

# 1 Sunflower Art and Science

Sunflowers are one of the most widely grown flowers in schools. The seeds are easy to germinate and the young plants grow prolifically. Their large yellow flowers provide an excellent way to add colour to a blank wall or create an interesting avenue leading from one part of the school to another. They are also a great source of inspiration for artwork and their edible seeds can be used for feeding the local wildlife or included when baking bread.

## CURRICULUM LINKS

### Foundation Stage

1, 2, 3, 4, 5, 6

### Science

KS1 – SC1, SC2

KS2 – SC1, SC2, SC4

KS3 – SC1, SC2

### Art & Design

KS1 – 1ab, 2abc, 3ab,

4ab, 5abcd

KS2 – 1abc, 2abc, 3ab,

4b, 5abcd

KS3 – 1ab, 2ab, 3a, 4ab,

5abcd

### Information & Communication Technology

KS1 – 1abc, 2ab, 3ab

KS2 – 1a, 2a, 4a, b, c

## HOW TO GROW Successful Sunflowers

Coombes CE Infant School in Berkshire cultivate their own sunflowers and use them creatively to support both formal and informal learning in school. For the Growing Schools Garden pupils recreated their Sunflower Avenue which leads to their vegetable patch. They also created a spectacular sunflower collage displayed in the classroom. Sunflowers also provided inspiration for some dramatic ephemeral grass artwork described overleaf.

Sunflowers need a sunny, sheltered spot away from strong winds if they are to thrive, and will need to be staked. To create an interesting display and plenty of flowers for harvesting, use multiple headed varieties that will grow to about 2m tall, interspersed with low-growing varieties of different colours.

For earlier than usual summer flowering, sow sunflowers in January indoors or in a heated greenhouse. Sow the seeds, one per pot, in damp multipurpose compost and label each pot. Put them in a warm place and keep the compost damp.

Germination takes about a week. Keep the young plants indoors in a warm sunny place until they are strong enough to be hardened off in a coldframe or under cloches for one or two weeks, depending on the weather. Only transplant them outside once all danger of frost has passed. Alternatively, start the seeds in March and you will not have to keep the young plants indoors for so long.

The best month to sow seeds directly into the soil is May. They will then flower in August/September. Sow them evenly into shallow drills, spacing the seeds of long-stemmed, single-headed flowers 15cm apart and of multiple-headed varieties 30cm apart. As a precaution against slugs, treat the soil with slug-killing nematodes (microscopic organisms, available by mail order) before sowing.

Water the sunflowers well until they are established and give them plenty of tomato feed as they grow. Sunflowers can also be grown in tubs, though this makes staking them more difficult. In the autumn, harvest the mature seedheads. Keep some of the seeds for sowing the following year, and use others for baking or artwork. Leave several

mature seedheads as a winter food source for local birds and small mammals. Pupils can also keep seeds to put in hanging bird feeders for the winter.

Modern sunflowers include both single-headed and multi-headed varieties. For tall varieties try 'Earthwalker' (orange), 'Claret' (red), or 'Full Sun' (bright yellow). Shorter ones include 'Gold and Silver' (yellow, with silvery foliage), 'Ikarus,' (lemon yellow, short, multi-stemmed), or 'Elite Sun', good for cutting. Even smaller and excellent for containers are 'Dwarf Yellow Spray', or 'Teddy Bear'.

NB If you want to collect seeds to sow the following year, avoid growing F1 hybrids, as their seeds will produce flowers different from those of the parent plants.

### March – sow the seeds in pots indoors



### May – sow the seeds outside



## HOW TO MAKE a Grass Sunflower

If you leave a brick on the lawn, after a day or two the grass underneath will start to turn yellow and die for lack of light. Remove the brick and in a week or so you will notice new shoots appearing through the dead grass. This natural process of decomposition and renewal is an easy and effective way of creating ephemeral artwork in school grounds.

First, get pupils to draw a simple outline design on paper, eg leaf shapes, like giant 1m oak leaves arranged in a spray, one for each class, or mazes which open up a whole new opportunity for play. Large, repetitive shapes like the 10m sunflower created by Coombes School are the most effective. Transfer the design onto black plastic, old carpet, tarpaulin or dark scrap fabric, and

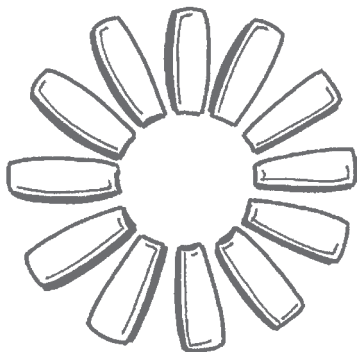
cut out the shapes. This may need some adult help.

Choose a grassed area that receives full sunlight right across the site throughout the day. The grass needs to have been mown regularly to ensure a good result. Lay out the pieces of dark material to create the design and anchor them with tent pegs, stones or bricks.

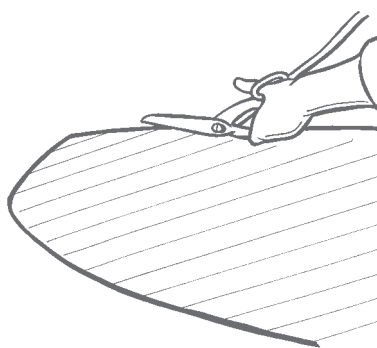
The colour changes caused by loss of chlorophyll should take about 3 weeks, but check regularly until you are satisfied with the result. When the white-out design is ready, gather all the pupils together and have a big unveiling ceremony.

NB No permanent harm will come to the grass: even if it looks completely dead it will re-grow quickly.

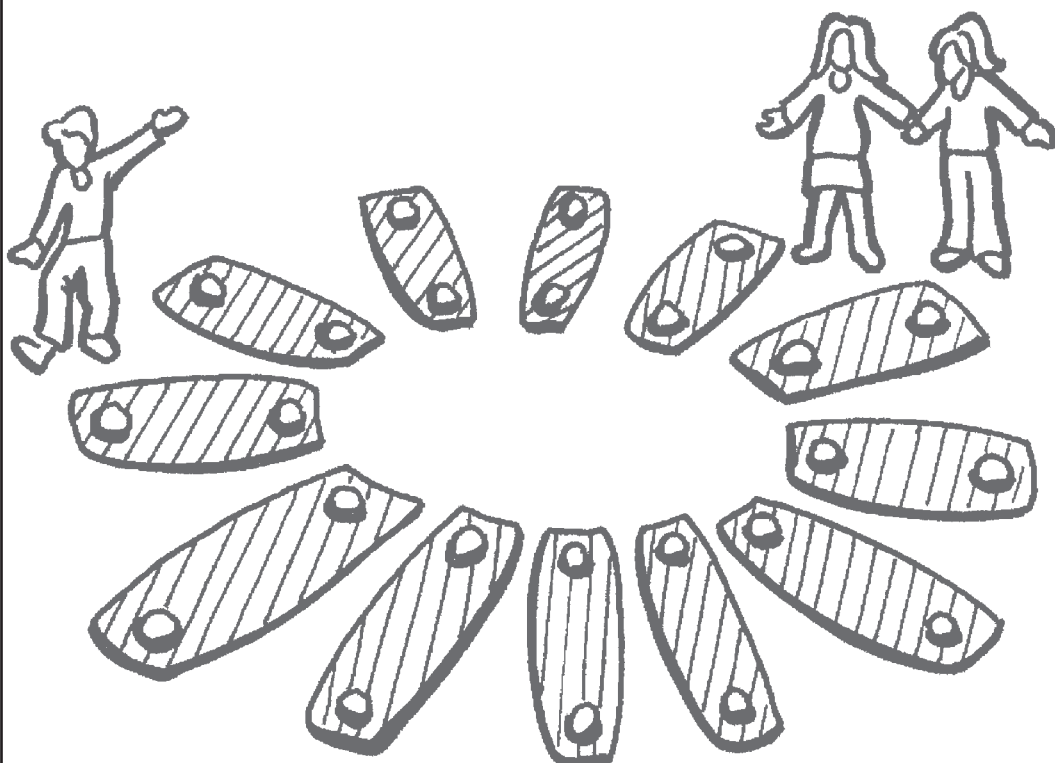
### 1 Design the pattern



### 2 Cut out shapes



### 3 Anchor with large stones and leave for three weeks



## ADDITIONAL INFORMATION

For slug nematodes (Nemaslug and Slugsure): by mail order: **GREEN GARDENER** ☎ 01603 715 096 [www.greengardener.co.uk](http://www.greengardener.co.uk) **JUST GREEN** ☎ 0800 389 6002 [www.justgreen.com](http://www.justgreen.com).

Sunflower seeds are available from many suppliers including: **DOBIES** ☎ 01803 696444 [www.dobies.co.uk](http://www.dobies.co.uk) **MR FOTHERGILL'S** ☎ 01638 552512 [www.mr-fothergills.co.uk](http://www.mr-fothergills.co.uk)

**SUTTONS** ☎ 01803 696321 [www.suttons-seeds.co.uk](http://www.suttons-seeds.co.uk) **THE ORGANIC GARDENING CATALOGUE** ☎ 01932 253666 [www.organiccatalog.com](http://www.organiccatalog.com)

**THOMPSON & MORGAN** ☎ 01473 688821 [www.thompson-morgan.com](http://www.thompson-morgan.com) **UNWINS SEEDS** ☎ 01945 588522 [www.unwins-mailorder.co.uk](http://www.unwins-mailorder.co.uk).