Name(s)_____ Period _____ Date _____
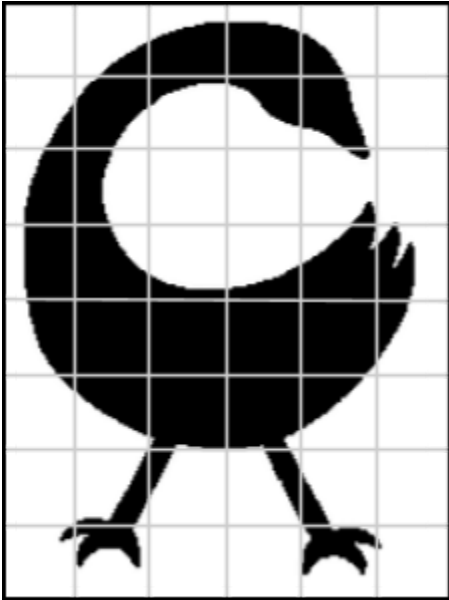
Activity Guide - Black and White Images

Building a Digital Image
Work to digitally represent the image below
- Read each square of the image and fill in the responses on the worksheet
- Enter the bits in Code Studio and use a timer to keep track of how long it takes
- Remember: Each bit can only be either black or white! You will have to decide for each square

Challenge A

When finished sampling, reflect on the following:
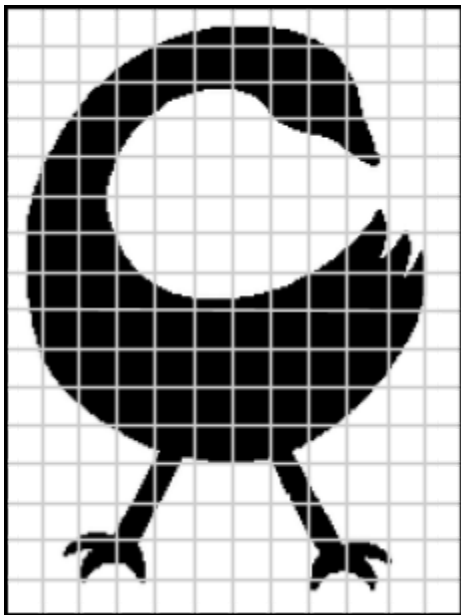
How many total bits were needed? _____

How long did it take to build? _____

How much does the digital image resemble this one? Why might that be the case?

_____

_____

_____

_____

Challenge B
This time, we will use sampling more frequently by reading the image using smaller squares.

How many total bits were needed? _____

How long did it take to build? _____

How does the new digital image compare to the one from Challenge A? What effect did taking a larger number of samples have on the image?

_____

_____

_____

_____

Challenge C

Select your favorite company logo. Decide how you are going to sample this logo - use one of the grids below. Draw the logo.