

Many schools have specific shade policies to reduce the risks from too much exposure to the sun. An enjoyable way of implementing these policies is to create pleasant shaded spaces to help protect pupils during break time, taking advantage not only of trees and pergolas but adding home-made parasols or 'shade umbrellas'. Children can easily make their own shade umbrellas using recycled materials and also study how the earth's movement affects the daily amount of sunshine we receive.

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, 2abcdef, 3ab, 4ab, 5abc

KS2 – 1abcd, 2abcdef, 3abc, 4a, 5abc

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

PSHE & Citizenship

KS1 – 3acdfg

KS2 – 3aeg, 4d

KS3 – 2bh

HOW TO MAKE a Shade Umbrella

For the Growing Schools Garden, Chaddesley Corbett Primary School in Worcestershire made two 'shade umbrellas' from cheap, recycled materials. Shade umbrellas can be mobile or permanent features and are a colourful solution to help provide shelter in the playground.

The initial element to consider is the position of the sun and where the shade falls in the playground at break times. Pupils can investigate how much shade is already available in their playground, looking at shadows cast by trees, buildings, or other permanent structures, observing the movement of shadows throughout the day, and how shade changes during the year. Once pupils have established what shade is available, they can then consider what additional shade is needed, and where.

To make their shade umbrellas, pupils from Chaddesley Corbett Primary used strips of plastic bags to twist into the spokes of an old garden parasol. However, many other materials could be used including old fabric, strips of cloth or tarpaulin, bamboo, wood, metal, willow or straw. Pupils can research how sunlight penetrates these different materials and investigate which are the best to use.

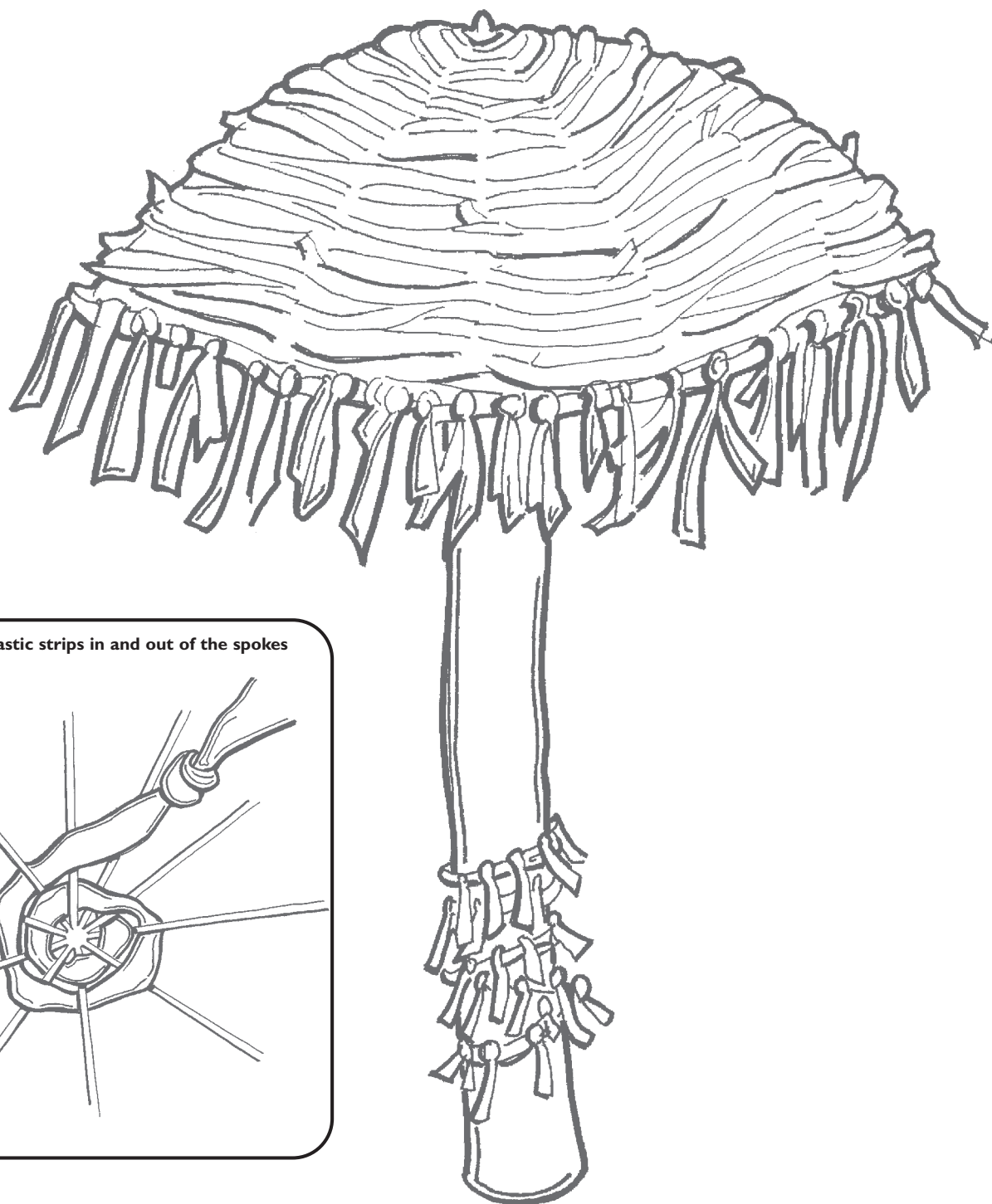
First strip the old parasol of any remaining fabric, leaving only the bare spokes. Meanwhile, cut the plastic bags into long strips and sort them into their different colours. Bags including garden sacks, rubble bags and bin liners come in a variety of different colours, so try to get as many colours as possible.

Open the parasol and if possible remove the pole (you may need to unscrew it). This will make it easier for the pupils to work on the parasol. Starting at the centre, near the pole, take a strip of plastic and weave it in and out of the open spokes. When the strip runs out, tie another strip of plastic to the end and continue as before. Make sure the

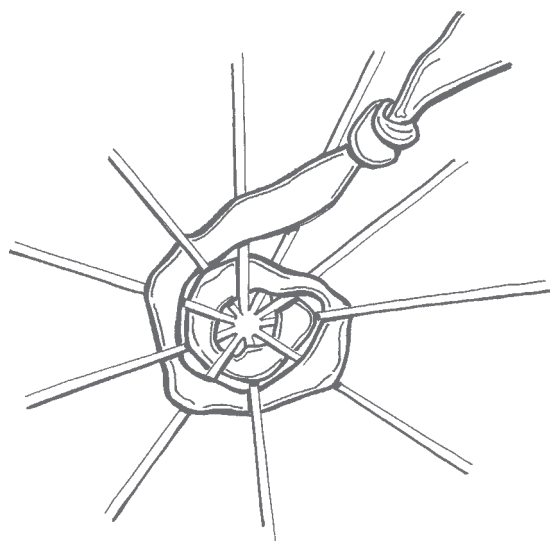
plastic strips are tightly packed together as you progress, otherwise the sun will creep through the gaps. By using the different coloured strips creatively, the final product can have an attractive appearance. When all the spokes are covered, tie the loose end off by knotting it firmly to one of the spokes. Finally, create a feathered edge by tying short strips of plastic to the edge of the completed parasol, letting them dangle in the wind.

If the umbrella is to be a permanent feature, it is best to sink the pole into dry-mix concrete or attach the top to a longer wooden pole which can be driven into the ground. Alternatively, fill the base of the parasol with sand and carry it outside when needed.

2 Decorate the edge with a fringe and ensure the sunshade is fixed securely in the ground



1 Weave the plastic strips in and out of the spokes



ADDITIONAL INFORMATION

For old umbrellas and garden parasols to convert try charity shops and car boot sales.