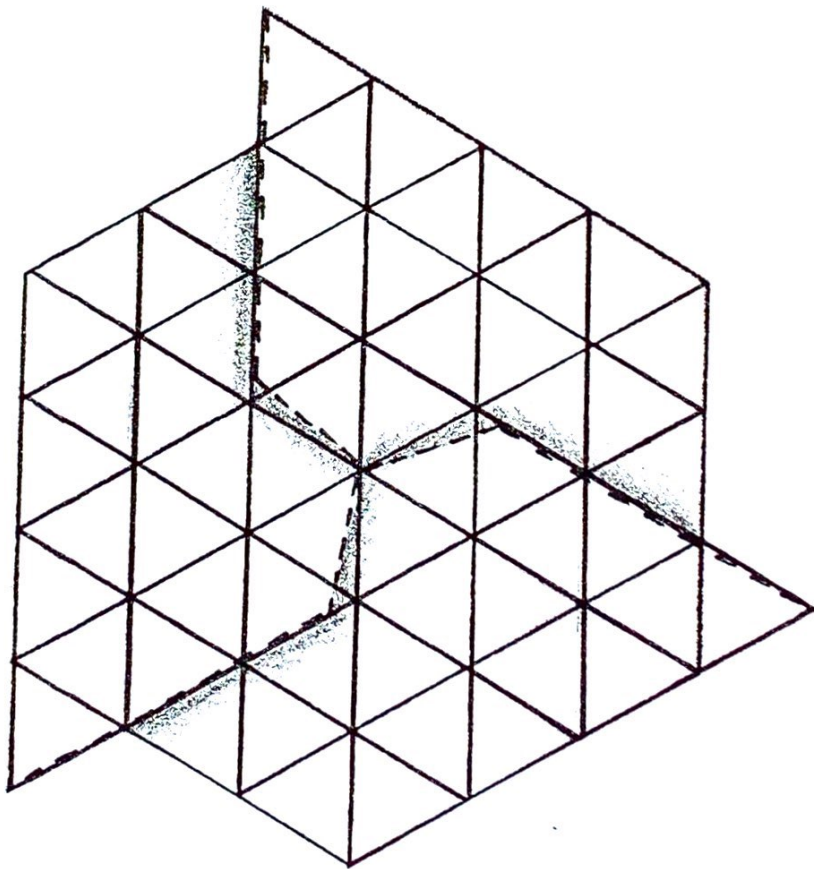

layered result

7. Repeat step 6 for the other two directions.

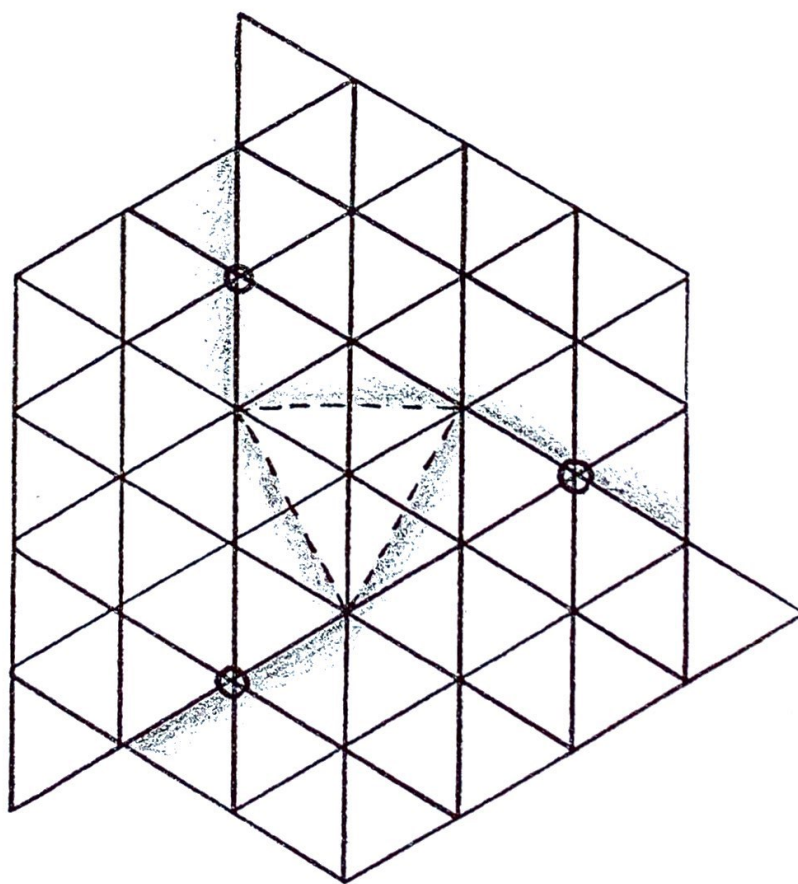8. You should have a grid of triangles across your paper. If you used a large sheet of paper and can bisect each section again, do so. The smaller the folded triangles are, the more detailed your tessellation will be.

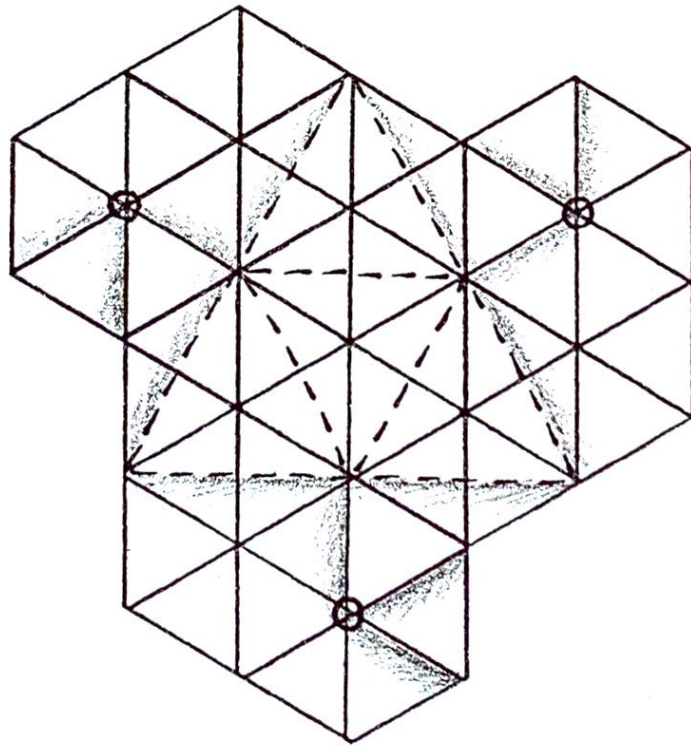9. Begin folding the tessellation by creating mountain folds along the three vertices as shown. The folds should head toward the same counterclockwise direction to create a type of twisted fold in the center.

10. Push down on the point created in the middle to flatten it out into a triangle. The indicated points will be the centers of adjacent triangles. Repeat step 9 using these points as the center points.

11. Your paper should look like this. Repeat step 9 on the indicated points. Some thick layers may have been created from step 10. Carefully unfold parts of these layers to make room for the new triangles. Continue this pattern of creating triangles until you reach the edges of the hexagon.

12. Once you reach the edges, you can leave them unfolded or continue the pattern as if you had more paper. This results in partial triangles as shown. Your tessellation is complete!