



01 Activity Guidance and Instructions

CREATE A FLOWER ARRANGEMENT FOR A FAMILY MEMBER

- 1** GATHER A RANGE OF FLOWERS FROM THE GARDEN OF DIFFERENT COLOURS, SHAPES AND SIZES.
- 2** PLACE ALL THE FLOWERS IN A SMALL HEAP AND SORT INTO SIMILAR COLOURS BY ABSTRACTING (PURPLE CAN GO WITH PINK ETC) AND CREATING MORE, SMALLER PILES OF FLOWERS.
- 3** CHOOSE A COLOUR ON THE COLOUR WHEEL AND TURN IT NORTH. THEN IDENTIFY THE COLOURS FOR EAST, SOUTH AND WEST.
- 4** RETURN TO YOUR PILES OF FLOWERS AND PICK SOME FLOWERS THAT MATCH THOSE FOUR INDICATED ON THE COLOUR WHEEL TO FIND ACCOMPANYING COLOURS.
- 5** YOU COULD PLAY A GAME BY RANDOMLY SELECTING A COLOUR AND SEEING WHO CAN QUICKLY GATHER FLOWERS OF THE FOUR COLOURS ON THE COLOUR WHEEL.
- 6** YOU COULD ALSO ORGANISE FLOWERS INTO HEIGHT OR TYPE.

KEEPING SAFE

DO NOT PICK WILD FLOWERS. PICK ONLY FLOWERS IN YOUR GARDEN

GET AN ADULT TO HELP YOU WITH SECATEURS IF NECESSARY



02 Computer Science*

COMPUTING

VARIABLES



A way in which computer programs can store, retrieve or change data, such as a score, the time left, or the user's name

Sorting through the differences in plants, flowers and flowering plants

- colour
- size (height and width)
- type

ABSTRACTION

Abstraction is about simplifying things; identifying what is important without worrying too much about the detail. Abstraction allows us to manage complexity.

Putting colours that are similar together (yellow and orange | red and pink) etc.

Matching colours to the colour wheel as best you can, it may not be an exact match

ALGORITHMIC THINKING



An algorithm is an unambiguous set of rules or a precise step-by-step guide to solve a problem or achieve a particular objective.

Following a sequence of instructions to find North, and identify East, West and South colours to accompany

DECOMPOSITION



The process through which problems or systems are broken down into their component parts, each of which may then be considered separately

The process of taking the larger heap of flowers and separating into smaller piles of colours.

03 IT Skills*

SORTING



Sorting is a common operation in many applications, and efficient algorithms ... making merging of sequences efficient and to enable processing of data in a defined order.

REPORTING



Think about all the different ways in which you can use IT to present your findings.

For example, a spreadsheet, a graph or chart, a presentation or even a video.

COLOUR WHEEL



A color wheel or color circle is an abstract illustrative organization of color hues around a circle (see right for a downloadable colour wheel).

See right for an intro to making charts.

PLANT IDENTIFICATION APP



Download a plant identifier app to help you discover more about the plants and flowers that you find in your garden or in the nearest park.

COLOURS IN COMPUTING



Colours can be added in graphics and in coding in different ways e.g HTML colours, HEX codes, RGB codes and more (see right).

04 Links to additional resources and activities

A

COMPUTING AT SCHOOL HOME LEARNING

<https://www.computingatschool.org.uk/homelearning>

B

BAREFOOT COMPUTING (including unplugged activities involving sport)

<https://www.barefootcomputing.org/>

C

HOME LEARNING RESOURCES FROM PARTNERS

Raspberry Pi Foundation <https://www.raspberrypi.org/learn/>

NCCE <https://teachcomputing.org/home-teaching/>

STEM Learning <https://www.stem.org.uk/home-learning>

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COLOURS IN COMPUTING

Check are HTML/HEX colour chart here: https://www.w3schools.com/colors/colors_picker.asp

Downloadable Colour Wheel <https://mrprintables.com/printable-color-wheel.html>

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CHARTS AND SPREADSHEETS

BBC Bitesize on Spreadsheets <https://www.bbc.co.uk/bitesize/guides/zdydmp3/revision/1>

Excel Easy tutorial on making charts <https://www.excel-easy.com/data-analysis/charts.html>

* Some definitions taken from Quick Start Computing Guide - <https://community.computingatschool.org.uk/files/8220/original.pdf>

