Memorizing Numbers

Lecture 9

I can tell you from experience that if you use a list a lot, like, say, the presidents or a particular credit card number, then eventually, the phonetic code fades away and the numbers are converted to long-term memory, or you remember the numbers using other contextual information.

In this lecture, we'll learn a fun and amazingly effective way to memorize numbers. This skill will help you perform large calculations and help you memorize important numbers, such as credit card numbers. For most of this lecture, we'll take advantage of a phonetic code known as the **Major system**, which has been in the English language for nearly 200 years.

Here is the Major system: 1 = *t* or *d* sound; 2 = *n* sound; 3 = *m* sound; 4 = *r* sound; 5 = *L* sound; 6 = *ch*, *sh*, or *j* sound; 7 = *k* or *g* sound; 8 = *f* or *v* sound; 9 = *p* or *b* sound; and 0 = *s* or *z* sound.

After you've studied and memorized this phonetic code, you'll have an invaluable tool for turning numbers into words. We do this by inserting vowel sounds anywhere we'd like among the consonants. For example, suppose you need to remember the number 491. Using the phonetic code, you can turn this number into RABBIT, REPEAT, ORBIT, or another word by simply inserting vowels among the consonants in the code: 4 = *r*, 9 = *p* or *b*, and 1 = *t* or *d*. (Notice that even though RABBIT is spelled with two Bs, the *b* sound is pronounced only once. The number for RABBIT is 491, not 4991.) There are no digits for the consonants *h*, *w*, or *y*, so those can also be used whenever you'd like. Even though a number might have several words that represent it, each word can be turned into only one number. RABBIT, for example, represents only the number 491. Of course, we can also use the code in reverse to identify which number is represented by a particular word; for instance, PARTY would be 941.

The phonetic code is also useful for memorizing dates. For example, to remember that Andrew Jackson was elected president of the United States

in 1828, we could turn 1828 into TFNF. You might picture Jackson as a TOUGH guy with a KNIFE. Or to remember that the Gettysburg Address was written in 1863 (TFJM), you might think that Lincoln wrote it to get out of a TOUGH JAM. On the Internet, you can find numerous sites that have converted entire dictionaries into phonetic code.

If you have a long number, such as a 16-digit credit card number, then it pays to look inside the number for particularly long words because the fewer words you use, the easier the resulting phrase is to remember. For the first 24 digits of pi, 3.14159265358979323846264, we can construct this sentence: "My turtle Poncho will, my love, pick up my new mover Ginger."

You can use the phonetic code to provide more security to your computer password by adding extra digits.

The phonetic code can also be used with the **peg system** to memorize any numbered list of objects. The peg system converts each number on the list into a tangible, easily visualized word called the peg word. My peg words for the numbers 1 though 10 are: tea, knee, moo, ear, oil, shoe, key, foe, pie, and dice. Notice that each of these words uses the sound for its corresponding number in the phonetic code. To remember that George Washington was the first president, I might picture myself drinking tea with him. Other associations might be a little bit strange, but that makes them even easier to remember.

If your list has more than 10 objects, then you need more peg words, and using the phonetic code, every 2-digit number can be turned into at least one word: 11 = tot, 12 = tin, 13 = tomb, and so on. My peg word for 40 is rose, and the phrase "red rose" reminds me that the 40th president was Ronald Reagan. I've also applied the peg system to learn where various elements appear on the periodic table.

You can use the phonetic code to provide more security to your computer password by adding extra digits. For instance, you might have one password that you like to use, such as BUNNY RABBIT, but you want to make slight alterations for each of your accounts. To adapt the password for your Visa account, you might attach the digits 80,741 (= VISA CARD).

The phonetic code is especially handy for numbers that you need to memorize for tests or for newly acquired phone numbers, addresses, parking spots, hotel rooms, and other numbers that you need to know for just a short while. I find the phonetic code to be useful for remembering partial answers when doing large mental calculations. We'll see more calculation examples that use mnemonics near the end of the course. ■

Important Terms

Major system: A phonetic code that assigns consonant sounds to digits. For example 1 gets the *t* or *d* sound, 2 gets the *n* sound, and so on. By inserting vowel sounds, numbers can be turned into words, which make them easier to remember. It is named after Major Beniowski, a leading memory expert in London, although the code was developed by Gregor von Feinagle and perfected by Aimé Paris.

peg system: A way to remember lists of objects, especially when the items of the list are given a number, such as the list of presidents, elements, or constitutional amendments. Each number is turned into a word using a phonetic code, and that word is linked to the object to be remembered.

Suggested Reading

Benjamin and Shermer, *Secrets of Mental Math: The Mathemagician's Guide to Lightning Calculation and Amazing Math Tricks*, chapter 9.

Higbee, *Your Memory: How It Works and How to Improve It.*

Lorayne and Lucas, *The Memory Book*.

Problems

Use the Major system to convert the following words into numbers.

1. News

2. Flash