Name:_____ Date:_____
Teacher:_____ Period:_____

Drawing Algorithm

What is an algorithm? A series of instructions to complete a task.

Programming Key	
→	Move One Square Forward
←	Move One Square Backward
↑	Move One Square Up
↓	Move One Square Down
	Fill-In Square with Color

Use the Programming Key to the left to answer the following questions.

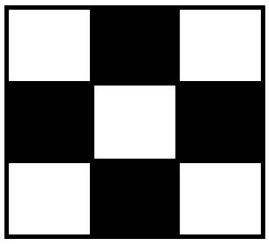
For example:

"Move one square forward, Move one square forward, Fill-in square with color,"

would be written as:

→ →

A full example is given below of an image to draw, the plain-English algorithm, and the algorithm in symbols. Note that the algorithm always starts in the upper leftmost corner.

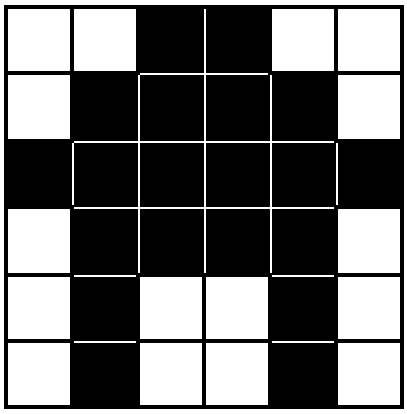


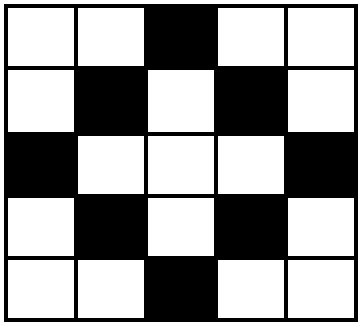
"Step forward, fill-in, step forward, next row, back, back,
fill-in, step forward, step forward, fill-in, next row, back, back
step forward, fill-in, step forward"

→ → ↓ ← ←
 → → ↓ ← ←
→ →

Your turn!

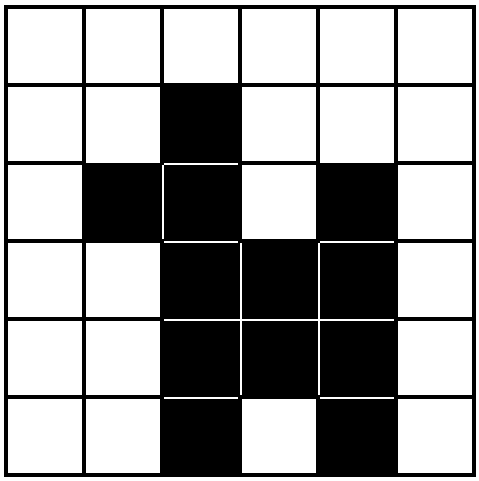
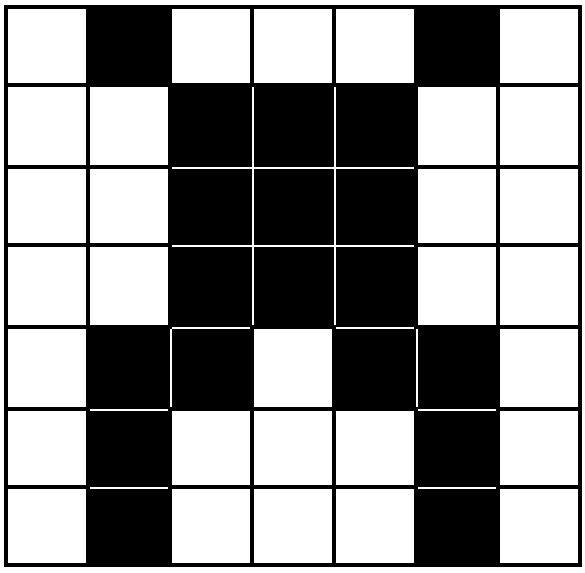
Write the algorithm in symbols for following drawings.





Now think about making the code a little shorter. For example, what could you replace “back, back” with?

Possibly ← 2

You can use steps like these to make the algorithm shorter so it’s easier to read.

Keep going! Now write an algorithm in symbols to draw exactly the images below: