

Torah Numerology

Hidden Mathematical Codes in Genesis 1:1

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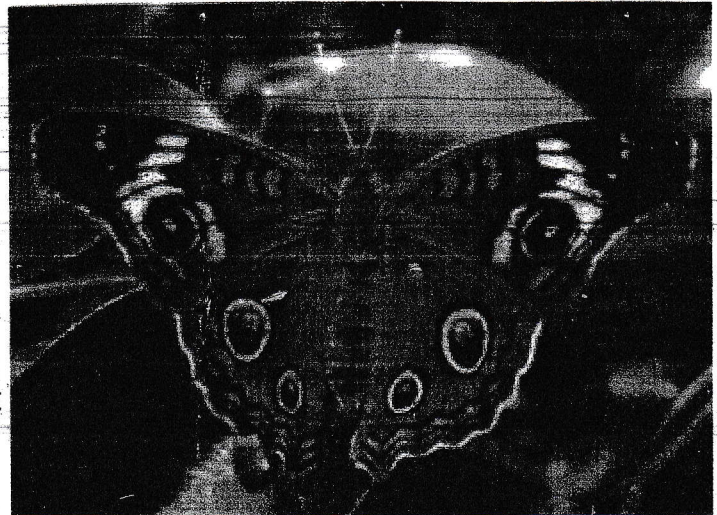
Chapter 1 - The Quintessential Number

What is the most perfect number in all of mathematics?

Without a doubt, it is none other than 2701 - the Gematria (numerical value) of Genesis 1:1.

You may ask, "well how do you measure perfection?"

Good question. Well, there is already a criteria! In math, there is an elite set of numbers called "perfect numbers". These are extremely rare. Only 51 are known (as of 2021). The fifth one is already greater than 33 million and the 16th has more than 1000 digits!



The criteria for "perfect numbers" is one simple symmetry. Namely, the number equals the sum of its divisors.

For example:

6 is a perfect number since it is divisible by 1,2,3 and $1+2+3=6$.

Likewise, 28 is a perfect number since it is divisible by 1,2,4,7,14 and $1+2+4+7+14=28$.

This simple symmetry was enough to classify it as a "perfect number".

Many of the ancient philosophers and theologians were awed by the 6 weekdays and the 28 day cycle of the moon. They saw this as a reflection of divine perfection in the world.

(note that the first word in Genesis 1:1 has 6 letters and the whole verse has 28 letters total. This is deep as we will see.)

Let's look at 2701.

This number has vastly more symmetry than any other number without comparison. In many ways, it is the supreme quintessential king of all numbers.

For example:

$2701 = 37 \times 73$ (both prime factors are mirror reflections of each other)

Isn't that eye-catching?

In addition to this symmetry:

$2701 + 1072$ (its own mirror reflection).

$=3773$ (same as the factors in order concatenated).

This double symmetry already makes it unique. No other known decimal number has this perfection.

How about the Geometric properties of 2701? Here too 2701 is replete with symmetries and perfection.

To name a few:

- 2701 is the 73rd triangle number - $1+2+3+4...+73 = 2701$
- 2701 is the 37th hexagonal number
- both 37 and 73 are star (hexagram) numbers
- This makes 2701 a unique "star of stars" number as we'll see

It also has many unique and fascinating properties not shared by any other number. In short, it is the peerless numerical king of symmetry and perfection.

Let's have a closer look at Genesis 1:1

As part of the Oral Tradition from Sinai, every letter in the Hebrew language is assigned a numerical value. This is known as the Gematria.

Gematria of Letters																					
א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ל	מ	נ	ס	ע	פ	צ	ק	ר	ש	ת
1	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	100	200	300	400

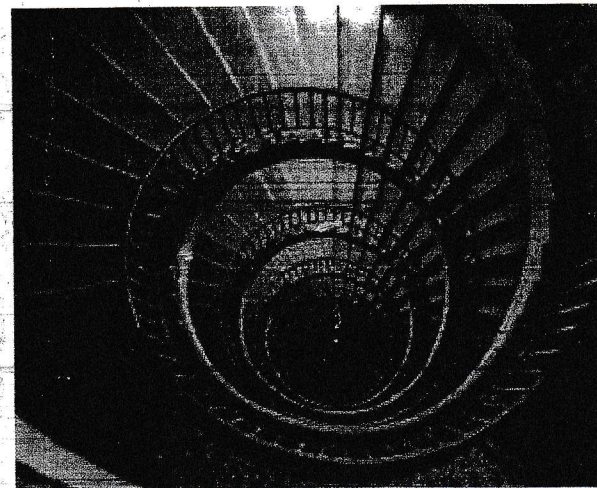
Taking the Gematria of each letter in Genesis 1:1 and summing gives:

Gematria of First Verse: <i>"in the beginning G-d created the Heavens and the Earth"</i>						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֶת	אֱ-לֹהִים	בָּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
<p><i>Adding Gematrias of Words:</i> $296+407+395+401+86+203+913$ Total=2701</p>						

Thus it seems the totality of the verse has been tuned to 2701.

How about if we multiply the Gematrias of the words together instead of adding them?

Gematria of First Verse						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֶת	אֱ-לֹהִים	בָּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
<p><i>Multiplying Gematrias of Words:</i> $296 \times 407 \times 395 \times 401 \times 86 \times 203 \times 913$ $=304,153,525,784,175,760$</p> <p>Sum of the Thousands: $304+153+525+784+175+760$ Total=2701</p>						



Incredible! Not only the total verse is tuned to 2701 but also the balance of words is finely tuned to 2701. (note: the "sum of thousands" is how large numbers are represented in Hebrew due to lack of zero, as we'll explain soon). With this introduction, let us begin the descent into the bottomless depths of divine wisdom. Please hold on to the railing.

Chapter 2 - Wisdom = Yud

As we saw last time:

$$2701 = 37 \times 73$$

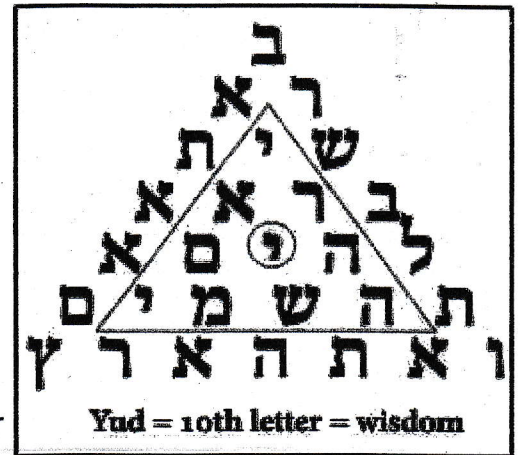
You may have noticed that each of these numbers has digit sum exactly 10 ($3+7=10, 7+3=10, 2+7+0+1=10$). What is that all about?

The opening word of the Torah is "*Beresheit*" (in the beginning). This word is rendered "with wisdom" (Targum Yerushalmi)^[1]. For the world was created with divine wisdom.

The opening letter, Beit points to the 2nd of the 10 mystical "Sefirot" (divine lights) - the Sefira of Wisdom.

Likewise, the letter of G-d's Name which corresponds to "wisdom" is "Yud" (Tikunei Zohar 6b). "Yud" has a gematria of 10.

ה	ו	ה	י
Malchut (kingship)	Tiferet (splendor)	Binah (understanding)	Chachma (wisdom)
5	6	5	10

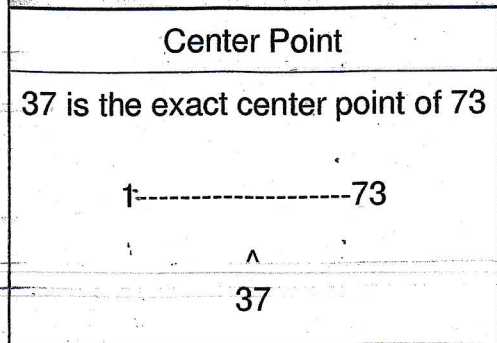


Notice, the first verse has 28 letters, a triangle number ($1+2+3+4+5+6+7=28$) with Yud of G-d's Name as the central letter (see picture on right, notice also the inner triangle has 10 letters).

"Wisdom" (called Chochma) in Hebrew, has 3 Gematrias which all point to Yud=10.

Observe the following perfection.

Standard Gematria																					
חכמה/wisdom = 73																					
א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ל	מ	נ	ס	ע	פ	צ	ק	ר	ש	ת
1	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	100	200	300	400
$8+20+40+5=73$																					



(i.e. for 73 dots side by side, the middle dot is the 37th)

Let us now look at the "Ordinal Gematria" which refers to the order number in the Hebrew Alphabet.

Ordinal Gematria																					
חכמה/wisdom =37																					
א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ל	מ	נ	ס	ע	פ	צ	ק	ר	ש	ת
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
$8+11+13+5=37$																					

Center Point
19 is the exact center point of 37
1-----37
^
19

Gematria Ketana (small Gematria)																					
חכמה/wisdom =19																					
א	ב	ג	ד	ה	ו	ז	ח	ט	י	כ	ל	מ	נ	ס	ע	פ	צ	ק	ר	ש	ת
1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4
$8+2+4+5=19$																					

Center Point
10 is the exact center point of 19
1-----19
^
10

Thus, we have a perfect alignment of the 3 Gematrias of Chochma = Wisdom towards "Yud" = 10 (and the 10 points to 1, i.e. the One G-d^[2]).

73 = Wisdom (Standard Gematria)

37 = Wisdom (Ordinal Gematria and center point of 73)

19 = Wisdom (Small Gematria and center point of 37)

10 = Yud and center point of 19

The Gematria of the first verse is $2701 = 37 \times 73$

Observe how all these numbers have digit sum = 10 exactly:

$$73 = 7+3 = 10$$

$$37 = 3+7 = 10$$

$$19 = 1+9 = 10$$

Likewise all the subgroups of 2701 have digit sum = 10 exactly:

$$2701 \text{ Sum of Thousands} = 2+701 = 703=7+0+3=10$$

$$2701 \text{ Sum of Hundreds} = 27+01 = 28=2+8=10$$

$$2701 \text{ Sum of Digits} = 2+7+1+0 = 10$$

All pointing to the Yud = 10 = Wisdom!

The sum of thousands - 703 is an extremely important number as we will see.

It is the base of the triangle of 28 letters (see above):

ואת הארץ = 703 = 37×19 (the two lower gematrias of wisdom).

703 is also a unique number in that it is the only number with digit sum=10 and whose sum of thousands always reduces to itself when raised to any power. For example:

$$703^2 = 494,209$$

$$494+209=703$$

$$703^3 = 347,428,927$$

$$347+428+927=1702 (1+702=703)$$

$$703^4 = 244,242,535,681$$

$$244+242+535+681=1702 (1+702=703)$$

So too for all powers. It always reduces back to 703. In that sense it is the one and only number which points continuously to 10 = wisdom for all powers.

(the only other numbers which reduce like this are 297 and 999 but these do not have digit sum of 10)

These latter numbers relate to the upper part of the triangle as we will see)

The geometric properties of 2701/703 are also absolutely astounding as we will see, be'H.

For example:

2701 is the 73rd triangle number and the 37th hexagonal number.

703 is the 37th triangle number and the 19th hexagonal number.

Both 73 and 37 are star of David (hexagram) numbers.

Thus 2701 is one of the extremely rare "star of star" numbers and a unique and special one as we'll see.

Footnotes

- [1] "Beresheit" hints to "b'Reisheit", i.e. the world was created with that which is called "Reisheit", namely "wisdom", as written: "the beginning of wisdom.. (Reisheit Chochma)" (Proverbs 9:10).
- [2] The various gematrias represent different stages of creation. Notice how the Small Gematria of Wisdom reduces to 10 and then to 1, namely:

$$19 = \text{Wisdom (Small Gematria)}$$

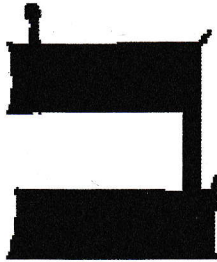
$$10 = \text{Wisdom (Small Gematria reduced), i.e., } 1+9=10$$

$$1 = \text{Wisdom (Small Gematria reduced reduced), i.e. } 1+0=1$$

Thus, the gematrias of "wisdom" all point to 10 and then reduce to the digital root of 1, the point of creation (heard from Oren Evron)

Chapter 3 - Divine Symmetries

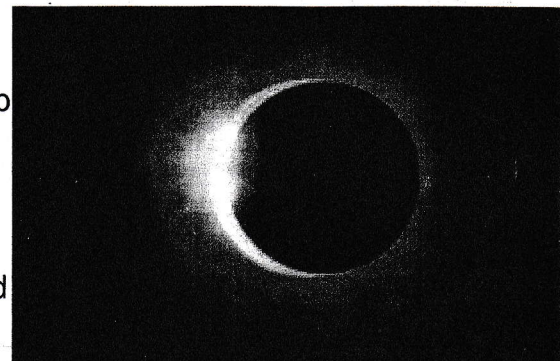
divine symmetries in Genesis 1:1, Prime numbers, and Pi



The Torah opens with the second letter Beit - a letter symbolizing plurality and duality. It consists of two parallel lines and one connecting line. Beit is a summary of the whole Torah. The top line represents Heaven (the spiritual) while the bottom line represents Earth (the physical). The connecting line is man's job to connect the two. This is the purpose of creation (Vilna Gaon).

The world was created with the Beit (Midrash Otyot d'Rabbi Akiva-Beit). Thus, we find that duality permeates the universe at every level. In physics, we find every charged particle has a corresponding anti-particle with all properties reversed. All particles (including light) have a mysterious dual wave/particle nature at the fundamental quantum level.

In our human domain we find most creatures, including man, have a mirror (bilateral) symmetry. Namely, the creature can be cut into two mirror image halves identical to our eye. Other examples of duality: male/female, sun/moon, good/evil, body/soul, Heaven/Earth, and many more. All this is the signature of the Beit.



The Beit also represents the second of the Ten Sefirot used to create the world - the Sefira of Wisdom (Rabeinu Bechaye, Ber. 1:1). The 10 Sefirot (spiritual divine lights) were divided into two groups of 3/7. Let us examine if this signature of duality is reflected mathematically.

As before the opening verse in the Torah has Gematria of 2701.

Gematria of First Verse						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֶת	אֶל־לְהִימִם	בְּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
Total=2701						

The first example of duality is as we saw already:

- $2701 = 37 \times 73$ (mirror reflection)
- secondly, if we add 2701 to its own mirror reflection:

$$2701 + 1072 = 3773$$

The original 37/73 prime factors are revealed in this sum. (I tested the first 100 million+ numbers by computer and none other than 2701 have these two symmetries)

- Another symmetry: if we multiply the 7 word Gematrias:
 $296 \times 407 \times 395 \times 401 \times 86 \times 203 \times 913$

=304,153,525,784,175,760 (huge number indeed)

Adding the groups of Thousands:

$$304 + 153 + 525 + 784 + 175 + 760 = \mathbf{2701}$$
 (same as Gematria!)

Adding the digit sum:

$$(3+0+4) + (1+5+3) + (5+2+5) + (7+8+4) + (1+7+5) + (7+6+0) = \mathbf{73}$$

$$(\mathbf{=7}) \quad (\mathbf{=9}) \quad (\mathbf{=12}) \quad (\mathbf{=19}) \quad (\mathbf{=13}) \quad (\mathbf{=13})$$

Adding the second^[1] digit sum:

$$(7) + (9) + (1+2) + (1+9) + (1+3) + (1+3) = \mathbf{37}$$

(again 73 and 37 the prime factors of 2701!)

G-d's Name

Interestingly, the Gematria of G-d's Name (the Tetragramaton) is 26:

$$26 \times 62 \text{ (mirror reflection)} = 1612$$

$$\text{and } \mathbf{1612} + \mathbf{2161} = \mathbf{3773}$$
 (remember these numbers)

Prime Numbers

Prime numbers are prime basic structures of creation.

They are defined as numbers which cannot be divided by anything except 1 and themselves. Mathematicians categorize "2" as the first prime number (1 is in a category of its own. "2" is also the only even prime number, since all other even numbers are divisible by 2 and thus not prime).

Let us examine their mysterious connection to the Torah's opening verse.

Prime Numbers	
Order#	Prime#
1st	2
2nd	3
3rd	5
4th	7
5th	11
6th	13
7th	17
8th	19
9th	23
10th	29
11th	31
12th	37

Here are the first prime numbers until 73 (see table on the left).

37 is the 12th prime number

73 is the 21st prime number

Note again the mirror symmetry in 12/21.

Note also that 12/21 are the very FIRST pair of numbers with mirror symmetry.

Interestingly, the 12/21 prime indexes also have a mirror symmetry in their squares:

$$12^2 = 144 \text{ and } 21^2 = 441$$

note the perfect mirror symmetry in 144/441

441 is also the Gematria of אמת = Truth

Our sages said the world was created with Truth, i.e. pure, absolute wisdom (Baal HaTurim Gen.1:1). In the lowest physical level, this manifests as the wisdom of mathematics.

13th	41
14th	43
15th	47
16th	53
17th	59
18th	61
19th	67
20th	71
21st	73

73 represents wisdom as we saw. Thus, 21 is also symmetrical with 73 in its Gematria meaning. For "Truth" and "Wisdom" are synonymous here.

אמת (truth) = 441 = $3 \times 7 \times 7 \times 3$ (note again the 37/73)

Prime Numbers of Opening Verse

Observe the following incredible perfection.

Gematria of First Verse						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֵת	אֶ-לֹהִים	בָּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
Total = 2701 = 37×73						

Prime Numbers of First Verse

The 913th	Prime	=	7127
The 203rd	Prime	=	1237
The 86th	Prime	=	443
The 401st	Prime	=	2749
The 395th	Prime	=	2711
The 407th	Prime	=	2797
The 296th	Prime	=	1949

Total Sum = 2161st Prime (19013)
 $2161 + 1612 = \mathbf{3773}$

Note that there is absolutely no logical reason of any kind for prime numbers to be related to their indexes.

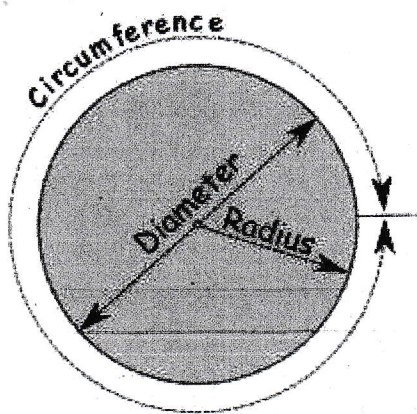
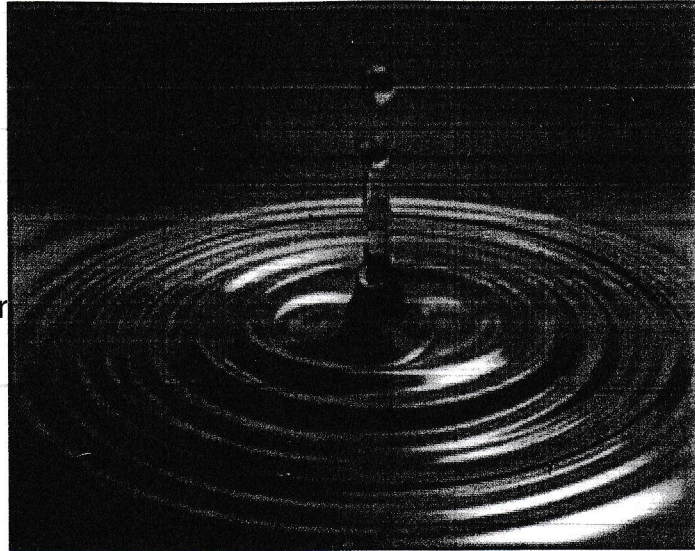
There is no mathematical formula for obtaining prime numbers. They are found by trial and error.

Chapter 4 - Genesis and Pi

based on a video by Oren Evron
613tube.com/watch/?v=ikGLJHNcJLo

In this chapter we are going to embark on a journey into the secret world of Torah numerology. Hopefully, we will get a feeling and appreciation for this amazing side of torah which is being revealed specifically in our computer era. The material here is almost entirely from a Hebrew video by Oren Evron (with permission).

Let us begin, be'H



$$\frac{\text{Circumference}}{\text{Diameter}} = \pi = 3.14159\dots$$

What is the most famous number in all of mathematics? No doubt it is the number Pi. This number appears everywhere in math and physics.

Pi is at the core of the universe because everything is composed of cycles that spin, orbit, rotate or oscillate. Pi defines all the cycles of the spinning and orbiting of atoms, planets, solar systems, galaxies, etc.

It is the central number of physics. And even in the mysterious quantum realm, everything, including light is basically just "probability waves" oscillating with mind-blowing mathematics.

Furthermore, according to the Kabbala (Etz Chaim 1:1) the entire creation began as a perfect circle. To make room for the creation G-d "constricted" His infinite light into a perfect circle, so to speak. Pi was used to bring this circle (Tzimtzum) in a whole and perfect way.

Let us see if Pi appears in the creation account. Surely, such an important number should appear in G-d's holy Torah.

First Verse in Torah - 22/7

Let us begin with a simple hint of Pi and afterwards move on to something far more impressive.

The first verse of the torah is:

בְּרֵאשִׁית בָּרָא אֱ-לֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ

If we take the first letter (Roshei Teivot) of each of the seven hebrew words. The gematria (numeric value) is:

בְּרֵאשִׁית בָּרָא אֱ-לֹהִים אֶת הַשָּׁמַיִם וְאֶת הָאָרֶץ

$$= \text{Beit} + \text{Beit} + \text{Aleph} + \text{Aleph} + \text{Heh} + \text{Vuv} + \text{Heh} = 2 + 2 + 1 + 1 + 5 + 6 + 5 = 22$$

Dividing this by the number of words gives: $22/7 = 3.14285$

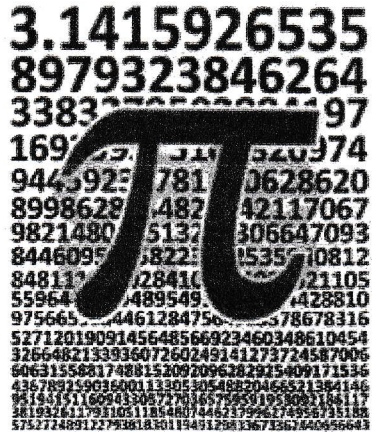
This number is 99.96 percent the value of Pi.

Interestingly, there is no other verse in all of Tanach (the Bible) with this ratio of 22/7 for first letters (Roshei Teivot) (or even last letters, i.e. Sofei Teivot) divided by number of words.

The next ratio of integers which comes closer to Pi than 22/7 is 333/106. But to make a verse of this size is not practical. The longest verse in Tanach is Esther 8:9 with 43 words. A statistical analysis of verses in the torah by Oren Evron found odds of obtaining this result randomly as 1 chance in 19,000 (all this is nothing compared to what's coming up shortly.)

Gematria of First Verse = Sum of 611 (Torah) Decimals of Pi

According to the Midrash (Beresheit Rabba 1:1), G-d first created the Torah as a blueprint of creation and afterwards created the world, similar to a builder which creates a blueprint for his building before making it (so to speak). Thus, the Torah existed before the creation.



The opening word of the torah is: בראשית

If we take the previous letter of each letter in this word, we get:

Previous Letters					
ת	י	ש	א	ר	ב
ש	ט	ר	א	ק	א

(note that we kept the Aleph as is since it is the first letter in the Hebrew alphabet and thus has no previous letter as the Arizal explains^[1].)

The gematria of these previous letters is:

Gematria of Previous Letters					
ש	ט	ר	א	ק	א
300	9	200	1	100	1
Total=611					

The Gematria of Torah is likewise 611.

Gematria of "Torah"			
ה	ר	ו	ת
5	200	6	400
Total=611			

This hints that the Torah came before Beresheit, i.e. before the creation as the Midrash says.

What is the gematria of the entire first verse? As we saw earlier, the first verse hints to Pi.

Gematria of First Verse						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֶת	אֶל־הַיָּם	בְּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
Total=2701						

How about if we take the first Torah, i.e. 611 digits of Pi and sum them?

First 611 Digits of Pi
Pi=3.14159265358979323846264338327950288419716939937510 58209749445923078164062862089986280348253421170679 82148086513282306647093844609550582231725359408128 48111745028410270193852110555964462294895493038196 44288109756659334461284756482337867831652712019091 45648566923460348610454326648213393607260249141273 72458700660631558817488152092096282925409171536436 78925903600113305305488204665213841469519415116094 33057270365759591953092186117381932611793105118548 07446237996274956735188575272489122793818301194912 98336733624406566430860213949463952247371907021798 60943702770539217176293176752384674818467669405132 00056812714...
Sum of 611 digits = 2701

How do we know if what we just found is a coincidence or not? The first thing is to try to see if there is any consistency to the pattern or if it was just a one time fluke.

Gematria Ketana of Torah Decimals of Pi = Gematria Ketana of First Verse

How about if we take the Gematria Ketana of the first verse in the torah?

The Gematria Ketana ("small gematria") of a letter is obtained by summing its digits. So for example, the letter shin is normally Gematria of 300.

Its Gematria Ketana is thus: $300=3+0+0=3$. The letter Peh has Gematria of 80. Thus, its Gematria Ketana is $8+0=8$. Similarly, for all the other letters.

Taking the Gematria Ketana of the first verse gives:

Gematria Ketana of First Verse						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֶת	אֶל־הַיָּם	בְּרָא	בְּרֵאשִׁית
17	11	17	5	14	5	13
Total=82						

Example: Beresheit is Beit,Reish,Aleph,Shin,Yud,Tav= $2+2+1+3+1+4=13$.

What is the Gematria Ketana of "Torah"?

Gematria Ketana of "Torah"			
ה	ך	ו	ד
5	2	6	4
Total=17			

Taking the first 17 decimals of Pi and adding them gives:

Pi=3.1415926535897932384626433..

1+4+1+5+9+2+6+5+3+5+8+9+7+9+3+2+3=82!!!

This fits beautifully with what we saw previously.

Namely, the full gematria of Torah is 611.

The full gematria of the first verse is 2701.

The first 611 digits of Pi sum up to 2701!

Now the gematria ketana of Torah is 17.

The gematria ketana of the first verse is 82.

The first 17 digits of Pi sum up to 82.

Gematria of First Verse = Sum of 611 (Torah) Decimals of Pi Offset 17

As before, the sum of the first 611 decimals of Pi equals the gematria of the first verse in the torah - 2701.

Perhaps a fluke thing? Let us see if this pattern repeats again.

As before, the gematria ketana of Torah is 17. How about if we count again the first 611 decimals of Pi but we start counting 17 digits later?

First 611 Digits of Pi Offset 17 Digits
Pi=3.14159265358979323{846264338327950288419716939937510
58209749445923078164062862089986280348253421170679
82148086513282306647093844609550582231725359408128
48111745028410270193852110555964462294895493038196
44288109756659334461284756482337867831652712019091
45648566923460348610454326648213393607260249141273
72458700660631558817488152092096282925409171536436
78925903600113305305488204665213841469519415116094
33057270365759591953092186117381932611793105118548
07446237996274956735188575272489122793818301194912
98336733624406566430860213949463952247371907021798
60943702770539217176293176752384674818467669405132
0005681271452635608277857713}
Sum of 611 digits offset 17 = 2701!

The answer is Yes!

As we saw previously, the first 17 digits of Pi sum up to 82.

How about those 17 digits we offset at the end, after the first 611 digits. Do they also add up to 82?

Pi=3.14159265358979323(=82){846264338327950288419716939937510
 58209749445923078164062862089986280348253421170679
 82148086513282306647093844609550582231725359408128
 48111745028410270193852110555964462294895493038196
 44288109756659334461284756482337867831652712019091
 45648566923460348610454326648213393607260249141273
 72458700660631558817488152092096282925409171536436
 78925903600113305305488204665213841469519415116094
 33057270365759591953092186117381932611793105118548
 07446237996274956735188575272489122793818301194912
 98336733624406566430860213949463952247371907021798
 60943702770539217176293176752384674818467669405132
 0005681271452635608277857713(=82)}...

Yes, indeed. The 17 digits we offset (after 611 digits) also add up to 82 just like the first 17 digits!

We are seeing symmetry here! It seems "Torah" can act both as an index location and a sum of digits. More later..

Gematrias of the Thousands

The Hebrew numbering system works differently than our decimal system. Instead, large numbers are grouped into multiples of thousands.

So for example, the current Hebrew year is 5780. We could write this out fully as:

תתתתתתתתתתתתתתתתת

and the sum of the letters would be 5780. But a shorthand method is used to group the thousands.

Instead we write:

ה'תשפ

Each multiple of a thousand is grouped for shorthand. Thus, the first Heh represents 5000 and the rest is 780. This is how big numbers are written in Hebrew^[2].

(there is no "zero" letter because the Hebrew letters have a reality, they represent Divine spiritual lights - Ramchal, Derech Etz Chaim).

Let us now analyze...

Gematria of "Beresheit"					
ת	י	ש	א	ר	ב
400	10	300	1	200	2
Total=913					

As before, the Gematria of Beresheit is 913.

The first Beit in the Torah is written specially large by the Oral Tradition. It is the only such large Beit the entire Tanach (Bible).

Beit spelled out fully: is Beit - Yud - Tav = $2+10+400=412$.

If we square this number, we get: $412^2=169,744$.

As before, the thousands are groups. So $169,744 = 2$ groups of (169) and (744)
What is $169+744$? 913. Same as the gematria of בראשית.

Interesting! How about if we multiply the gematria of each word in the first verse? As before the Gematria of each word in the first verse is:

Gematria of First Verse						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֶת	אֶ-לֹהִים	בָּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
Total=2701						

gits.

Let us multiply each one together..

$913 \times 203 \times 86 \times 401 \times 395 \times 407 \times 296$
Total=304,153,525,784,175,760

are

Huge number indeed! As before, in Hebrew each thousand times is grouped together separately. Adding the groups of thousands gives:

$$304 + 153 + 525 + 784 + 175 + 760 = \mathbf{2701}$$

As before, 2701 is the same as the gematria of the verse itself!

A statistical analysis by Oren Evron gives odds of one chance in 16.38 million of this result coming randomly (for both, getting value 2701 for the verse and also 2701 for the sum of thousands. see video^[3])

How about if we multiply this number by 82, which as before, is the gematria ketana of this verse?

$913 \times 203 \times 86 \times 401 \times 395 \times 407 \times 296$
$\times 82$
Total=24,940,589,114,302,412,320

Adding each group of thousands gives:

$24 + 940 + 589 + 114 + 302 + 412 + 320$
Total=2701!!

Prior to 82 there are no other numbers that gives this result of 2701 as sum of thousands.

How about if we multiply again by 82?

913 × 203 × 86 × 401 × 395 × 407 × 296
× 82
Total=24,940,589,114,302,412,320
× 82
Total=2,045,128,307,372,797,810,240

Adding each group of thousands gives:

2 + 45 + 128 + 307 + 372 + 797 + 810 + 240
Total=2701!!

Here too, prior to 82 there are no other numbers that gives this result of 2701 as sum of thousands.

Thus we hit 2701 three times in a row with these multiplications. As known, in Jewish law if a strange thing happens three times, it should not be regarded as a chance occurrence.

If we multiply again by 82 the result is not 2701. Thus this is the final number for our operation.

How about if we now add up all the digits of this final enormous number together?

2+0+4+5+1+2+8+3+0+7+3+7+2+7+9+7+8+1+0+2+4+0
Total=82!!

Thus: $82^2 \times$ the multiplication of each word in the verse gives the verse itself. Another wheel of perfection. According to Oren Evron, a statistical analysis gives odds of this occurring randomly as 1 chance in 311 Billion (see video).

Squaring Each of the First 82 Digits of Pi

Let us go back to Pi. How about if we do something similar with Pi.

Let us square each digit of the first 82 digits of Pi.

3.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	1	4	1	5	9	2	6	5	3	5	8	9	7	9	3	2	3	8	4	6
	1	16	1	25	81	4	36	25	9	25	64	81	49	81	9	4	9	64	16	36
	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
	2	6	4	3	3	8	3	2	7	9	5	0	2	8	8	4	1	9	7	1
	4	36	16	9	9	64	9	4	49	81	25	0	4	64	64	16	1	81	49	1
	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	6	9	3	9	9	3	7	5	1	0	5	8	2	0	9	7	4	9	4	4
	36	81	9	81	81	9	49	25	1	0	25	64	4	0	81	49	16	81	16	16
	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
	5	9	2	3	0	7	8	1	6	4	0	6	2	8	6	2	0	8	9	9
	25	81	4	9	0	49	64	1	36	16	0	36	4	64	36	4	0	64	81	81
	81	82																		
	8	6																		
	64	36																		

Thus if $\text{Pi}=3.14159265\dots$

So we add $1^2+4^2+1^2+5^2+9^2+6^2+5^2\dots$ etc. for 82 digits.

The result: 2701!

Additions

by Yosef Sebag

This section is not in the original video by Oren Evron. I present a few more findings.

We have seen that not only the totality of Genesis 1:1 has been tuned to 2701 but also the balance of words themselves (words multiplied).

How about the individual digits within the word gematrias themselves, have these also been fine-tuned to 2701?

One way to test this is to look for order in the proportion and number of individual digits. Let us sort this set of digits in ascending order.

<i>Individual Digits of Gematrias Sorted:</i>						
הָאָרֶץ	וְאֵת	הַשָּׁמַיִם	אֵת	אֶ-לֵהִים	בְּרָא	בְּרֵאשִׁית
296	407	395	401	86	203	913
<p><i>Combining Digits And Sorting:</i> 296 407 395 401 86 203 913 =00,011,223,334,456,678,999 (sorted digits)</p> <p>00+011+223+334+456+678+999 Total=2701!</p>						

Incredibly, this too gives a sum of thousands equal to 2701! Thus it seems the number and proportions of the individual digits of the words themselves is also tuned to 2701!

Now the words are made up of individual letters. How about if we multiply by the total number of letters in the verse (28)?

00011223334456678999
× 28
Total=314,253,364,787,011,972

Adding each group of thousands gives:

314 + 253 + 364 + 787 + 011 + 972
Total=2701!!

Prior to 28 there are no other numbers that gives this result of 2701 as sum of thousands.

How about if we multiply by the sum of the gematria of all the letters?

00011223334456678999
× 2701
Total=30,314,226,367,489,976,299

Adding each group of thousands gives:

$30 + 314 + 226 + 367 + 489 + 976 + 299$
Total=2701!!

Thus it seems not only (1) the totality of the verse and (2) the balance of words have been finely tuned to 2701, but also (3) the number and proportions of the individual digits of the words themselves.^[4]

This additional fine-tuning lowers the statistical odds to less than 1 chance in 3 trillion of being random^[5].

The Flood - New Beginning

Interestingly, we find one other verse in the book of Genesis with Gematria of 2701.

After the flood in Parsha Noach, the final verse says:

<i>"And in the second month, on the twenty seventh day of the month, the earth was dry" (Gen.14:14)</i>							
הָאָרֶץ	יְבֹשָׁה	לְחֹדֶשׁ	יוֹם	וְעֶשְׂרִים	בְּשִׁבְעָה	הַשְּׁנִי	וּבְחֹדֶשׁ
296	317	342	56	626	379	365	320
Adding Gematrias of Words: $296+317+342+56+626+379+365+320$ Total=2701							

For after the flood was like a "new beginning" (notice the verse also ends with "Ha'Aretz").

The Chizkuni commentary points a contradiction in the verses on the years of Noach.

At the beginning of the flood:

"And Noah was six hundred years old, and the flood came about, water upon the earth" (Gen.7:6).
=600

From the verses, the flood lasted 1 year. Afterwards:
+1

"And Noah lived after the Flood, three hundred and fifty years" (Gen.9:28):
+350

$600+1+350=951$.

"And all the days of Noah were nine hundred and fifty years, and he died" (Gen.9:29)
=only 950!

Why does the Torah omit the year of the flood? The Chizkuni answers that the year of the flood is not counted since the normal laws of nature were all halted. Everything was operating in a new

miraculous manner.

The book Otzar Hapilaot points out a hint of this in the Gematria of 2701. For after the flood was like a new beginning of creation^[6].

Note: Oren Evron is working on another video on Pi with vastly more incredible findings. Will try to update this book, be'H.

Footnotes

- [1] see Pri Etz Chaim, Shaar Chag Hamatzot ch.1 about 2/3 down
- [2] Interestingly, we find this special code method in Megilah Esther by the 10 sons of Haman, 3 letters are written smaller and 1 letter is written bigger. The big letter (Vav) codes for the 6th millenia (year 5000) and the 3 small letters code for 707. Together they add up to 5707. This was the year the 10 Nazi criminals were hanged after the Nuremberg Trials
- [3] I can confirm this from personal examination of test data he showed me
- [4] note the perfection here: 00,011,223,334,456,678,999 has 20 digits like the Milui of Yud - Yud-Vav-Dalet=10+6+4=20 (Yud=Wisdom is central to creation, as we will see another time). The digit sum is 82 which happens to fit the gematria ketana of the verse (special case). This also reduces to Yud (8+2=10). $00011223334456678999 \times 28$ has digit sum=73 (again reduces to Yud. $00011223334456678999 \times 2701 = 30314226367489976299$ (digit sum=100). Both 00011223334456678999 and 2701 reduce to Yud. Thus $10 \times 10 = 100$ like the final digit sum. Pure perfection.
- [5] about one in 311 Billion for the Gematria, words, multiplied, and Gematria Ketanas multiplied. See "Genesis and Pi" by Oren Evron. For the sorts one can add an extra factor of 10 at least (only 10 due to all the other alignments there already). So over 1 in 3 trillion
- [6] no other verse in the Torah has Gematria of 2701 except for Vayikra/Leviticus 20:27 which speaks of executing the sorcerer/witch. Perhaps this is due to the witchcraft interfering with nature and executing them restores the natural order of creation. In the era of prophecy, the powers of witchcraft were vastly greater than today in order to maintain free will. Today it is virtually non-existent

Chapter 5 - Breath of Life

The first word "Beresheit" (in the Beginning) has 6 letters.

In math, 6 is classified as a "perfect number" since it's factors are 1,2,3 and $1+2+3=6$.

Likewise the entire verse has 28 letters, also a perfect number, since its factors are 1,2,4,7,14 and $1+2+4+7+14=28$.

"Perfect numbers" are extremely rare; only 51 are known. The first 5 are: 6,28,496,8128,33550336.

Both 6 and 28 are also triangular numbers.

6 is the 3rd triangular number since $1+2+3=6$.

28 is the 7th triangular number since $1+2+3+4+5+6+7=28$.

These numbers 3 & 7 represent the 10 sefirot used to create the world. They were split into two groups - 3 higher Sefirot and 7 lower Sefirot.

We have seen 3 & 7 many times already in the Genesis 1:1 numeric structure!

Interestingly, the digits of Pi intersect with triangular numbers at digits 3 and 7.

Namely, $Pi=3.14159265359\dots$

First 3 digits of Pi = 141

$$1+4+1=6$$

First 7 digits of Pi = 1411592

$$1+4+1+1+5+9+2=28$$

This phenomena is unique for 3 and 7. It never happens again for the rest of the digits of Pi.

We also saw last time that Pi is perfectly symmetrical in the first 628 digits (a concatenation of 6 and 28) both backwards and forwards.

Namely, the 611/17 digits of Pi (which are the gematria and small gematria of "Torah") are perfectly symmetrical with 2701/82 (the Gematria and small Gematria of Genesis 1:1) forward and backward (see there). $611+17=628$. The Aramaic word for "Torah" אורייתא also has Gematria of 628.

(628 is also $2 \times 314 = \text{Beit} \times \text{Sh-adai}$ as we'll discuss another time

Interestingly, Bereisheit \times Sh-adai = $913 \times 314 = 286682$ - note the mirror symmetry in 286/682)

Let us now look more closely at the 28 letter triangle of creation.



Since 28 is a triangle number, the 28 letters can be arranged into a perfect triangle (see picture on right).

The outer triangle has Gematria of 2080 (80x26).

The inner triangle has Gematria of 611 (Torah).

The Yud is in the center.^[1]

This hints to the order of Creation. The Midrash opens saying "G-d gazed into the Torah and created the world" (Midrash Gen.Rabbah 1:1).

The letter "Yud" corresponds to the "eye" in the image of G-d (Etz Chaim, Shaar Peh Ozen Chotem, ch.1), . "Yud" is also the first letter in G-d's Name which includes the whole Name^[2]

ה	ו	ה	י
mouth	nose	ears	eyes
5	6	5	10

611 corresponds to Torah (same Gematria).

2080=80x26. 80 is the Gematria of the letter Peh, which means "mouth" in Hebrew. 26 is the Gematria of G-d's Name - the Tetragramaton.

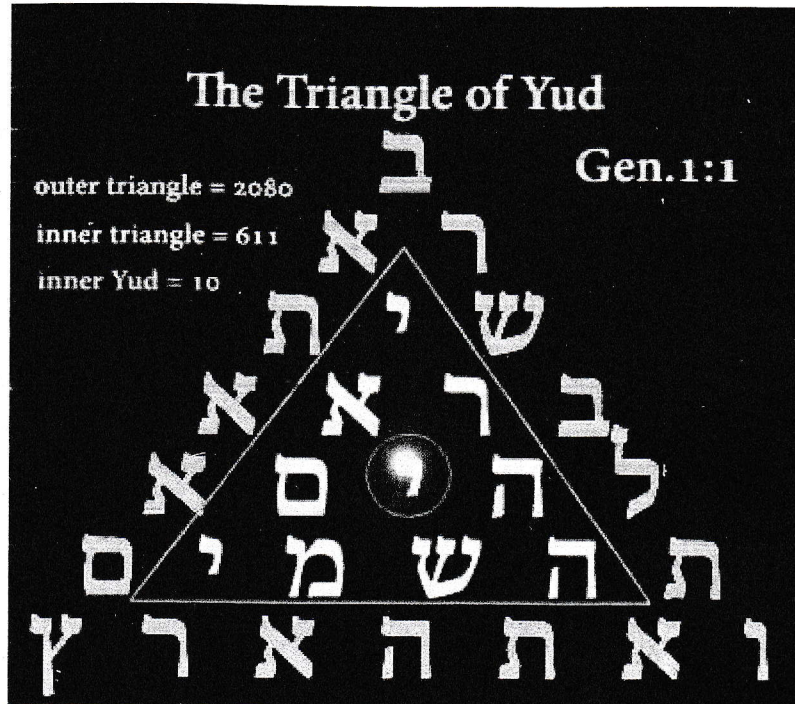
Master Kabbalist Rabbi Moshe Chaim Luzzato writes:

"And on this it is written "For the L-ORD gives wisdom, out of His mouth comes knowledge and understanding" (Mishlei 2:6). For all that exists is from the word of the Holy One blessed be He. Because this "mouth" (of G-d) is the root of all creations, and this itself sustains their existence. And the "hevel" (breath), which means the hashpaah (influence, energy) which goes out to all creations form the source which took it out. And therefore it is written "that man does not live by bread only, but by every thing that goes out of the mouth of the L-ORD does man live" (Devarim 8:3), which is this "hevel" which goes out and sustains..." (Derech Etz Chaim).

Incredibly, the word "Hevei" which means "breath" has Gematria of 37 and it appears exactly 73 times in the entire Tanach.^[3] And Genesis 1:1 has gematria=2701=37x73.

Interestingly, in Eccl.1:2 Rashi notes that the seven times of "Hevel" (vanity) in that verse refers back to the creation of the world (vanities in plural counts as 2 - thus "Vanity of vanities, says Ecclesiastes, vanity of vanities, all is vanity" = 7 total).

Thus, Genesis 1:1 is a sort of cornerstone of Creation. The world came to exist through this "Hevel" of G-d's mouth, so to speak. It is this "breath of life" which everything depends on. Hence, the opening verse of the Torah is structured around this concept (interestingly, our body temperature is 37 degrees celsius).



It's connection to Torah is also meant for us. For as our sages taught that after creation, man becomes a partner with G-d through learning Torah. The "Hevel" (breath) that comes out of his mouth through Torah study sustains the world.

And in the book Shaarei Kedusha by Rabbi Chaim Vital (Part 3 Gate 2):

We have explained that man includes all the worlds, and this is what is meant by "it is all of man" (Koheles 12:13). And it is the deeper meaning of "Let Us make man in our image". This is why "Let Us" is written in plural form - because all the worlds were partners in his making. Then he includes the image of man in all the worlds (i.e. the 10 sefirot) because all of them need his actions. This is the deeper meaning of "And He placed man in the garden of Eden to work it and guard it." (Genesis 2) - (work it) means positive commandments and (guard it) means negative commandments. As it says "G-d did not bring rain on the land because the man was not there to work it." (Genesis 2:5) And also, "And I placed my word in your mouth to plant the heavens and to lay the foundations of the earth" (Isaiah 51:16). Because man through his actions brings down life to heaven and earth and it is as if he planted them and laid their foundation. Therefore we find that "You are with Me (G-d)" as the Sages taught (G-d says:) "My partner - I (G-d) create and you (man) uphold".

Our sages said the world was created for Yisrael - the Jewish people. For it is through their Torah study that the world is sustained.

The milui (letter expansion) of Yisrael = 2701.

Letter Expansion of Yisrael				
ל	א	ר	ש	י
למד מם דלת	אלף למד פה	ריש יוד שין	שין יוד נון	יוד ואו דלת
588	270	890	486	467
Total=2701				

And the final word in the Torah is likewise:

(Devarim/Deuteronomy 34:12) (Yisrael) **לִלְכָל הַיָּד הַחֲזָקָה וְלִכְלֵי הַמּוֹרָא הַגָּדוֹל אֲשֶׁר עָשָׂה מֹשֶׁה לְעֵינָיו כֹּל יִשְׂרָאֵל**

With these introductions, we will also understand some contradictions in the words of our sages.

Our sages said the world was created with the letter "Heh" (Midrash brought in Rashi on Gen.2:4).

And "the world was created with the letter Beit" (Midrash Otyiot d'Rebbi Akiva-Beit).

And "the world was created with wisdom" (Targum Yerushalmi Gen.1:1)

The explanation is that it refers to different aspects of the same thing. The world was created with wisdom, i.e. the Torah (milui of wisdom=613), i.e. G-d's looking into the Torah. (Beit represents the second Sefirah of wisdom). While the Heh represents the stage of divine "Hevel" (speech) to actually create the world. The letter "Heh" itself is pronounced like the breath - Heeehh, using neither the tongue nor the teeth to enunciate. Everything here is ultimately made of information and this information is being read and spoken by G-d.

Interestingly, there is another hugely important number we will discuss soon, be'H. Namely the number 1820.

$$1820 = 70 \times 26.$$

70 is the gematria of the letter "Ayin" which means "eye" in Hebrew and 26 is G-d's Name. The milu (letter expansion) of the opening word Bereishis = 1820. (the Yud is also basically just a black dot, in the center of the eye)

There are exactly 1820 instances of G-d's Name in the Torah and many other amazing facts on 1820 as we will see, be'H.

Footnotes

- [1] after discovering this "Triangle of Yud" and its Gematrias, I was told it was previously discovered by Rabbi Yitzchak Ginsburg
- [2] Vilna Gaon on Sefer Yetzira 1:1 see <https://hebrewbooks.org/pdfpager.aspx?req=59799&st=&pgnum=8> and footnote Tet-Zayin
- [3] as a noun. excluding the name Hevel in Genesis (Kain's brother) and the 5 total instances where it appears in verb form: ויהבלו תהבלו מהבלים. Likewise excluding הבליעל and הבלעי which do not at all mean "Hevel". Then the total is exactly 73 times for all of Tanach.

ולכל

4).

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The Menorah

Rabbi Chaim Lenchitz

"Properties of Materials"—the title of one of the engineering tables issued by Westinghouse Electric Corp. In it the data for determining the relative densities of Gold and Silver is readily found. It reads: Lb/Cu. In. — Gold, .697—Silver, .380.

The following is a translation of 16 paragraphs from "Torath Chemed" — writings of Hagoon Rav. C. M. D. Weissmandell, z.t.l. Patient concentration in the study of these paragraphs will yield the immense experience of *witnessing* the verification of Torah truth.

1) The apparent view of Rashi, Menachoth 28: is that the *gevi'im*, *kaftorim* and *parachim* of the Menorah were not just protruding from the surface but rather were composed of depressions and engravings (v. para. beg. "ha'raglayim ve-haperach").

2) There are various opinions as to the form of the Menorah. One of these (quoted in Migdal Oz and also in M'lechet Machsheveth of Hagoon R. Emanuel Chai Riki z.l., author of Mishnath Chasidim) holds with the above view — concurring also with the form of the Menorah engraved on the shekels that have remained to this day from the Temple era.

3) Proceed to calculate: The length of the central column was (see Figure) 18 tefachim. The lowest of the three semi-circular *kanim* (stems) began at 9 tefachim. (Menachoth, ibid. Rashi-Chumash.) According to an opinion stated in M'lechet Machsheveth the *kanim* lengths were semi-circular in shape. With application of the rule, as stated in the Gemarah — a diameter of 1 gives a circumference of 3 — we find: The lowest of the semi-circular *kanim* had a length of 27 tefachim (3x9), the middle *kaneh*, 21 tefachim (3x7), and the upper *kaneh*, 15 tefachim (3x5). The *kaneh* involved in shaping the feet near the base began at a height of 3 tefachim. Its semi-circular length was therefore 9 tefachim (3x3).

4) We now have $18+27+21+15+9 = 90$ tefachim as the total length. If the *kanim* were square in shape the volume of the Menorah would equal 90 cubic tefachim. We find however (as mentioned by the author of Mishnath Chasidim) that the *kanim* were all cylindrical. (This being the shape as implied everywhere by the word *kaneh* itself.) Again we use the familiar rule of the Gemarah — the relative difference in area of a square and its inscribed circle is $\frac{1}{4}$. Deducting $\frac{1}{4}$ from the volume of 90 cubic tefachim, we get 67.5 cubic tefachim as the remainder.

5) The result of the above calculation is that the volume of gold in the Menorah equalled 67.5 cubic tefachim. Therefore, the weight of one *kikar* of gold corresponds to this volume, since the Menorah was a complete *kikar* (as expressly stated in the Pasuk).

6) In yet another instance, we find the measurement of a *kikar* relating to the *adanim*. Those silver sockets which supported the *kerashim* had a weight of one *kikar* per *eden*.

7) There were two *adanim* per *keresh*. The dimensions of the *keresh* included a width of 9 tefachim and a depth of 6 tefachim. The height of the *adanim* was 6 tefachim (as stated by Rashi).

8) The resulting volume of a single *eden* is therefore $6 \times 6 \times 4.5 = 162$ cubic tefachim.

A review of the calculations in paragraphs No. 3, 4 and 5 using $\pi = 3.1416$ (rather than the approximation of 3.0), shows the following:

$$\begin{aligned} 3.1416 \times 3 &= 9.4248 \\ 3.1416 \times 9 &= 28.2744 \\ 3.1416 \times 7 &= 21.9912 \\ 3.1416 \times 5 &= 15.7080 \\ \hline &75.3984 \\ &18.0000 \\ \hline &93.3984 \text{ tefachim} \end{aligned}$$

The cross-sectional diameter is given by the Pasuk as one tefach.

Therefore:

$$\begin{aligned} V(g) &= \text{volume occupied by one kikar weight of pure gold} \\ &= (3.1416/4) \times 93.3984 = 73.4 \text{ cubic tefachim.} \end{aligned}$$

$$\begin{aligned} V(s) &= \text{volume occupied by one kikar weight of silver} \\ &= 135 \text{ cubic tefachim (see No. 10, above).} \end{aligned}$$

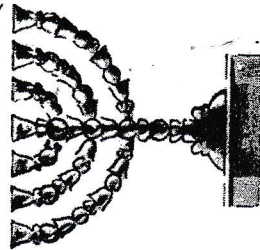
Let $d(g)$ and $d(s)$ be the weight densities, respectively, of gold and silver. Since weight density equals weight/volume, then we have for one kikar of each substance.

$$d(g)/d(s) = V(s)/V(g) = 135/73.4 = 1.834.$$

From "Properties of Materials":

$$d(g)/d(s) = .697/.380 = 1.834. \text{ (Checks!!)}$$

He who wants wisdom—should face south—the Menorah is in the south
(Bava Basra 25:)



9) However, each eden was hollow at its center to serve as a receptacle for the protruding arm at the bottom of the keresh (as mentioned in the Pasuk and Rashi). From Rashi we learn the dimensions of this protrusion. $1.5 \times 3 \times 6 = 27$ cubic tefachim. The matching volume of the hollow receptacle, 27 cubic tefachim, is then deducted from the overall 162 cubic tefachim, leaving a remainder of 135 cubic tefachim of silver.

10) Result: One *kikar* of silver has a volume of 135 cubic tefachim. One *kikar* of gold has a volume of 67.5 cubic tefachim—exactly $\frac{1}{2}$ the volume of silver.

11) We see that the Tosafoth in Bekhoroth 50 (para. beg. "d'miz-dabna") have also determined that the weight of gold is exactly twice the weight of silver. The opinion of Tosafoth is quoted repeatedly in various other places. If the simple interpretation of *kikar* refers to a weight measure, it follows that the volume of a silver *kikar* should indeed be twice the volume of a gold *kikar*.

12) Yet, according to the Tosafoth in Bechoroth 49: (para. beg. "amar") it would seem from the opinion of Rabbenu Tam that a *dinar* is a unit of volume rather than weight, and therefore the *kikar* too would be a measure of volume and not of weight. This contention also finds support in the words of R. Ibn Ezra z.l. in the beginning of Parshath Pekudai — "It is a *kabala* from our forefathers that the golden *kaporeth* over the *aron* was a *kikar*". The dimensions of the *kaporeth* were $15 \times 9 \times 1$ tefachim (as mentioned in Succah and other places). The total volume was therefore 135 cubic tefachim of gold, the same volume as a *kikar* of silver. R. Ibn Ezra, therefore, would seem to agree with the aforementioned opinion.

13) Most opinions, however, do not hold so. A *kikar*, therefore, is a measure of weight and not volume.

14) The Tosafoth in Eruvin and Succah have already pointed out that the 1 to 3 ratio of diameter to circumference, as set forth by Chazal, is not an exact calculation — it is slightly greater. This point has been quoted by the Shakh in the beginning of Hilkhoth Teraifoth, as a factor in Halakhah. However, the Rosh in a responsa writes that Chazal have derived from the Pasuk mentioned in Eruvin 14. that in matters bearing on Halakhah, one *must* calculate with the above ratio (1 to 3) for all decisions, consequent leniency or strictness notwithstanding. (Indeed, the omission by the Shakh of the Rosh's opinion requires further examination).

15) The Menorah, however, was not a Halakhah, but a practical actuality — and in practice the calculation is not accurate since in reality the ratio is greater by almost $1/7$ (as stated by the Rambam in his commentary on the Mishnah and as quoted by the aforementioned Shakh). There is, therefore, a need to reconcile the contradictory Halakhah with the actual practice of Menorah construction. *It is here that Moshe found difficulty in constructing the Menorah and required a miracle — from Heaven.*

16) Truly, for those who fully comprehend, this is one of the wonders. Verily, if all men of science from East to West would join together, they would be incapable of determining the exact ratio of circumference to diameter — since it is an infinite calculation — although both of them exist in reality.

(Translated from Torah Chemed)

The overtones of the above investigation yield another exciting result.