

Secret Phonetic Codes

Overview: If only you could keep better track of big numbers, adding and multiplying your head wouldn't be such a problem! But fear not... I have a trick that might be just the ticket for your brain!

Use this secret phonetic math code to code and decode sentences into numbers. Developed over a hundred years ago, this is *the* code that the expert mathematicians use when doing large calculations in their head. This is exactly how Dr. Arthur Benjamin from Harvey Mudd University squares 5-digit numbers in his head, *without* a calculator!

Materials

- Pencil
- Paper

Activity: The first thing you need to do is memorize this short list of number substitutions:

1 = t or d

2 = n

3 = m

4 = r

5 = l

6 = ch, sh, or j

7 = hard c, k, or hard g

8 = f or v

9 = p or b

0 = s or z

All vowels and letters like y and w are not used (you'll see what I mean in a minute). Let's try an example so you can see how this works:

To encode the number: 307

Find: 3 = m

0 = s or z

7 = hard c, k or hard g

Look at m, s, and k and try to make a word out of it by adding vowels. Looks a little like "music," doesn't it? Since vowels don't have a numerical value, 307 = music.

What if I give you "music"... can you decode it back into its original number? Try it now:

Let's memorize the first 24 digits of pi:

My turtle Pancho will, my love, pick up my new mover Ginger.

Use the phonetic code to write out the 24 digits of pi here:

Here's a hint: m=3, y has no value, t =1, u has no value, r =4, l = 5, p = 5... and onward to get:

pi =3.14159265358979323846264 *Ta-daa!*

How about the next 17 digits of pi? What kind of words can you make with these digits using the phonetic code?

3 3 8 3 2 7 9 5 0 2 8 8 4 1 9 7 1

Try it here:

When I assign them the alphabet codes, one possibility is this: *My mauve monkey plays in a favorite booklet*

Now it's your turn! Work out the exercises below. (You'll find answers at the back of this book.)

Exercises

What numbers are these?

1. place
2. now
3. healing the disease
4. what is my effort
5. that he was not able to come
6. people will come and go

Form a phrase that represents the following numbers:

7. 6313406
8. 1071

Answers to Exercises: Secret Phonetic code

1. 956
2. 2
3. 6527100
4. 103841
5. 1660215263
6. 995563217
7. The phrase formed should have chmtmrsc or their equivalent
8. The phrase formed should have tsgd or their equivalent