

Corpus Data or Teacher Intuition: Which is More Valuable when Choosing Vocabulary to Teach to Young ESL Learners?

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Corpus Data or Teacher Intuition: Which is More Valuable when Choosing Vocabulary to Teach to Young ESL Learners?

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Abstract

This study compared the value of corpus data versus teacher intuition when selecting vocabulary to teach to young ESL learners. It revealed that vocabulary chosen using teacher intuition are mostly low-frequency, but that such items are more preferable because they have high-imageability. It concluded that for young learners, a combination of 500 words with high-imageability chosen using native English speaker intuition and the most frequent 500 words of English is preferable in comparison with teaching the most frequent 1,000 words of English. The reason for this was the minimal gains in text coverage that the second most frequent 500 words of English provided in comparison to words chosen with intuition, which had high-imageability and thus a lower learning burden. This study showed that such an approach strikes an ideal balance between the practicality of pedagogical goals and the cost/benefit value of vocabulary choices.

Keywords: high-frequency vocabulary, vocabulary acquisition, young learners, corpora, intuition

Introduction

Research indicates that the early years of life is the ideal time to learn a foreign language. Kotulak (1996) states that by the age of 12, the fundamental architecture of the brain is complete and Dryden and Vos (1997) believe that from birth until this age is the crucial time that should be taken advantage of if a child is to learn language in the most efficient way. While much of the previous research indicates that this age range is a crucial period, it is not yet clear how exactly a foreign language should be taught during it.

When choosing vocabulary to teach directly to second language learners, research indicates that it is best to focus on high-frequency vocabulary because such vocabulary

items cover 80 percent or more of the words in most texts (Nation, 2008). To identify high-frequency vocabulary, we rely on frequency data in corpora. However, the vast majority of research regarding the teaching of vocabulary to second language learners does not focus on young learners (from birth to age 12), but rather junior high school, high school, university or adult learners. So, while previous research has clearly shown the value of high-frequency vocabulary for these learner groups, it is not yet clear whether this also applies to very young learners. In fact, quite often vocabulary choices for this age range are not based on corpus data, but rather intuition.

While making vocabulary choices using corpus data truly enhances our ability to select useful items to teach, the intuition of an experienced ESL practitioner should not be discounted altogether. In fact, research has shown that if the person making vocabulary choices using their intuition has enough experience teaching the target learners, their choices can be quite reliable (Rogers, 2010). Quite often, vocabulary choices in materials for teaching very young ESL learners are based on a similar concept: words with high imageability, such as *dog*. A child can easily imagine a picture of the target word in their mind, and teachers can easily use child-friendly pictures to help aid learning. This is not easily done with words that have low imageability, such as *tax*. It is also very common for materials to organize vocabulary into similar semantic fields. For instance, animals will all be taught at the same time. In fact, the majority of materials for children teach vocabulary in this way. However, do such words have a good cost/benefit ratio for the learners? In other words, does learning such words help these learners when they encounter authentic texts? How do such words compare to the most frequent 500 or 1,000 words in a corpus? These questions remain unanswered.

To address this gap in the research, this paper compared the cost/benefit ratios of two sets of high-frequency vocabulary: the first and second most frequent 500 words from a corpus versus vocabulary with high imageability within similar semantic fields chosen using native speaker intuition.

Literature Review

Mastering vocabulary is central to language acquisition, and high-frequency vocabulary has been proven to be the most valuable for learners to master. The rationale is that the learning burden/benefit ratio becomes inefficient for learning words that are low-frequency

since the time put into learning them is not supported by enough exposure to solidify learning or be worthwhile (Webb & Nation, 2008). Nation (2008) recommends that learners focus primarily on the first 2,000 words of English. However, there is a severe lack of research in regards to using high-frequency vocabulary lists derived from corpora for very young learners. The vast majority of such research targets much older learners, and has not yet considered aspects such as a word's imageability and how such words compare with high-frequency vocabulary in regards to text coverage.

But how exactly are words 'counted' in corpus linguistics? In fact, there are a number of ways. When Nation (2008) referred to 2,000 words of English above, he was actually referring to 2,000 word families. A word family is "a headword, its inflected forms, and its closely related derived forms" (Nation, 2001:8). For instance, the word family for *accept* includes *accept*, *acceptability*, *acceptable*, *acceptably*, *acceptance*, *acceptances*, *accepted*, *accepting*, *acceptor*, *accepts*, *unacceptability*, *unacceptable*, and *unacceptably* (Heatley, Nation, & Coxhead, 2002). Words can also be counted as lemma, or a "set of related words consisting of the stem and inflected forms that are all the same part of speech" (Nation & Meara, 2002:36). For instance, the verb *run* represents the forms *run*, *runs*, *running* and *ran*, and the noun *run* would be listed as a separate lemma. Other researchers, such as Shin (2006), counted words as types, which means that the verbs *run*, *runs*, *running*, and *ran* would all be counted separately.

All these different ways to count words have positive and negative aspects. Some are more suitable for specific types of research. For instance, if the goal is to choose a specific example of a lexical item to teach to a learner, then lemma or type may be a preferable way to count because the headword in a word family is not always necessarily the most frequent lexical item that the family includes. For example, table 1 below shows data from the Corpus of Contemporary American English (COCA) (Davies, 2008a) which highlights how the word family for *depress* can be misleading. Despite the word family being represented by the verb *depress*, the noun *depression* has significantly higher frequency.

Word type	Frequency in the corpus
<i>depression</i>	19,176
<i>depressed</i>	6,715
<i>depressing</i>	2,032

<i>depressive</i>	1,598
<i>anti-depressants</i>	758
<i>anti-depressant</i>	533
<i>depress</i>	411
<i>depressingly</i>	152
<i>depresses</i>	144
<i>depressant</i>	58
<i>depressives</i>	31
<i>depressants</i>	18

Table 1. Frequency counts in the COCA (Davies, 2008a) for word types in the word family *depress*

It is also important to note that, both in the past and today, the most common way that vocabulary is taught to very young learners (both native and ESL learners) is via semantic sets. Researchers such as Erten and Tekin (2008) and Waring (1997) criticized exposing learners to vocabulary in such a way because they believe that learning in this way is inefficient. However, researchers such as Papathanasiou (2009) disagreed, believing that presenting vocabulary in semantic sets may still be of value for L2 learners in regards to long term retention. Chepyshko and Truscott (2009) believe that neither a semantic grouping approach or an alternative approach (such as thematic or random grouping of vocabulary), can be exclusively recommended. In fact, in a more recent study, Ishii (2014) found that the difference between learning words presented in semantic sets versus sets of totally unrelated words was not statistically significant. While this issue should be pointed out in any study that is concerned with semantic grouping of vocabulary, this paper does not argue for or against semantic grouping of vocabulary, but rather simply provides data as to currently held beliefs by native English speaking ESL practitioners.

Research also indicates that if a word has high imageability (Ellis & Beaton, 1993; de Groot and Keijzer, 2000) it may be beneficial for vocabulary learning. Such vocabulary choices are clearly preferable when the cognitive capabilities of very young learners are considered. Researchers such as Dryden and Rose (1995) and Dryden and Vos (1997) recommended reinforcing words with pictures when teaching very young learners. Thus, vocabulary items with high imageability are clearly preferable for this age group. When

native English speaking ESL practitioners use their intuition to choose vocabulary, there is high probability that the imageability of a word will be considered. While this study will confirm this, it will also examine whether high-frequency vocabulary items have high imageability, a pertinent question that has yet to be answered.

Research Questions

1. Are vocabulary choices for direct instruction to young ESL learners made by native English ESL teachers influenced by the notion of the semantic set and imageability?
2. What provides better text coverage, the first 500 most frequent lemma of English, the second most frequent lemma of English, or a list of 500 words chosen for young learners using intuition?
3. What provides better text coverage, the first 500 most frequent lemma of English combined with a list of 500 words chosen for young learners using intuition or the first 1,000 most frequent lemma of English?
4. What percentage of the most frequent 1,000 lemma of English has high imageability?

Materials

A questionnaire was created to determine the types of beliefs native English teachers have in regard to vocabulary selection for direct instruction for young learners (see appendix 1). The answers to this questionnaire served as a basis for the selection of 500 words (see appendix 2) to teach young learners using teacher intuition.

This study also used the most frequent 500 and the second most frequent 500 lemma of the COCA's top 5,000 lemma list (Davies, 2008b). Both of these lists fall into the range of what Nation (2008) considered to be high-frequency vocabulary, and thus worthy of direct instruction. This range was chosen because of the well-documented value of the high-frequency vocabulary within the first 1,000 word families. This amount of vocabulary was also chosen with consideration for the target learners' age range, in that 1,000 vocabulary items is a realistic goal for a learner studying from age 2 to 10. Furthermore, this lemma list is freely available and thus makes replication of this study easier.

For the purposes of this study, lemma are preferable in that this study specifically has the goal of identifying items to teach to end users. Lemma are also advantageous in

comparison with counting word types in that counting with lemma helps to consolidate data and can result in more accurate word counts in comparison to counting with types. Therefore, this study will begin by utilizing these lemma lists. These lemma lists will be compared with a 500 word list created using teacher intuition.

When the goal is to examine text coverage, word families are certainly preferable. Webb and Nation (2008:3) stated that if learners are “able to demonstrate knowledge of the headword in the test, then there is the assumption that they also have receptive knowledge of the rest of that word family.” Therefore, it is not unreasonable to assume that knowledge of one member of a word family can extend to the rest of the lexical items in that family. Therefore, this study will utilize word families when conducting text coverage analysis.

Shin (2006) stated that a corpus linguistics study should ideally use a large corpus which includes a variety of genres. Ideally, such a corpus should be equally distributed across these genres. Furthermore, it is preferable that the corpus also be modern and freely available so that the study can be easily replicated. For these reasons, the Manually Annotated Sub-Corpus (MASC) (Ide, Baker, Kellbaum, Fillmore, & Passonneau, 2008) of the American National Corpus (ANC) will be used. The corpus is modern (its contents were compiled from data sources from 1990 onward), somewhat large at 497,658 tokens (words), has equal distribution over 19 genres of English, and is freely available. To calculate text coverage of the MASC, Heatley, Nation and Coxhead’s (2002) RANGE program will be used.

Procedure

The first step taken in this study was to administer the questionnaire. It was administered to eight native English speaking English language teachers who have had experience teaching the target learners. It aimed to determine the type of vocabulary choices they would make for young children if they had to rely simply on their intuition. The data was then examined and its results were used as a guide to create a list of 500 words using intuition by one of this paper’s authors, and a native English speaking English language teacher who has experience teaching the target learners of this study.

Then, the most frequent 500 lemma list, second most frequent 500 lemma list, and 500 word intuition list were all turned into word family headword lists. Headword list creation is a function of the RANGE program which allows a custom word family list to be created from any list of words. For instance, if one of the lists contains the word *depression*, then an entry

will be created in the headword list called *depress*, which will include all 12 derivations of the headword (as in table 1 above). This step is taken because if, for example, a list contains the word *dog*, and *dogs* occurs in the MASC corpus, then we clearly want *dogs* to be marked as known because of the ease of extending word family knowledge. Thus, the headword list should not simply contain an entry for *dog*, but for *dogs* as well. Fortunately, this is easily accomplished via this special function of the RANGE program.

Next, the RANGE program was used with each of these headword lists to determine their coverage of the MASC corpus. Essentially, when this is done, the resulting data will indicate that if a learner had mastered the words on the list, then that knowledge would theoretically provide them with understanding of X percentage of any text (assuming that the corpus represents the language in general). Five different analyses were conducted:

1. Coverage of the corpus by the most frequent 500 lemma list
2. Coverage of the corpus by the second most frequent 500 lemma list
3. Coverage of the corpus by the intuition-based 500 word list
4. Coverage of the corpus by the most frequent 500 lemma list combined with the intuition-based 500 word list
5. Coverage of the corpus by the most frequent 500 lemma list combined with the second most frequent 500 lemma list

Finally, the most frequent 500 lemma list and second most frequent 500 lemma list were examined for imageability and percentages were tallied.

Results

The results of the questionnaire show that when ESL practitioners rely on their intuition to choose vocabulary to teach to very young learners, they choose items which have high imageability. All of the words provided were either nouns, verbs, or adjectives with high imageability. Furthermore, all of the respondents indicated that such vocabulary be taught in semantic sets. Therefore, the answer to RQ #1 is affirmative. The semantic sets respondents indicated that they would teach the words in were actions, animals and bugs, body parts, colors, descriptions, food and drink, music, nature, people and occupations, and shapes. An additional three categories were added by this paper's authors since some of the word examples given fell into these categories. These are: big things, small things, and places.

The result of the text coverage analysis of the corpus using the most frequent 500 lemma list showed that the list provided substantial coverage of the corpus at 54.15 percent (see table 2).

Word List	Tokens/%	Types/%	Families
Most frequent 500 lemma list	269,501/54.15	1,553/ 4.86	399
Not on the list	228,157/45.85	30,408/95.14	X
Total	497,658	31,961	399

Table 2. Text coverage of the corpus by the most frequent 500 lemma list

The result of the text coverage analysis of the corpus using the second most frequent 500 lemma list showed that the list provided a considerable amount of coverage of the corpus at 19.55 percent (see table 3).

Word List	Tokens/%	Types/%	Families
Second most frequent 500 lemma list	97,313/19.55	1,917/ 6.00	450
Not on the list	400,345/80.45	30,044/94.00	X
Total	497,658	31,961	450

Table 3. Text coverage of the corpus by the second most frequent 500 lemma list

The result of the text coverage analysis of the corpus using the intuition-based 500 word list showed that the list provided only minimal coverage of the corpus at only 4.71 percent (see table 4).

Word List	Tokens/%	Types/%	Families
Intuition-based 500 word list	23,432/ 4.71	973/ 3.04	425
Not on the list	474,226/95.29	30,988/96.96	X
Total	497,658	31,961	425

Table 4. Text coverage of the corpus by the intuition-based 500 word list

The data above provides a clear answer to RQ #2. The most frequent 500 lemma of English provides the most text coverage at 54.15 percent, while the second most frequent 500 lemma of English also provides a significant amount of coverage at 19.55 percent. The text coverage provided by the intuition-based 500 word list provided was far less at only 4.71%.

The result of the text coverage analysis of the corpus using the most frequent 500 lemma list combined with the intuition-based 500 word list showed that the lists provided only a minimal coverage increase in comparison with the coverage of the most frequent 500 lemma list alone (see table 5).

Word List	Tokens/%	Types/%	Families
Most frequent 500 lemma list and intuition-based 500 word list	70,884/54.43	2,141/ 6.70	738
Not on the list	226,774/45.57	29,820/93.30	X
Total	497,658	31,961	425

Table 5. Text coverage of the corpus by the most frequent 500 lemma list combined with the intuition-based 500 word list

The result of the text coverage analysis of the corpus using the most frequent 500 lemma list combined with the second most frequent 500 lemma list showed that the lists also provided only a minimal coverage increase in comparison with the coverage of the most frequent 500 lemma list alone (see table 6).

Word List	Tokens/%	Types/%	Families
Most frequent 500 lemma list and second most frequent 500 lemma list	295,240/59.33	2,501/ 7.83	756
Not on the list	202,418/40.67	29,460/92.17	X
Total	497,658	31,961	425

Table 6. Text coverage of the corpus by the most frequent 500 lemma list combined with the second most frequent 500 lemma list

Tables 5 and 6 above provide an answer to RQ #4. The first 1,000 most frequent lemma of English provide slightly better text coverage (59.33 percent) in comparison with the first 500 most frequent lemma of English combined with a list of 500 words chosen for young learners using intuition (54.43 percent).

When the first and second most frequent 500 lemma lists were examined for imageability, it was found that the vast majority of lemma had low imageability (see table 7).

Word List	% of lemma with high imageability
Most frequent 500 lemma list	2.8%
Second most frequent 500 lemma list	6.2%
First and second most frequent 500 lemma lists combined	4.5%

Table 7. Imageability of the first and second most frequent 500 word lists

In regards to RQ #5, table 7 above shows that the vast majority of most frequent 1,000 lemma of English have low imageability.

Discussion

The results of the questionnaire showed that regardless of the current debate on the efficacy of teaching vocabulary in semantic sets, ESL practitioners still choose such vocabulary when they rely on their intuition. Furthermore, the results of the corpus text coverage analysis revealed that such vocabulary provides very low text coverage. However, a more in-depth analysis of the data revealed that the intuition-based vocabulary list is still valuable for very young learners.

The first text coverage analysis revealed that the most frequent 500 lemma provides substantial coverage of the corpus. Theoretically, if a learner has mastered these 500 lemma, they would be able to comprehend 54.15 percent of the words in any text. Therefore, these lemma are of clear value to learners. Conversely, when we compare text coverage of the most frequent 500 lemma of English with 500 child-friendly words chosen using native speaker intuition, we find that the corpus-sourced word list clearly has a better cost/benefit ratio in regards to text coverage. The most frequent 500 lemma list covered 54.15 percent of the corpus while the intuition-based list only covered 4.71 percent. Furthermore, when we look at the somewhat significant coverage that the second 500 lemma provides (19.55 percent), it would seem that the corpus-based list provide superior value for learners. However, it would not be prudent to rely on this data alone. Thus, the lists were combined to show their true coverage because duplicates in the lists (multiple lemma falling into one word family) can significantly affect results.

In fact, combining these lists did provide very revealing data which contrasted with the initial findings. When we compare adding the most frequent 500 lemma to the 500 words chosen with intuition with the first 500 most frequent lemma added to the second 500, the additional coverage was found to be minimal. The second 500 lemma only gave an advantage of 5.9 percent more coverage, while not having the advantage of high imageability. Therefore, the gains in text coverage that the second 500 words provide may not be worthwhile in comparison with what can be gained in regards to motivation via child-friendly words with high imageability because of their low learning burden.

Conclusion

This study was quite revealing in that it filled a gap in the research in regards to using corpora to inform vocabulary choices for direct instruction to very young ESL learners. The data revealed the significant importance of the first and second most frequent lemma of English in regards to text coverage. The data also revealed that a 500 word list chosen for young learners using native English speaking English language teachers' intuition has very low value in regards to text coverage in comparison.

However, this study also revealed that when text coverage of the most frequent 1,000 lemma of English is compared with coverage of the most frequent 500 lemma combined with an intuition-based 500 word list, the gains in text coverage were minimal, while the loss of imageability was substantial. This study also revealed that the vast majority of the most frequent 1,000 lemma of English have low imageability, and thus have a high learning burden for younger learners. Thus, an intuition-based list of 500 words combined with the most frequent 500 lemma of English may be preferable for very young learners in comparison with a list of the most frequent 1,000 lemma of English.

These results of this study point to a potential advantage of starting off very young learners with an intuition-based list of vocabulary which have high imageability, and then moving on to the most frequent 500 words of English as a first step towards vocabulary acquisition. The data in this study shows that such an approach strikes an ideal balance between practicality of pedagogical goals (learning words with a low learning burden) and cost/benefit value (learning words with a high percentage of text coverage). Therefore, to answer the question this paper's title puts forward, both corpus data and intuition should be considered valuable when choosing vocabulary to teach very young learners.

While this study did provide revealing information that ESL practitioners can use to improve upon the efficacy of English instruction for young learners, more research is still needed. Future research should examine the best way to teach high-frequency function words to very young learners since they make up a very large proportion of the most frequent 500 lemma of the COCA (25.2 percent). Furthermore, while much previous research has been done on how words with high imageability can be taught to young children, the best way to teach more abstract lexical items (such as *tax*) or function words has yet to be discovered. Despite this, this study should still be considered as a step forward towards improving upon the efficacy of vocabulary acquisition by very young learners.

References

- Chepyshko, R. & Truscott, J. (2009). *Semantic category effects in L2 vocabulary learning: A MOGUL perspective*. (Unpublished master's thesis). National Taiwan University, Taipei, Taiwan.
- Davies, M. (2008a). *The corpus of contemporary American English: 450 million words, 1990-present*. Retrieved from <http://corpus.byu.edu/coca/>
- Davies, M. (2008b). *Top 5,000 lemma list*. Retrieved from <http://www.wordfrequency.info/free.asp?s=y>
- deGroot, A. & Keijzer, R. (2000). What is hard to learn is easy to forget: The roles of word concreteness, cognate status, and word frequency in foreign language learning and forgetting. *Language Learning, 50*, 1-56.
- Dryden, G. & Rose, C. (1995). *Fundamentals*. United Kingdom: Accelerated Learning Systems.
- Dryden, G. & Vos, J. (1997). *The learning revolution*. Auckland, NZ: The Learning Web.
- Ellis, N. & Beaton, A. (1993). Psycholinguistic determinants of foreign language vocabulary learning. *Language Learning, 43*, 559-617.
- Erten, I. & Tekin, M. (2008). Effects on vocabulary acquisition of presenting new words in semantic sets versus semantically unrelated sets. *System, 36* (3), 407-422.
- Heatley, A., Nation, P. & Coxhead, A. (2002). *RANGE program*. Retrieved from <http://www.victoria.ac.nz/lals/staff/paul-nation>
- Ide, N., Baker, C., Fellbaum, C., Fillmore, C., & Passonneau, R. (2008). MASC: The manually annotated sub-corpus of American English. *Proceedings of the Sixth International Conference on Language Resources and Evaluation (LREC)*. Paris: European Language Resources Association.
- Ishii, T. (2014). Re-examining semantic clustering: Insight from memory models. *The Language Teacher, 38*, 27-30.
- Nation, P. (2008). *Teaching vocabulary: Strategies and techniques*. Boston, Heinle.
- Nation, P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Nation, P. & Meara, P. (2002). Vocabulary. In N. Schmitt (Ed.), *An introduction to applied linguistics*, (pp. 35-54). London: Edward Arnold.
- Papathanasiou, E. (2009). An investigation of two ways of presenting vocabulary. *ELT Journal, 63*(4), 313-322.
- Rogers, J. (2010). Is intuition enough when choosing vocabulary? *Kansai Gaidai Journal of Inquiry and Research, 91*, 195-210.
- Waring, R. (1997). The negative effects of learning words in semantic sets: A replication. *System, 25*(2), 261-274.
- Webb, S. & Nation, P. (2008). Evaluating the vocabulary load of written text. *TESOLANZ Journal, 16*, 1-10.

Appendix 1: Questionnaire

1. If you had to rely on your intuition to choose 500 vocabulary items to teach to young ESL learners (age 2-12), what kind of vocabulary would you teach? Write 10 examples.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

2. When you teach these words, would you group them into semantic sets, such as animals, colors, etc.? YES or NO

If yes, what semantic sets would you choose? Please write down up to 10.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Appendix 2: 500 words chosen using English teacher intuition

*Each word is preceded by a number which indicates the semantic set or category of words it was grouped into. These are: 1. actions, 2. animals/bugs, 3. big things, 4. body, 5. colors, 6. descriptions, 7. food/drink, 8. music, 9. nature, 10. people/occupations, 11. places, 12. shapes, and 13. small things.

1 carry, 1 catch, 1 close, 1 dance, 1 dig, 1 draw, 1 drink, 1 drop, 1 eat, 1 hide, 1 jump, 1 kick, 1 laugh, 1 listen, 1 open, 1 point, 1 pour, 1 pull, 1 punch, 1 push, 1 read, 1 run, 1 sing, 1 sit, 1 sleep, 1 stop, 1 swim, 1 throw, 1 walk, 1 wash, 1 wave, 2 alligator, 2 ant, 2 beak, 2 bear, 2 bee, 2 bird, 2 bull, 2 butterfly, 2 camel, 2 cat, 2 caterpillar, 2 chicken, 2 cow, 2 crab, 2 deer, 2 dinosaur, 2 dog, 2 dolphin, 2 donkey, 2 dragonfly, 2 duck, 2 eagle, 2 elephant, 2 feather, 2 fish, 2 flamingo, 2 fly, 2 fox, 2 frog, 2 giraffe, 2 goat, 2 goose, 2 gorilla, 2 grasshopper, 2 hippo, 2 horse, 2 jellyfish, 2 kangaroo, 2 kitten, 2 koala, 2 ladybug, 2 lion, 2 lizard, 2 lobster, 2 monkey, 2 mosquito, 2 moth, 2 mouse, 2 octopus, 2 owl, 2 panda, 2 parrot, 2 penguin, 2 pig, 2 pigeon, 2 puppy, 2 rabbit, 2 raccoon, 2 rhino, 2 scorpion, 2 shark, 2 sheep, 2 snake, 2 spider, 2 squirrel, 2 tiger, 2 turtle, 2 walrus, 2 whale, 2 wing, 2 wolf, 2 worm, 2 zebra, 3 airplane, 3 ambulance, 3 bath, 3 bed, 3 bicycle, 3 blackboard, 3 boat, 3 bridge, 3 broom, 3 bus, 3 car, 3 chair, 3 computer, 3 couch, 3 curtain, 3 desk, 3 door, 3 elevator, 3 escalator, 3 fan, 3 fireworks, 3 flag, 3 floor, 3 helicopter, 3 kite, 3 ladder, 3 locker, 3 map, 3 mirror, 3 motorcycle, 3 painting, 3 rake, 3 road, 3 rocket, 3 sandbox, 3 seesaw, 3 shelf, 3 ship, 3 sign, 3 slide, 3 stairs, 3 statue, 3 suit, 3 suitcase, 3 swing, 3 table, 3 telescope, 3 tent, 3 toilet, 3 train, 3 tricycle, 3 truck, 3 TV, 3 umbrella, 3 wall, 3 wheel, 3 window, 4 ankle, 4 arm, 4 back, 4 band-aid, 4 beard, 4 belly, 4 butt, 4 cheek, 4 chest, 4 chin, 4 cut, 4 ear, 4 eye, 4 eyebrow, 4 eyelash, 4 finger, 4 foot, 4 forehead, 4 hair, 4 hand, 4 head, 4 knee, 4 leg, 4 lip, 4 mouth, 4 muscle, 4 neck, 4 nose, 4 shoulder, 4 thumb, 4 toe, 4 tongue, 4 tooth, 4 wrist, 5 beige, 5 black, 5 blue, 5 brown, 5 colors, 5 green, 5 grey, 5 pink, 5 purple, 5 red, 5 violet, 5 white, 5 yellow, 6 angry, 6 between, 6 big, 6 bright, 6 broken, 6 confused, 6 dark, 6 dirty, 6 down, 6 empty, 6 fat, 6 full, 6 happy, 6 hard, 6 heavy, 6 left, 6 long, 6 noisy, 6 quiet, 6 right, 6 sad, 6 small, 6 soft, 6 strong, 6 surprised, 6 tall, 6 up, 7 apple, 7 banana, 7 bean, 7 beef, 7 blueberry, 7 bowl, 7 bread, 7 broccoli, 7 cake, 7 candy, 7 carrot, 7 celery, 7 cheese, 7 cherry, 7 chocolate, 7 coconut, 7 coffee, 7 cookie, 7 corn, 7 cucumber, 7 cupcake, 7 egg, 7 food, 7 fork, 7 garlic, 7 glass, 7 grape, 7 grapefruit, 7 hotdog, 7 ice, 7 juice, 7 ketchup, 7 kiwi, 7 knife, 7 lemon, 7 lettuce, 7 lollipop, 7 milk, 7 mushroom, 7 onion, 7 orange, 7 pancake, 7 pea, 7 peach, 7 pear, 7 pepper, 7 pineapple, 7 plate, 7 pot, 7 potato, 7 pumpkin, 7 raisin, 7 refrigerator, 7 rice, 7 salad, 7 salt, 7 sandwich, 7 spoon, 7 stove, 7 strawberry, 7 tea, 7 tomato, 7 water, 7 watermelon, 7 yogurt, 8 bell, 8 cello, 8 cymbal, 8 drum, 8 flute, 8 guitar, 8 harp, 8 headphones, 8 microphone, 8 music, 8 piano, 8 saxophone, 8 speaker, 8 tambourine, 8 trumpet, 8 tuba, 8 violin, 8 xylophone, 9 beach, 9 branch, 9 cloud, 9 dirt, 9 earth, 9 fire, 9 flower, 9 forest, 9 grass, 9 lake, 9 leaf, 9 moon, 9 mountain, 9 nest, 9 ocean, 9 plant, 9 puddle, 9 rain, 9 rainbow, 9 river, 9 rock, 9 shell, 9 sky, 9 smoke, 9 snow, 9 snowman, 9 sun, 10 astronaut, 10 baby, 10 boy, 10 captain, 10 chef, 10 clown, 10

doctor, 10 fireman, 10 girl, 10 lifeguard, 10 mailman, 10 man, 10 policeman, 10 Santa, 10 singer, 10 soldier, 10 teacher, 10 woman, 11 airport, 11 bedroom, 11 building, 11 castle, 11 circus, 11 city, 11 classroom, 11 desert, 11 farm, 11 garden, 11 hospital, 11 house, 11 island, 11 kitchen, 11 park, 11 space, 11 supermarket, 11 waterfall, 12 arrow, 12 circle, 12 cone, 12 cross, 12 heart, 12 oval, 12 pyramid, 12 rectangle, 12 shapes, 12 square, 12 star, 12 stripes, 12 triangle, 12 tube, 13 bag, 13 ball, 13 balloon, 13 battery, 13 belt, 13 bolt, 13 bone, 13 book, 13 boot, 13 bottle, 13 box, 13 bracelet, 13 bubble, 13 button, 13 calculator, 13 calendar, 13 camera, 13 can, 13 candle, 13 card, 13 cast, 13 chain, 13 chalk, 13 clock, 13 clothes, 13 coin, 13 comb, 13 crayon, 13 dice, 13 doll, 13 dress, 13 earring, 13 eraser, 13 faucet, 13 flashlight, 13 floss, 13 glasses, 13 glove, 13 hammer, 13 hanger, 13 hat, 13 helmet, 13 hook, 13 iron, 13 jacket, 13 key, 13 keyboard, 13 lamp, 13 letter, 13 magazine, 13 makeup, 13 marker, 13 mask, 13 medal, 13 microscope, 13 money, 13 nail, 13 necklace, 13 newspaper, 13 notebook, 13 nut, 13 package, 13 pants, 13 paper, 13 pen, 13 pencil, 13 picture, 13 pillow, 13 plug, 13 pocket, 13 present, 13 puzzle, 13 ring, 13 robe, 13 robot, 13 rope, 13 ruler, 13 scale, 13 scarf, 13 scissors, 13 screwdriver, 13 shirt, 13 shoe, 13 smartphone, 13 sneaker, 13 soap, 13 sock, 13 sponge, 13 stapler, 13 straw, 13 sunglasses, 13 sword, 13 tape, 13 telephone, 13 ticket, 13 tissue, 13 toaster, 13 toothbrush, 13 toothpaste, 13 towel, 13 wallet, 13 watch, 13 whistle, 13 wrench, 13 zipper

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