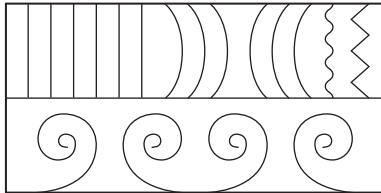


# Sawing and Piercing Practical Exercises

To practice sawing and piercing, try these exercises. Use good 3/0 saw blades; I recommend German or Swiss blades with rounded backs. For each exercise, make 25 x 50 mm (1 x 2-in.) plates out of copper or brass sheet that's at least 1.0 mm (18 gauge) thick.

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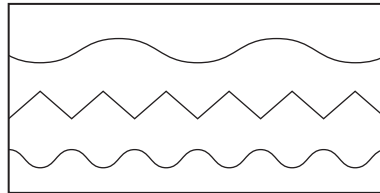


## Plate 1: Basic lines

Use dividers to divide the plate in half lengthwise. On one half of the plate, scribe a series of parallel lines spaced 3 mm (1/8 in.) apart:

- 6 straight lines
- 3 lines curved right
- 3 lines curved left
- 1 squiggle line
- 1 zigzag line

On the other half of the plate, scribe a spiraling curve from the edge of the plate inward to the left, and scribe a mirror spiral curving right. Repeat. Saw the lines in the order listed, cutting down the center of each line.

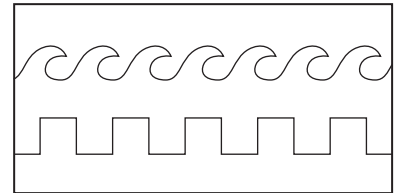


## Plate 2: Decorative lines

Scribe three lines lengthwise down the plate:

- 1 undulating line
- 1 zigzag line
- 1 squiggle line

Saw the three lines to separate the plate into four pieces. The four pieces should fit neatly back together.

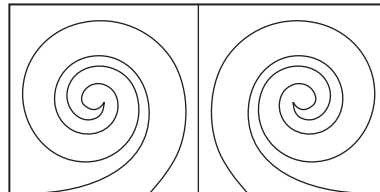


## Plate 3: Pattern lines

Use dividers to divide the plate lengthwise into thirds, then mark even increments along the scribed lines. Scribe two symmetrical pattern lines:

- 1 wave pattern
- 1 step pattern

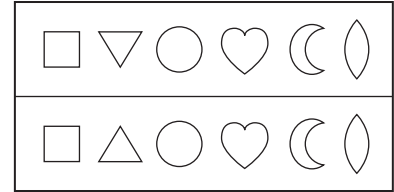
Saw each line, using controlled movements of both the plate and the saw. The three pieces should fit back together neatly.



## Plate 4: Spirals

Use dividers to divide the plate into two even squares. In one square, scribe a continuous line spiraling from the outer edge to the center and back out. Scribe a mirror image on the other square.

Saw the plate in half. To separate the spiral from the square, saw each spiral in a controlled, even, curving motion from the outer edge inward and back out again. The four pieces should fit back together neatly.



## Plate 5: Cutouts

Use dividers to divide the plate in half lengthwise. Scribe the following shapes for small cutouts on both halves of the plate:

- Square
- Triangle
- Circle
- Heart
- Crescent
- Marquise

Mark the centers of the shapes, and drill holes in the cutouts, using a 1 mm drill bit. Pierce each shape twice in the order listed.