CSD: ASCII & Binary Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Decoding Activity

Directions: Decode the following words or phrases.

Directions: Encode the following words or phrases.

1. USA
2. Positive Attitudes Only
3. Elephant

Directions: Use the 8 bit binary number system to decode the following numbers.

128 64 32 16 8 4 2 1

1. 10) 11)

Directions: Use the 10 bit binary number system to answer the following questions. Before you decipher the answers, complete the code for the 10 bit system below.

12) a. Number of bones in the human body a = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_ c = \_\_\_\_\_\_\_\_

b. Longest fingernail length in centimeters

c. The number of miles you would walk if you hiked a quarter of the Appalachian Trail

13) a. Secret Number 1 a = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_ c = \_\_\_\_\_\_\_\_

b. Secret Number 2

c. Secret Number 3

Directions: Decode the answers given the bit lengths. Complete the code for the 8 bit below.

14) a. Secret Number 1 (3 bits) a = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_ c = \_\_\_\_\_\_\_\_

b. Secret Number 2 (8 bits)

c. Secret Number 3 (6 bits)

15) a. Secret Number 1 (6 bits) a = \_\_\_\_\_\_\_\_ b = \_\_\_\_\_\_\_\_ c = \_\_\_\_\_\_\_\_

b. Secret Number 2 (4 bits)

c. Secret Number 3 (7 bits)

Directions: Encode the following numbers.

16) 81 17) 213 18) 156