

### Notes:

Note: This is a 5x5 version of a Code.org Unplugged activity. For more on this activity and other activities that teach programming fundamentals away from the computer visit <a href="https://code.org/curriculum/unplugged">https://code.org/curriculum/unplugged</a>.

# Algorithms

#### **Instructions:**

Pair the students together. One student (Student A) is given an image with shaded blocks. The other student (Student B) is given the blank grid. Student B does not look at the image Student A is given. The students should follow the instructions below:

- Student A writes an algorithm that can be used to draw the image they are given with the programming language provided in the example below.
- Student A gives the algorithm to Student B.
- Student B uses the algorithm written by Student A to draw the image on the blank grid provided.

## **Programming Language:**

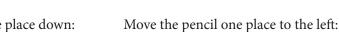
When Student B interprets the programming language, their pencil should start on the square that says "Start Here." The programming language is outlined below:

Move the pencil one place up:

Move the pencil one place to the right:



Move the pencil one place down:





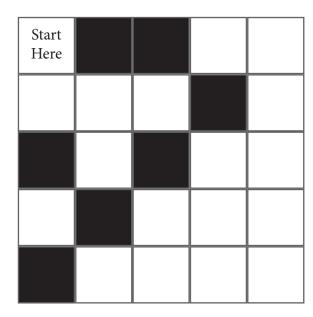
Shade in the block where the pencil is currently located:

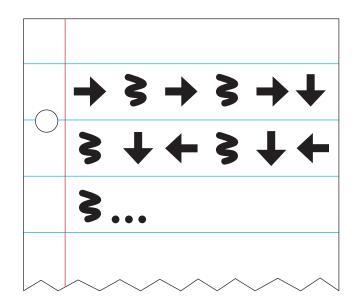


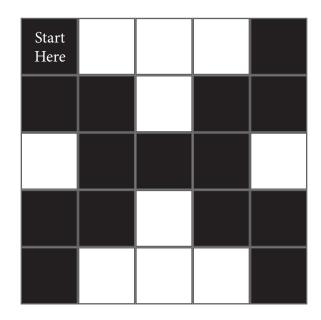


# Example:

The program is written and read as standard English is written and read: from left to right, one line at a time.

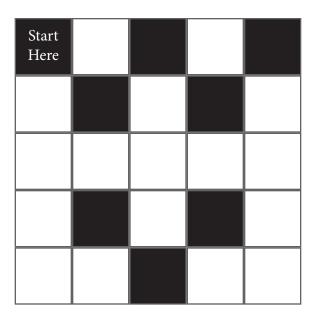






Start Here		

Start Here		



Start Here		

Start Here			

Start Here		

Start Here		