Name: _____   Date: _____

Inwood Early College for Health and Information Technologies
Career and Technical Education Department

AP Computer Science Principles 1

Pixelated Pic Project

EXAMPLE – Graphic Organizer

Pixel Color Description: ___Dark Red___

RGB Values: _130_, _15_, _25_

Red Value: _130_	Green Value: _15_	Blue Value: _25_
Convert to Binary 130 ÷ 2 = 60 R 0 65 ÷ 2 = 32 R 1 32 ÷ 2 = 16 R 0 16 ÷ 2 = 8 R 0 8 ÷ 2 = 4 R 0 4 ÷ 2 = 2 R 0 2 ÷ 2 = 1 R 0 1 ÷ 2 = 0 R 1 10000010	Convert to Binary 15 ÷ 2 = 7 R 1 7 ÷ 2 = 3 R 1 3 ÷ 2 = 1 R 1 1 ÷ 2 = 0 R 1 00001111 Leading 0's	Convert to Binary 25 ÷ 2 = 12 R 1 12 ÷ 2 = 6 R 0 6 ÷ 2 = 3 R 0 3 ÷ 2 = 1 R 1 1 ÷ 2 = 0 R 1 00011001 Leading 0's
Red Value in Binary: 1 0 0 0 0 0 1 0	Green Value in Binary: 0 0 0 0 1 1 1 1	Blue Value in Binary: 0 0 0 1 1 0 0 1

Pixel color bitstring: 1 0 0 0 0 0 1 0 0 0 0 0 1 1 1 1 0 0 0 1 1 0 0 1