

## (G) By the Same Token (1/2)

G1. “Types” refers to the number of distinct letters found in the word. “Tokens” refers to the total number of letters in the word (i.e., its length. Here are some possible entries for the chart:

| Word               | Types | Tokens |
|--------------------|-------|--------|
| rock               | 4     | 4      |
| paper              | 4     | 5      |
| scissors           | 5     | 8      |
| shoot              | 4     | 5      |
| shaping            | 7     | 7      |
| add                | 2     | 3      |
| senselessness      | 4     | 13     |
| metal              | 5     | 5      |
| assesses           | 3     | 8      |
| hemidemisemiquaver | 11    | 18     |
| squeegee           | 5     | 8      |
| a                  | 1     | 1      |
| dog                | 3     | 3      |
| speaking           | 8     | 8      |
| noon               | 2     | 4      |
| singing            | 4     | 7      |
| unpredictably      | 13    | 13     |

All of the numbers must be the exact values shown, but there are many options for the words; e.g., *a* could be replaced with *l* and *unpredictably* could be replaced with *troublemaking*. (It is very difficult to think of words that fit the 13-13 requirement of being 13 letters long with no repeated letters, but careful observers might notice the hint of *unpredictably* being heavily emphasized in the intro text). Fun fact: The longest English words with no repeated letters are *uncopyrightable* and *dermatoglyphics* (15 letters each), according to <https://www.morewords.com/unique-letters/>.

For half credit, solvers could have use nonsense letter strings that fulfill the given criteria; e.g., *abcdbbb* could have been used instead of *singing*.



## (G) By the Same Token (2/2)

G2. Here is what the table looks like with the extra letters removed:

| Shilha word | Types in correct Shilha word | Tokens in correct Shilha word | English translation       |
|-------------|------------------------------|-------------------------------|---------------------------|
| AFULUS      | 5                            | 6                             | male chicken              |
| IFULUSN     | 6                            | 7                             | male chickens             |
| TAFULUST    | 6                            | 8                             | female chicken            |
| TIFULUSIN   | 7                            | 9                             | female chickens           |
| ATBIR       | 5                            | 5                             | male pigeon               |
| ITBIRN      | 5                            | 6                             | male pigeons              |
| TATBIRT     | 5                            | 7                             | female pigeon             |
| TITBIRIN    | 5                            | 8                             | female pigeons            |
| AFUNAS      | 5                            | 6                             | ox (male bovine)          |
| IFUNASN     | 6                            | 7                             | oxen (male bovines)       |
| TAFUNAST    | 6                            | 8                             | cow (female bovine)       |
| TIFUNASIN   | 7                            | 9                             | cows (female bovines)     |
| ASHLHIY     | 6                            | 7                             | male speaker of Shilha    |
| ISHLHIYN    | 6                            | 8                             | male speakers of Shilha   |
| TASHLHIYT   | 7                            | 9                             | female speaker of Shilha  |
| TISHLHIYIN  | 7                            | 10                            | female speakers of Shilha |
| ADRAR       | 3                            | 5                             | mountain (masculine)      |
| IDRARN      | 5                            | 6                             | mountains (masculine)     |
| TADRART     | 4                            | 7                             | mountain (feminine)       |
| TIDRARIN    | 6                            | 8                             | mountains (feminine)      |

Thus, the answers to the specific questions asked are:

- (l) TATBIRT
- (m) ATBIR
- (n) TAFUNAST
- (o) ADRAR
- (p) TIDRARIN

