Kinetic Curling Paper Sculpture STEAM

by KimWestMakesArt

This project creates a kinetic curling sculpture.

When the outside top edge is opened, the whole sculpture curls inward like a tenticle or fern leaf.

Supplies:

Cardstock (I recommend AstroBrites 65lb paper) 6 pages total

Printer

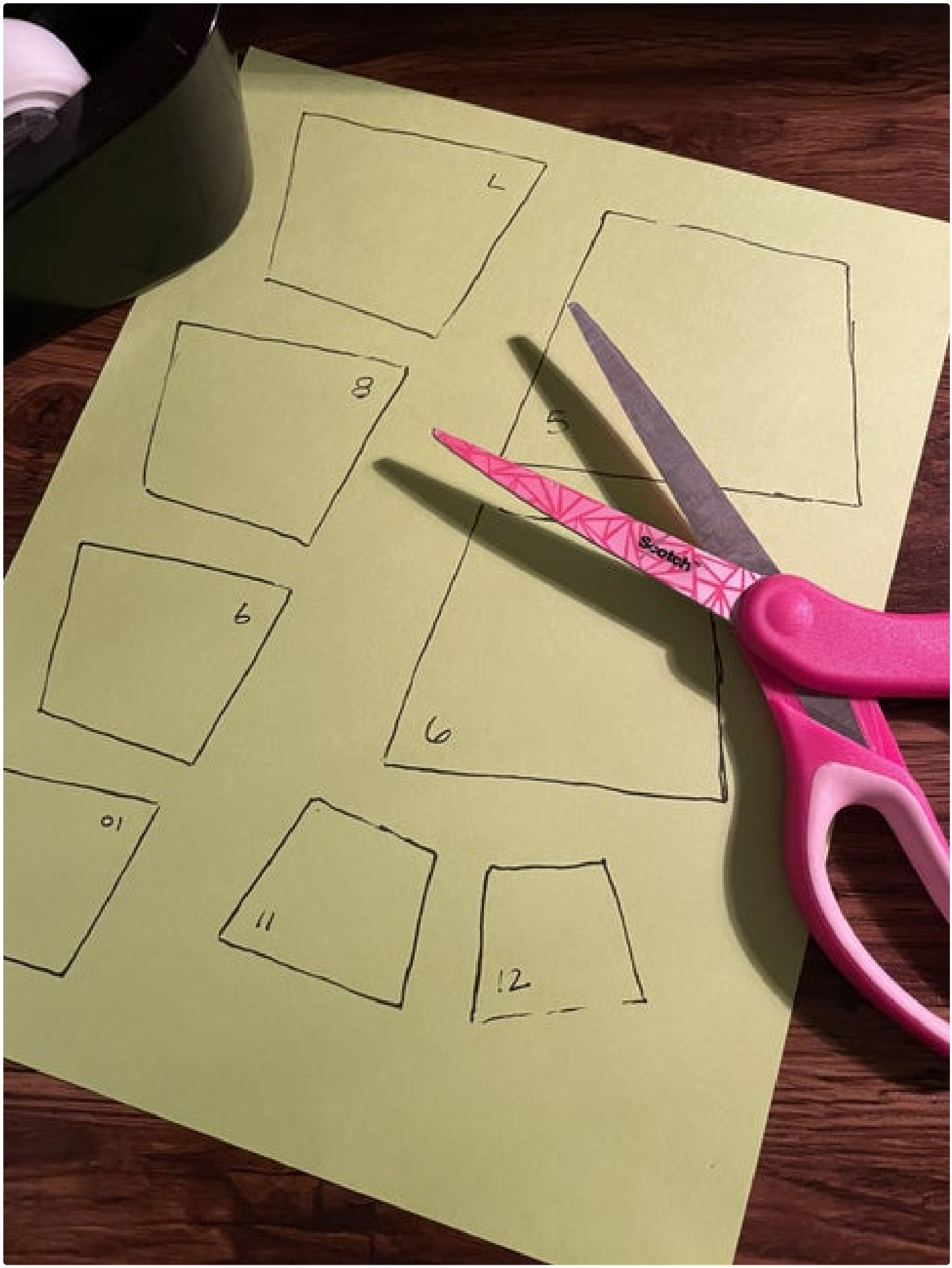
Scissors

Tape (I used Scotch)

Step 1: PRINT

Print the attached PDF file. TWICE.

PRINT IT TWICE!!! You need one set for each side.


7
8
5
6
6
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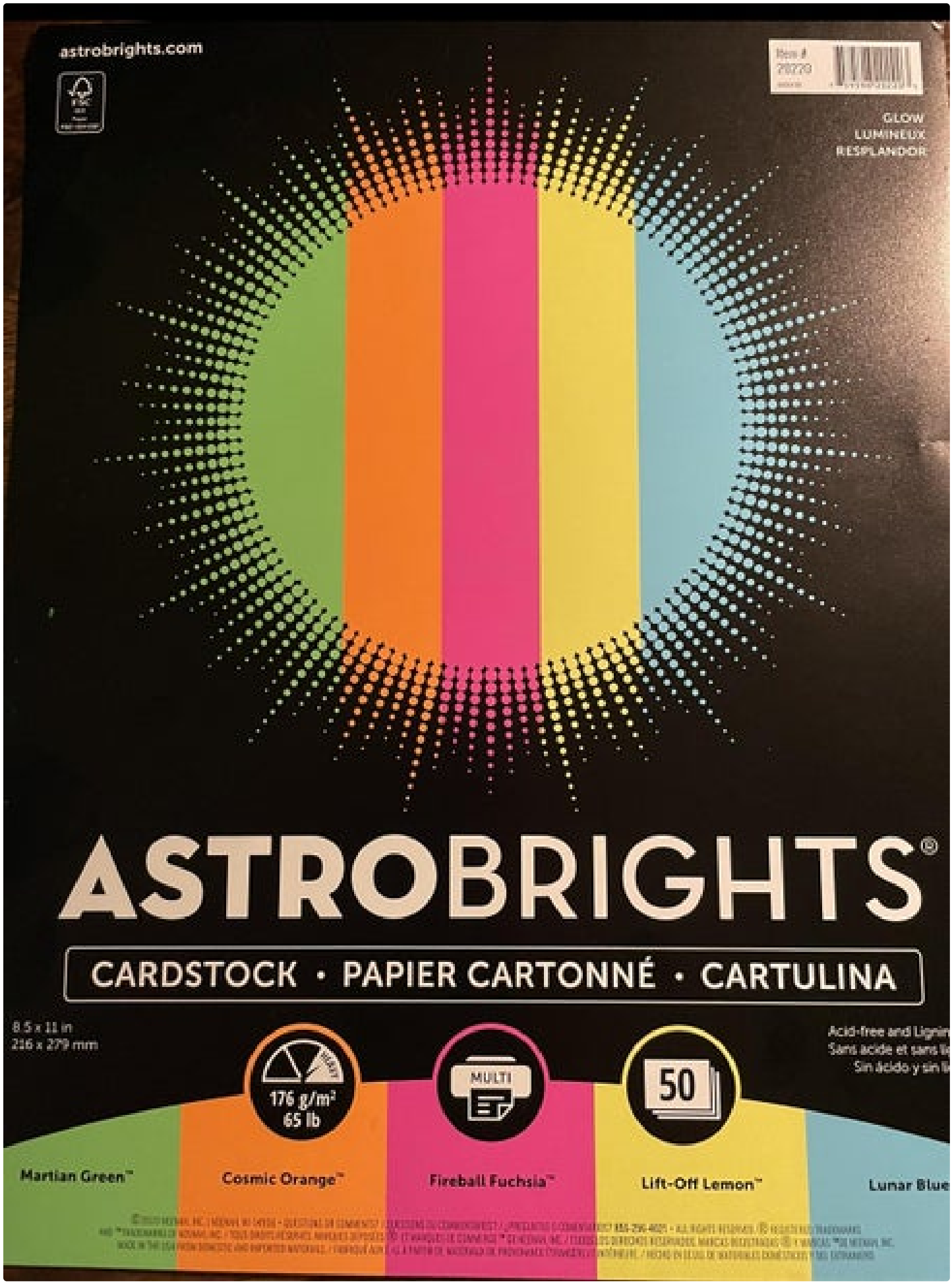
11
12
Scotch


astrobrights.com
GLOW
LUMINEUX
RESPLANDOR
ASTROBRIGHTS®
CARDSTOCK • PAPIER CARTONNÉ • CARTULINA
8.5 x 11 in
216 x 279 mm
176 g/m²
65 lb
MULTI
50
Martian Green™
Cosmic Orange™
Fireball Fuchsia™
Lift-Off Lemon™
Lunar Blue

Download

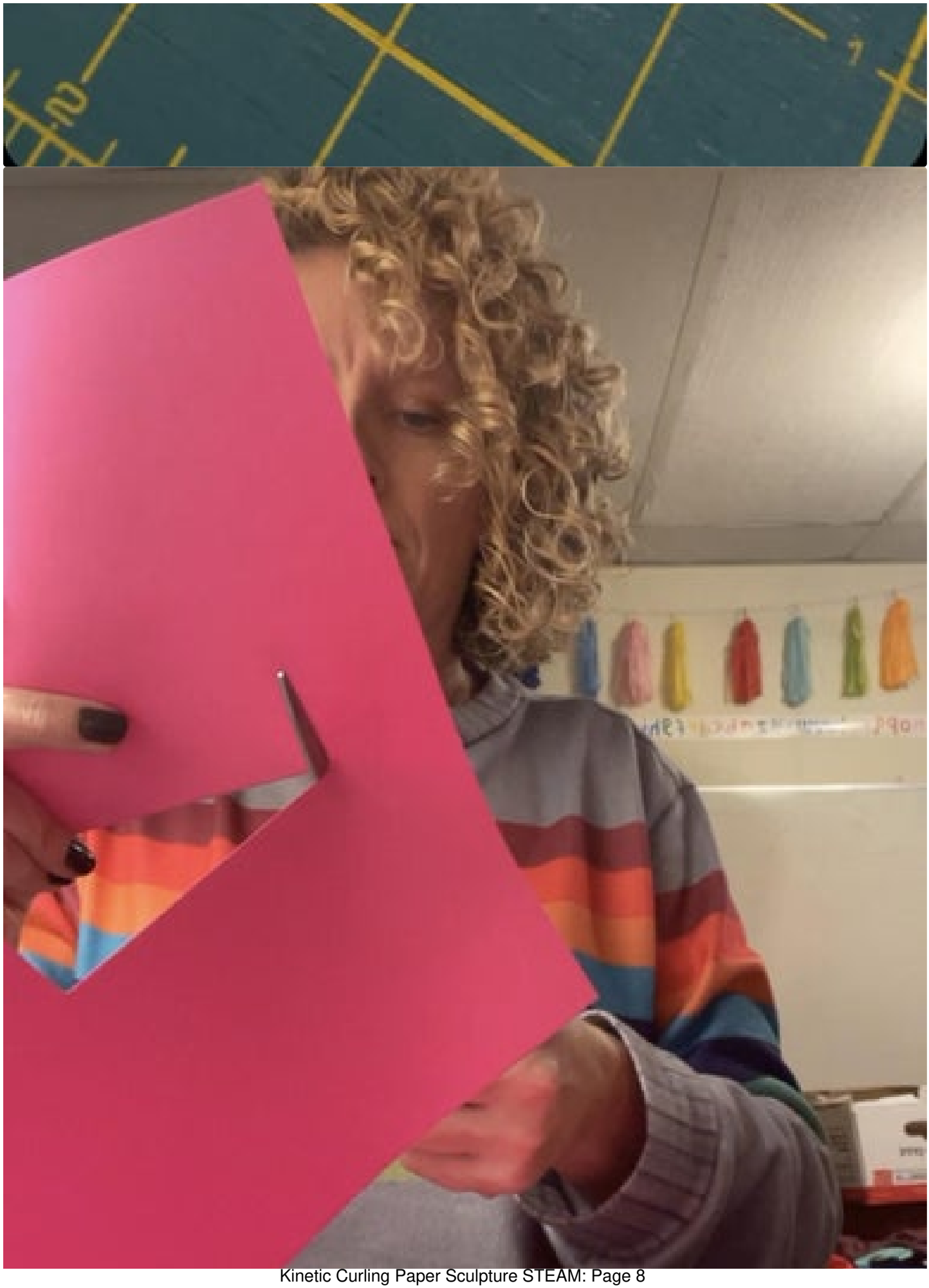
https://www.instructables.com/FKI/9V1S/LCG8QZD1/FKI9V1SLCG8QZD1.pdf

Step 2: CUT

Cut out each little hexagon shape.

I recommend doing only one side at a time, to not get confused.


1
2
3
4



Step 3: TAPE

Tape #1 RIGHT edge to #2 LEFT edge

THE NUMBERS WILL ALWAYS BE IN THE BOTTOM LEFT.

Continue taping #3 to #2, then #4 to #3 ... until you tape #18 to #17

This does not have to be super perfect, but trim any thing too wonky as you go. The closer the first side and second side are to being exactly alike, the better.

Step 4: REPEAT

Repeat the cutting and taping until you have two complete curly/fingers.

Step 5: TAPE

Lay the two curls on top of eachother.

The number sides will be up on each.

Tape down the bottom. I lay them on top of eachother, put the piece of tape on the top and slightly lift and then fold the tape over.

Step 6: FINISHED!

Hold the biggest part, slowly open the two pieces and the sculpture will curl toward you.

STEAM:

SCIENCE (kinetic movement and plants/ferns)

TECHNOLOGY (where could this type of structure be used?)

ENGINEERING (with paper and plastic movable bonds/tape)

ART (cool looking sculpture, how could you make it look even cooler?!?!)

MATH (hexagons at decending sizes, geometry)

Looks like a great project!