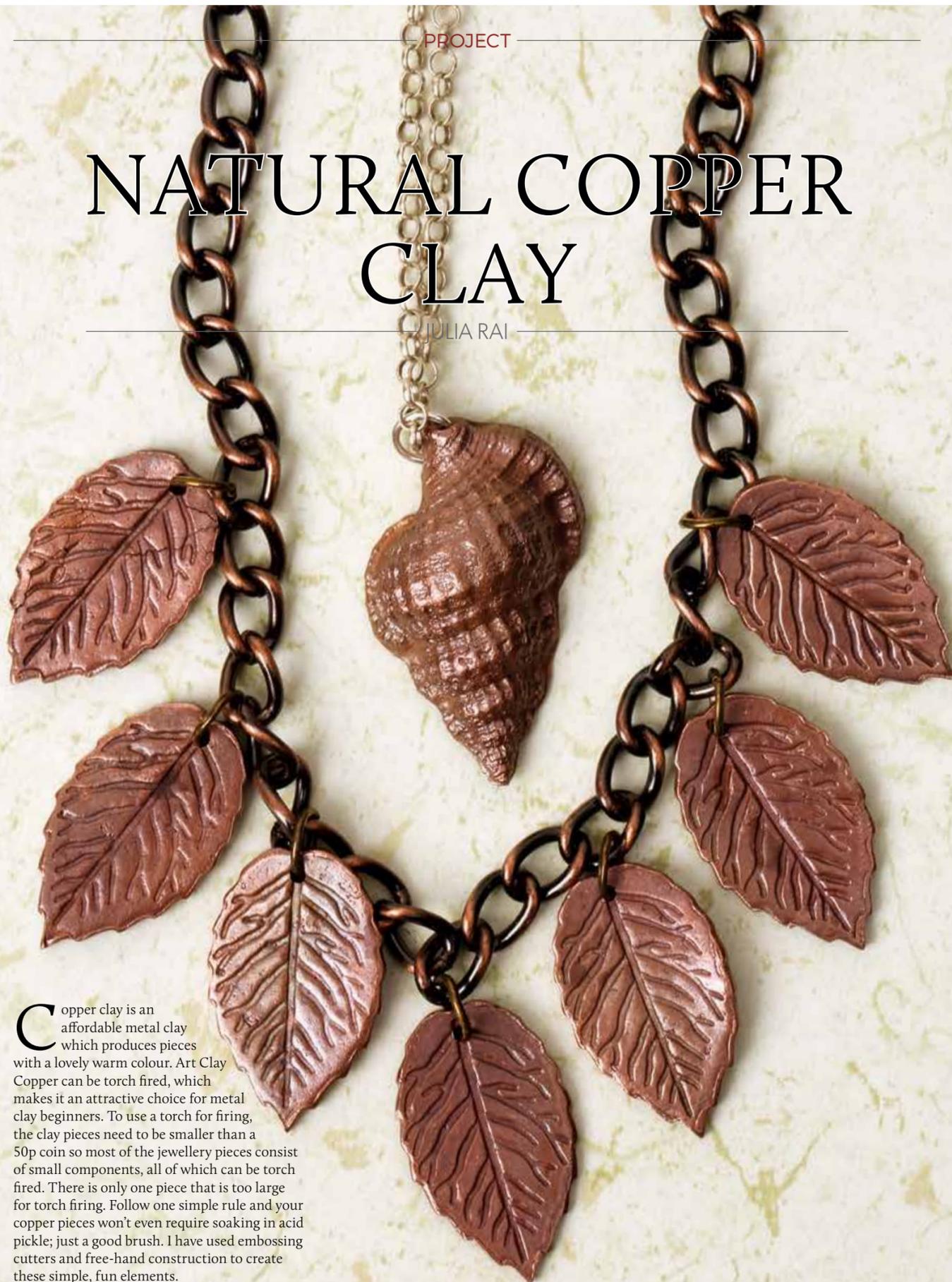
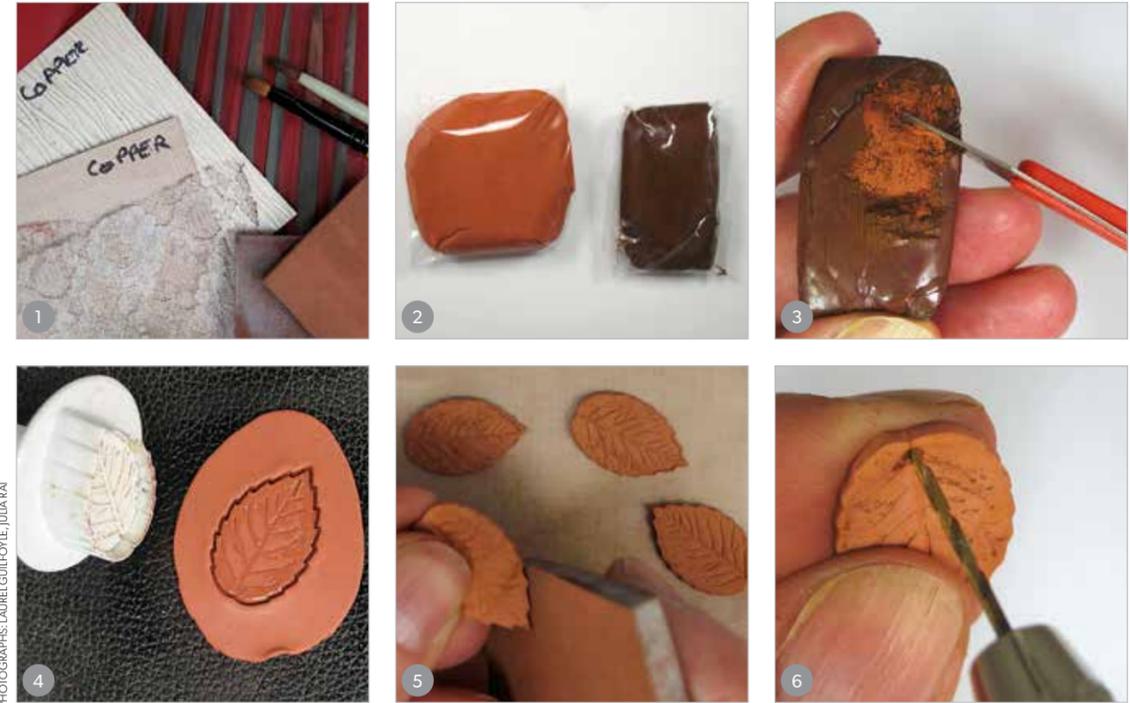


# NATURAL COPPER CLAY

JULIA RAI



Copper clay is an affordable metal clay which produces pieces with a lovely warm colour. Art Clay Copper can be torch fired, which makes it an attractive choice for metal clay beginners. To use a torch for firing, the clay pieces need to be smaller than a 50p coin so most of the jewellery pieces consist of small components, all of which can be torch fired. There is only one piece that is too large for torch firing. Follow one simple rule and your copper pieces won't even require soaking in acid pickle; just a good brush. I have used embossing cutters and free-hand construction to create these simple, fun elements.



PHOTOGRAPHS: LAUREL GUILFOYLE, JULIA RAI

## HOW TO MAKE

### MATERIALS & TOOLS

- 50g Art Clay Copper
- Paste Maker
- Copper and/or silver chain, jumprings and findings
- Silver earwires
- Embossing cutters
- Small cutters
- Roller and spacers
- Pin tool
- Measuring spoons
- Shell mould
- Teflon sheet
- 1mm drill
- Sandpaper (400-600 grit)
- Sanding sponges
- Paintbrushes
- Firing tools
- Polishing tools

1. It is important to keep some of the tools you use with copper clay separate from any you use with silver. Anything that can be thoroughly washed or wiped clean is fine to use with both; just make sure you clean them well after using copper clay. This applies to things like rollers, cutters, wipe-clean texture sheets, Teflon, knives, blades, pin tools and drill bits. Files, sanding sponges, wet and dry paper, paintbrushes and similar items cannot be cleaned well enough to be used with both clays so keep these separate. I keep some textures separate too, such as wallpaper, lace, skeleton leaves and anything else that isn't easy to clean.

2. When you open a fresh pack of copper clay it is a lovely orange colour. If you don't use it all in one go, the surface can oxidise. In the picture the piece on the left is a fresh new pack of copper clay and the one on the right has been opened and then kept wrapped up for around six months. This is showing oxidation on the surface. As Art Clay Copper only comes in 50g packs, you either have to use it all in one go or make sure you keep it sealed up away from air.

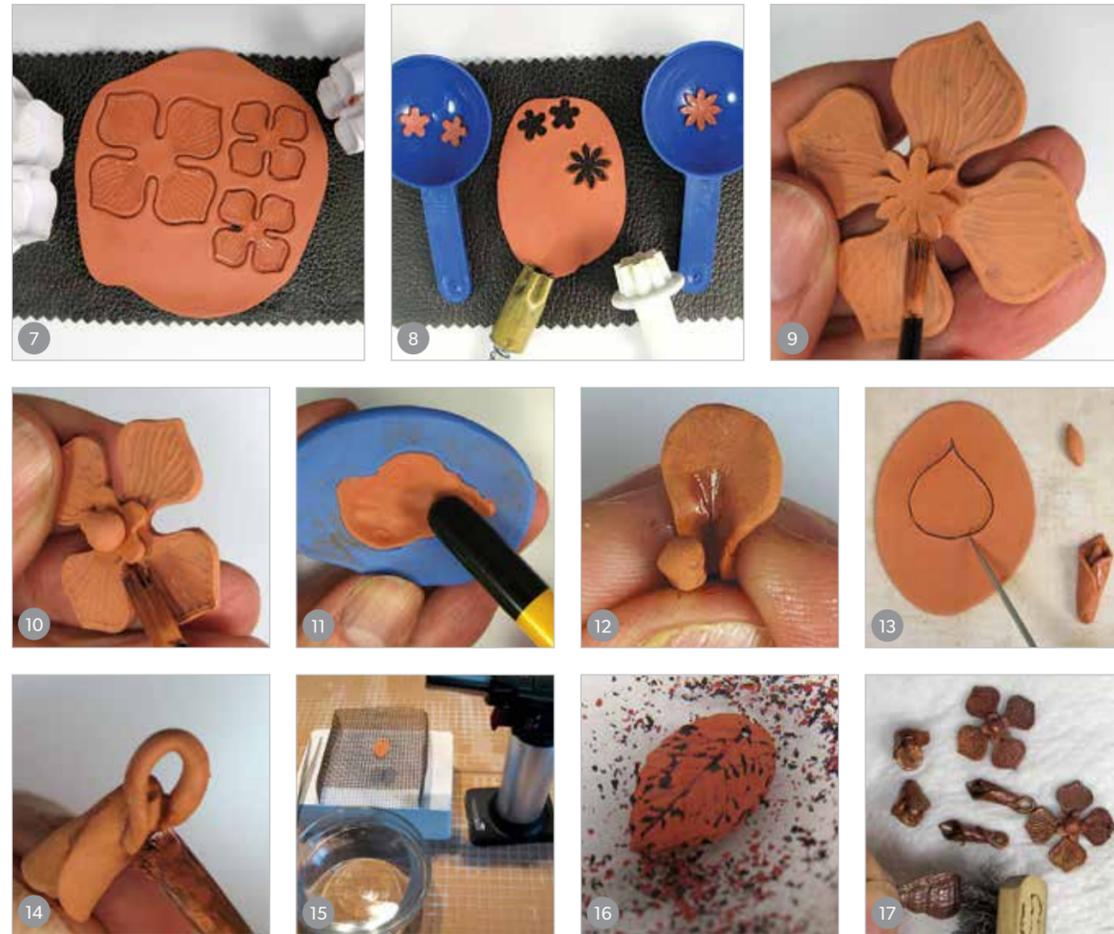
3. If you are going to keep some of the clay for another time, wrap it very tightly in cling film excluding as much air as possible. Then wrap it again in more cling film and seal it in an airtight bag. This will help to keep it in good condition. If you do find that your clay has oxidised, scrape the surface oxidation off with

a sharp craft knife so you have good clay again. It's a bit of a messy process but it will give you good quality clay to work with.

4. The first piece is a necklace with multiple leaf components. Embossing cutters are easy to use as you cut and texture in one step. The leaf elements are around 2cm long. Oil the work surface, roller and the embossing cutter. Roll the clay out to four cards thick and press the cutter into the clay. Before lifting it up, push the plunger down to emboss the veins onto the surface. Transfer the leaf to a piece of Teflon and put to dry. Make as many leaves as you need for your design.

5. Copper clay can take a bit longer to dry than silver so put the pieces somewhere warm to speed up the drying. When the pieces are dry, refine the edges using sanding pads. Plastic embossing cutters are not as sharp as metal cutters so there is normally more to clean and refine when using these. Check the back of the pieces to ensure they don't need any refining.

6. Drill a hole in each leaf for a jumpring to attach them to the chain. If they are perfectly flat, you can use a rubber block to drill them on. If they have a bit of a curve, put your finger behind the piece as you drill. You are not pushing hard when drilling, the drill bit is doing the work, so you won't drill into your finger. Keep all the dust from drilling and filing to make paste, which you will need later. ▶



**7.** The pendant piece is too large for torch firing, but the earrings will be fine. Roll the clay to four cards thick, cut and emboss the pieces as before and put to dry on Teflon. When they are dry, refine the edges using sanding pads or sandpaper. Getting into the narrow spaces between the petals of these cutters is best done with sandpaper.

**8.** To make the centrepieces of the pendant and earrings, choose small cutters which complement the design. Roll the clay out three cards thick on an oiled surface and cut out the shapes. Oil the inside of two measuring spoons and put the shapes inside so they have a slight curve. Allow to dry.

**9.** Refine the small shapes as necessary. These are fiddly and fragile so take extra care when refining them. Use Paste Maker mixed with the dust from filing/drilling to make a thick paste and stick the small shapes to the centre of the pendant and earrings. Allow to dry.

**10.** Make some small balls for the centre of the pendant and earrings and allow them to dry. Stick them in place using the Paste Maker paste, let them dry and then use the paste to put a rough texture on the balls using a tapping motion with a paintbrush. Allow to dry and then drill holes in the pendant and earrings for jumprings.

**11.** Choose a shell mould which is around 2cm long or make one using two-part moulding compound. Take enough clay to line the mould, but not completely fill it. The clay should be around 1mm thick and kept inside the mould edges, rather than come up over the edge. Use the rounded end of a paintbrush or other blunt tool to press the clay down into the mould, ensuring you don't make it too thin. Leave to dry in the mould.

**12.** To make a small flower charm, roll a short, tapered log of clay for the centre. Leave this to dry. Roll out the clay three cards thick onto an oiled surface and use a teardrop shaped cutter

to cut out one petal. Stick the petal to the dry centrepiece using paste, molding it around the centrepiece. Thin the top edge of the petal by pinching it gently. Let this dry and then repeat with the other two petals to create a flower.

**13.** To make the lily flower charm, roll a short, tapered log of clay as before for the centre, and dry. Roll out the clay three cards thick and use a pin tool to cut a wide teardrop shape. This needs to be wider than normal teardrop cutters so it is easier to cut this free hand. Paint a layer of paste onto the teardrop and wrap it around the centrepiece, overlapping it at the front and smoothing down to the base of the lily. Allow this to dry.

**14.** Roll out a thin snake of clay with a taper at one end and form this into a loop around the base of the lily and smooth up the back. Let this dry. Drill a hole in the dry shell pendant. Refine the charms and drill a hole in one of the petals of the flower charm for a jumpring.

**15.** Set up the torch firing station with a fire brick and a piece of mesh bent down at the edges. Place a bowl of cold water right in front or behind the firing brick and have tweezers handy. Fire each piece separately. Heat the piece until it is glowing bright red and hold for seven minutes. Carefully tip up one edge of the mesh with the tweezers while keeping the torch flame on the copper piece and tip it into the water. By keeping the flame on the copper right up until you drop it in the water you minimise the oxidation.

**16.** As the piece hits the water, any oxidation that does form will pop off. The black oxidation which is visible on this piece can be removed with just brushing, no pickle needed. If you have thicker oxidation, you may need to use pickle but the key is keeping the piece hot as long as possible and not allowing it to cool before it enters the water. Pieces can also be kiln fired either open shelf which has the same oxidation problem as torch firing, or buried in carbon after an initial binder burn out phase. This is the cleanest method and results in no oxidation at all.

**17.** Polish the pieces using a tumble polisher, brush or rotary tool. Patina if you like this effect. Use jumprings to assemble the necklace of leaves on copper or silver chain. Hang the shell pendant on a chain with a jumpring. Add silver earwires to the copper earrings and hang the matching pendant on the chain with a jumpring. Hang the charms on a silver or copper chain bracelet.

#### RESOURCES

*Art Clay Copper, Paste Maker:*  
[metalclay.co.uk](http://metalclay.co.uk)  
*Antique copper chain and jumprings:*  
[thebeadstore.co.uk](http://thebeadstore.co.uk)  
*Silver chain and findings:*  
[cooksongold.com](http://cooksongold.com)

#### CONTACT

[juliarai.co.uk](http://juliarai.co.uk)  
[csacj.co.uk](mailto:csacj.co.uk)  
[info@csacj.co.uk](mailto:info@csacj.co.uk)

