

FOLDING WORKSHOP WITH JULE WAIBEL

LEVEL 1 - Folded Keychain

Materials

- [150-200 GSM Paper](#)
(can experiment with different textures and patterns)
- [Long and Short rulers](#)
- [Scissors](#)
- [Set Square](#)
- [Pen/Pencil](#)
- [Folding Bone](#)
- [Double-sided Tape](#)
- [Box Cutter](#)
- [Key Ring\(s\)](#)
- [String to Attach to Key Ring\(s\)](#)
- [Needle](#)
- [Nylon Thread](#)

Instructions

1. Cut paper to 9 cm x 27.5 cm (3.6"x11")
2. Make sure the **back side of the paper is facing you** (if you have a pattern only on one side of the paper).
3. Take your ruler and pencil to measure 2.5 cm across the long side of the paper 10 times, creating a total of **10 lines**.
4. Continue to measure 3 cm (1.2 inches) across the shorter side of the paper 2 times, creating a total of **2 lines**.
 - a. Tip: You should have 11 boxes across and 3 boxes down.
5. Draw diagonal lines like the image as shown in the video (01:37).
 - a. From the left to right, draw a diagonal line from the top left corner to the bottom right corner of the first box in the row.
 - b. For the second box to the right of the first one, make a diagonal line connecting the bottom left corner with the top right corner.
 - c. Repeat this 2 step process with the next boxes in the row, eventually ending on a line in the last box from the top left corner to the bottom right corner.
6. Repeat steps of row 1 on the second and third (final) rows. Tip: Your zig-zags of the rows should be **parallel to one another** and not touch each other at any points or corners.
7. Cut on the zig-zag lines of row 1, where the (11) individual squares are now cut into $\frac{1}{2}$, forming (11) 90° triangles.
8. Repeat step 4 for row 3, leaving the middle row (row 2) untouched.
9. Use the folding bone to go over the 10 vertical lines, making sure to use pressure and leave behind a line indentation. Do this also for the zig-zag lines in row 2 (your only complete row), but not the horizontal lines (which form the rows).
10. To crease the paper, fold the **left edge of your paper** inward to meet the **first vertical line**, matching up our triangles on top to bottom. Use the folding bone to press down your crease.

continued on next page...

FOLDING WORKSHOP WITH JULE WAIBEL

LEVEL 1 - Folded Keychain

Instructions (continued)

11. Flip your paper (outside facing you and the lines facing your mat), then fold the new “edge” we just made to the closest vertical line, using the folding bone to press down this new crease.

- a. Flip the paper over where the lines drawn are visible again and repeat.

12. Repeat step 11, **flipping over your paper each time**, until your paper has an accordion shape (03:44).

13. Spread your paper out again in a flat sheet.

14. Go over again the zig-zag diagonal lines in row 2 with the folding bone, making sure it does not rip.

15. Start squeezing diagonal lines you just creased from the end of the paper. **Only fold the lines from row 2**. Repeat for all diagonal lines.

- a. Tip: Your paper should look like a 3D zig-zag, with the diagonal lines we just bent being the most protruded. For reference, look at the example at the time stamp (04:32).
- b. Tip: You want your creases to be in the direction where your lined side of the paper touches and the outside of your paper is only visible.

16. Now we take one fold and align it to the other end of the paper. Take your double sided tape to stick the two ends together. Make sure the folded lines are on the exact spot.

17. The paper should now be a 3-dimensional circular shape. Squeeze both ends of the shape to create a diamond shape.

18. Choose any side as the “bottom.” Take your ruler and draw a small dot 0.5 cm from the bottom tip of one of the triangles.

- a. Repeat making dots on all of the tips. Be sure the dots are level with one another. (06:09)

19. Use a needle to poke a hole through each dot and take your nylon thread to connect all of the tips together.

- a. Tip: Squeeze the folds together and help thread the tips and keep the shape. (06:29)

20. After threading the all the tips together, squeeze them together into one sharp tip, securely tie the thread together

- a. Feed the excess thread through the fold, to the inside of our keychain. (07:25)
- b. Take the thread and guess where the center of the shape is and create a knot.

21. To attach the key ring for our keychain, take another ~15cm thicker thread and create a surgical tie

22. Tightly tie the ends of both threads together. Cut off the excess thread. **Make sure the loop you created with the thicker thread protrudes out center and can be used as the hook for the key ring.**

23. Repeat steps 19-21 with the “top” of our keychain, making sure that our string to connect the key ring is directly fed through the middle of the tips.

24. Attach the key ring to the loop of the string.

Done!

