## **Coding and Decoding**

## A. Choose the correct answer:

1.	If Δ =	1 R =	: 2 C :	= 3 the	n what is	s the	code	for D?
т.	11 A -	I, D -	- 2, C -	- J, LIIC	II wilat i	o uic	LUUE	101 0:

a) 2

b) 3

c) 4

d) 5

2. If CAT = 3 + 1 + 20, what is the total code value of CAT?

a) 24

b) 25

c) 26

d) 27

3. If Z = 26, then what is the code for M?

a) 12

b) 13

c) 14

d) 15

4. If APPLE = 1 + 16 + 16 + 12 + 5, what is the total code value?

a) 40

b) 50

c) 60

d) 45

5. In a code, if DOG = 4 + 15 + 7, what is the code total?

a) 25

b) 26

c) 27

d) 28

**B.** Write the Missing Terms to Complete the Sentences:

- 1. If A = 1, then Z = \_\_\_\_\_
- 2. In alphabetical order, E = \_\_\_\_\_
- 3. The word "MATH" = 13 + 1 + 20 + \_\_\_\_\_
- 4. If the code for FUN is 6 + 21 + 14 = \_\_\_\_\_
- 5. If B = 2, then the code for BB = \_\_\_\_\_

C. Mark each sentence with a True ( ✔) or False (X):

- 1. A = 1, Z = 26 is the standard coding pattern
- \_\_\_\_

2. In the word "BOOK", K = 11

\_\_\_\_

3. The word "HELLO" adds up to 52 in letter codes \_\_\_\_\_

- 4. The letter M comes after N

  5. B = 2 and D = 4
- D. Figure out the answers to these questions:
  - 1. Find the code for the word "SUN" using A = 1 to Z = 26
  - 2. Decode the total 33 as the sum of three letters
  - 3. If A = 1 and each next letter increases by 1, what is the code for "BED"?
  - 4. If CODE = 3 + 15 + 4 + 5, what is the total value?
  - 5. Create a word whose letter codes add up to 30
- E. Challenge yourself with these questions:
  - 1. Code the word "BALL" using number values of letters
  - 2. What is the total code for "TREE"?
  - 3. Make a secret message using number codes for "HOME"
  - 4. Decode this sum: 8 + 5 + 12 + 16 = ? (what word is this?)
  - 5. Write any word with a total letter code sum of 40