

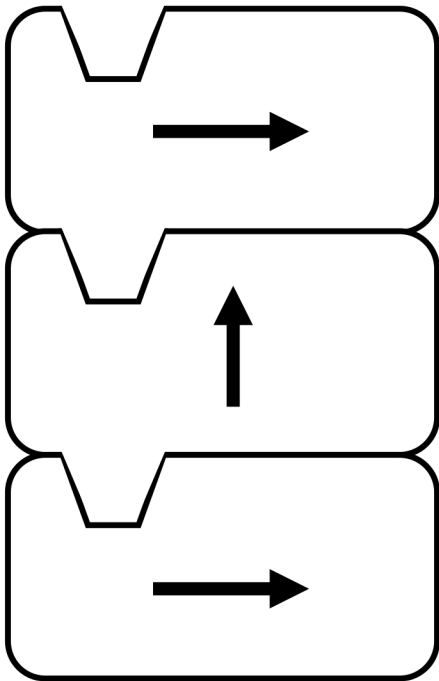
DRAW A FLOWER BASED ON AN ALGORITHM

Years ago when people learned to code, they needed to learn a computer language like Cobol, Basic or C++. The languages feature a combination of words, letters, numbers and symbols.

A few years ago Neil Fraser invented a coding language called Blockly Blocks which features visual block programming. A series of command or function blocks are linked together vertically to create an algorithm or series of steps.

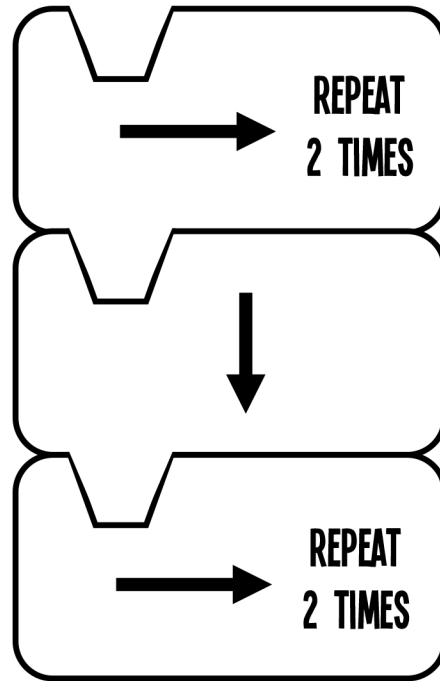
Examples:

WHEN RUN ▶



This means after you click on run, you need the object you are programming to go right, then forward, and finally, right again.

WHEN RUN ▶



This means after you click on run, you need the object you are programming to go right twice, then backwards, and finally, right again twice.

Coding sites for children like Tynker and Code.org feature Blockly blocks in their coding activities. Before you have students put Blockly blocks together online, you can have them follow an algorithm offline. One way they can work with a Blockly block algorithm is to follow the steps you need to draw an object like a flower. The algorithm or series of steps needed to draw and color a flower can be found on the Drawing a Flower Based on an Algorithm worksheet.

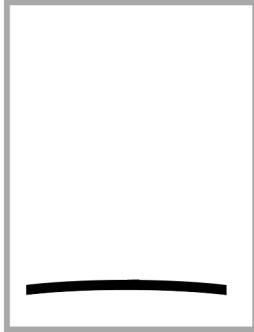
What will they do? Your students will draw what is mentioned or pictured in each of the blocks from the top block to the bottom block. When they have completed each step displayed in the block, they will have drawn a flower.

DRAW A FLOWER BASED ON AN ALGORITHM

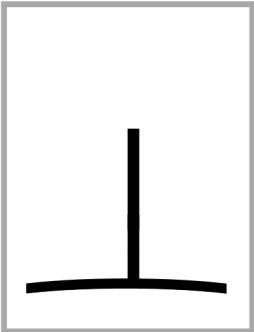
WHEN RUN



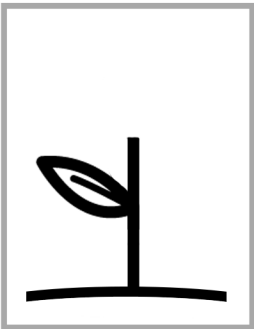
DRAW THE
GROUND



DRAW
A STEM



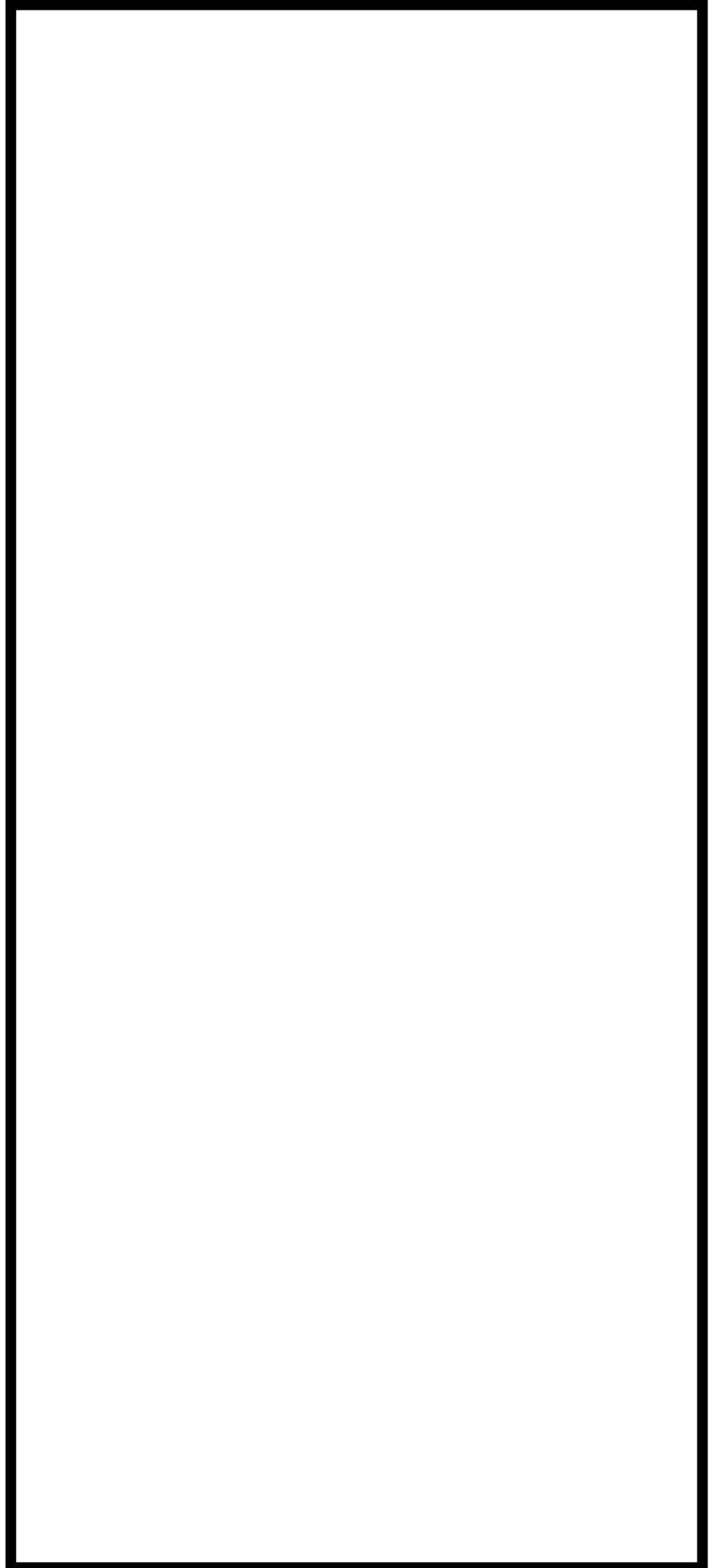
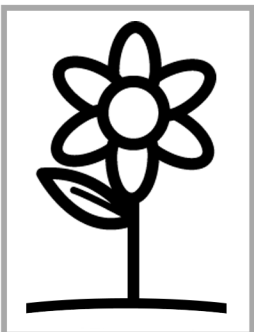
DRAW
A LEAF



DRAW THE
FLOWER CENTER



DRAW A PETAL
REPEAT 6 TIMES



DRAW A FLOWER BASED ON AN ALGORITHM

WHEN RUN

