

School fences can be much more than just utilitarian. Although essential for security or separating different areas, fences can be decorative in their own right. They can challenge pupils to make structures that are both useful and beautiful, perhaps using locally grown wood or recycled and scrap materials. In addition, like the railings round some urban parks, they can become a temporary outdoor exhibition space, displaying works made by pupils in science or art lessons.

## CURRICULUM LINKS

### Art & design

KS1 – 1ab, 2abc, 3ab, 4abc, 5abcd

KS2 – 1abc, 2abc, 3ab, 4abc, 5abcd

KS3 – 1abc, 2abc, 3ab, 4abc, 5abcd

### Design & Technology

KS1 – 1abcde, 2abcde, 3ab, 4ab, 5abc

KS2 – 1abcd, 2abcde, 3abc, 4abcd, 5abc

KS3 – 1abcdefgh, 2abcde, 3abc, 4bcd, 6abc, 7bc

### Science

KS1 – SC1, SC2, SC3

KS2 – SC1, SC2, SC3

KS3 – SC1, SC2

KS4 – SC1

## HOW TO Make Decorative Fencing

The decorative fencing pupils made by Palatine Special School, Worthing, for the Growing Schools Garden, was inspired by their investigations about trees, focusing on leaf shapes, leaf skeletons and chlorophyll patterns in science lessons. They also use their own school fence creatively as a showcase of the art they produce, changing the exhibits each year.

Fences can be made from a range of different materials. Palatine School used coppiced wood poles, which they purchased cheaply from their local Woodland Trust. Coppiced wood will make an attractive rustic-looking fence, and it is also environmentally friendly, being the by-product of woodland management. If you cannot source it locally, try contacting your local Wildlife Trust (01476 581135) or ask at your local timber merchant.

To make the decorative fencing you will need coppiced wood poles, galvanised nails or screws, marine plywood, acrylic paints, pastels and varnish, garden rope, and galvanised wire.

Palatine found the easiest way to make this basic post-and-rail fence was in 3m sections flat on a hard surface, erecting it afterwards. To create each section, you will need four 1.5m poles and four 1.2m poles to make the upright posts, as well as six 1m poles to make the horizontal rails.

Place all the upright posts in a line on the floor in pairs (0m, 1m, 2m & 3m), with the taller posts at either end. Then measure 30cm and 115cm up from the bottom of each post and mark it clearly. The next step is to place the horizontal rails perpendicular to the uprights at the marked points, sandwiching them between each pair of upright posts at either end. Then use galvanised nails or screws to fix through each upright into the horizontal rails. Once assembled, erect each fence section using a mallet to drive the poles into the ground.

The show garden fence was used to display enlarged leaves cut out of marine plywood (approximately 50-70cm wide), but other things could take their place. The pupils copied leaf shapes onto the plywood, cut

them out and then decorated them to look like leaves, using acrylic paint, pastels and varnish. The leaf shapes were then attached to the fence using strong galvanised wire, small holes having been drilled through the plywood at four points.

The finishing touches included smaller plywood leaves (10cm – 15cm), some of which were nailed to the top of each pole, while others were attached to a garden rope and strung between the taller posts.

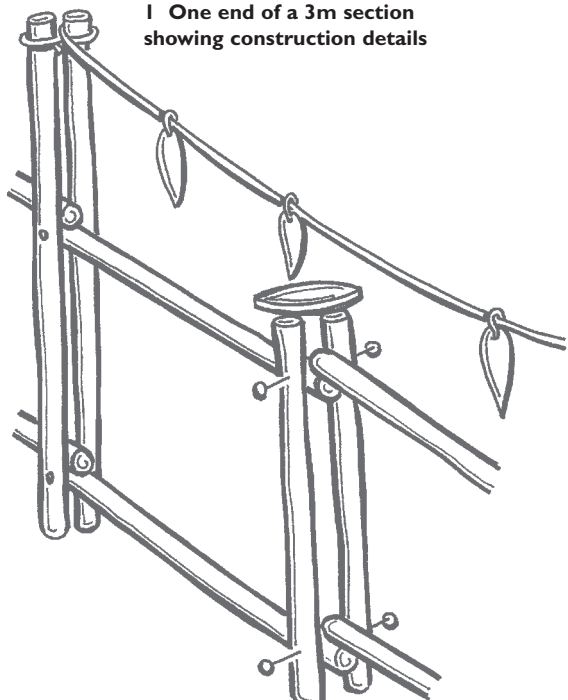
An alternative type of decorative fencing which Palatine School have used in their own school grounds is made from timber posts and concrete reinforcement mesh.

For this you will need: timber posts (15cm x 15cm in diameter), concrete reinforcement mesh, galvanised 17cm nuts and bolts, dry cement mix, clay, marine plywood, paints, pastels and varnish.

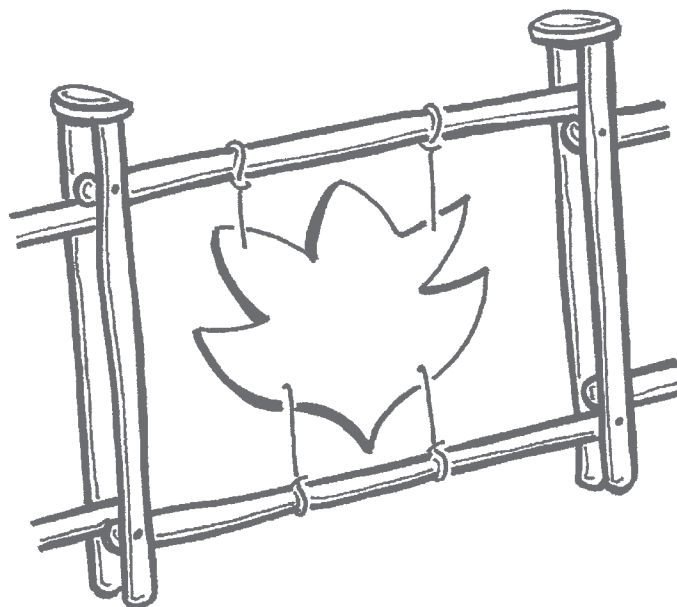
Each section of fencing requires two 2m lengths of timber to make the upright posts and one section of concrete reinforcement mesh. Ask the timber merchant to cut a slot out of one side of each timber upright, just wide enough for the concrete mesh to slot into and about two-thirds the thickness of the post. Then place each timber upright flat on the floor and slide the wire mesh into the slot, one post at each end, drill holes along the length of the post and through these bolt the mesh into place.

To erect the fence, dig out holes deep enough to bury 45cm of the upright posts in the ground and back fill them with dry cement mix. Decorate the fence with shapes cut out of plywood, or with other designs produced by the pupils. Clay balls fixed on the top of the concrete reinforcement mesh add a decorative finish and discourage climbing. The clay balls will need to be fired if they are to last the winter months.

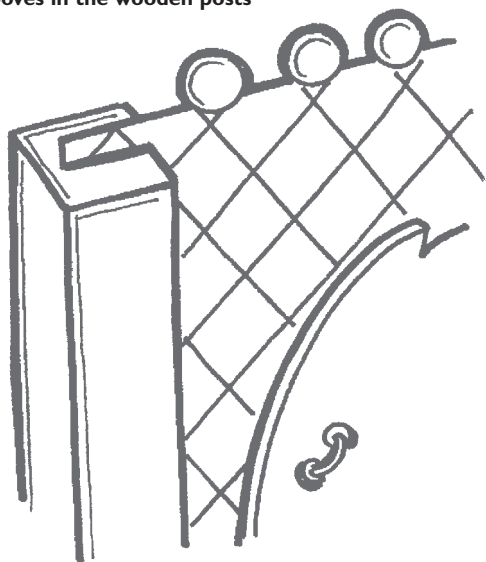
1 One end of a 3m section showing construction details



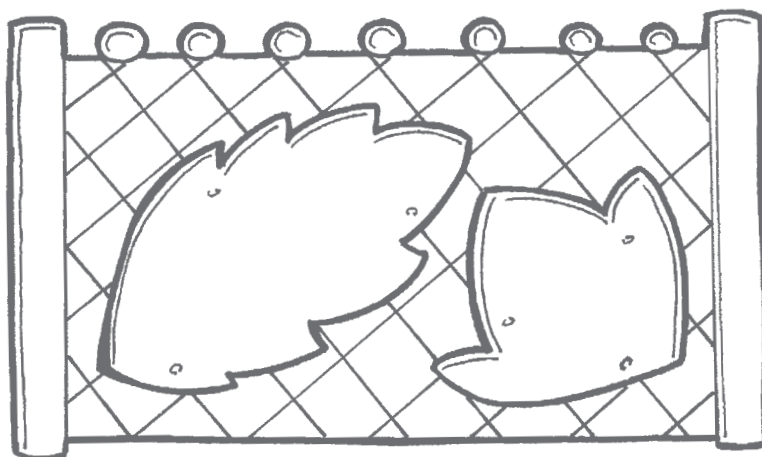
2 The centre of a 3m section with a leaf motif in place



1 Reinforcing mesh slides into grooves in the wooden posts



2 Decorate with leaf motifs



## ADDITIONAL INFORMATION

For information on local sources of beanpoles, hurdles, and other woodland products:

[www.allotmentforestry.com](http://www.allotmentforestry.com)

For timber and wood working supplies try your local timber merchant.