

U1/Ch1/L8: Encoding Color Images (15pts.)

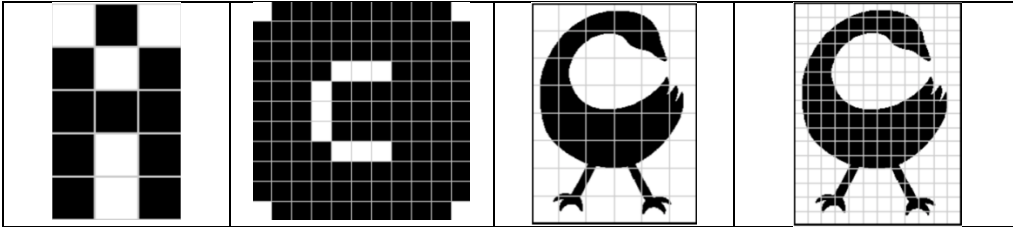
Purpose: Students will learn how to encode color images.

Vocabulary: RGB

Journal #1: Encoding Color?

- Write down the names of as many shades of blue you can think of.
- How many do you think there are total? (partner/class)

Here are the Black and White Images that you encoded during the previous class.



Now, devise an Encoding Scheme for color (with Partner) - Share.

- How many colors could you represent?
- What are some of the difficulties you face?

Video: "A Little Bit About Pixels." (Note: This is the same video we viewed with B&W images).

Activity 1: Color Pixelation Widget	
<p>Log on to Code.org, UCh1L8 View Explanation 1.RGB Color.</p> <ul style="list-style-type: none"> • #1-Video Tutorial: Color Pixelation Widget - (3 bit color) • Recreate the image to the right using the Pixelation Widget. (Puzzle 2 of 9; Color pixelation Task 1) 	
<p>View Explanation 3. More Shades of Color.</p> <ul style="list-style-type: none"> • #2-Video Tutorial: Color Pixelation Widget - (6 bit color) • Recreate the image to the right using the Pixelation Widget. (Puzzle 4 of 9; Color pixelation Task 2) 	
<p>View Explanation 3. More Shades of Color. (5pts.)</p> <ul style="list-style-type: none"> • #3-Video Tutorial: Color Pixelation Widget - (12 bit color) • Recreate the image to the right using the Pixelation Widget. (Puzzle 5 of 9; Color pixelation Task 2) 	
<p>6. Color Sampling Widget</p> <ul style="list-style-type: none"> • For each of the four images, decide which would be the best 'Sampling' to accurately recreate it. <p>7. Pixelation Widget (10pts.)</p> <ul style="list-style-type: none"> • Now you get to try and recreate any one of the 4 images...Good Luck! 	

Video: How Computers Work: Binary & Data.