

## Study Aids <br> Numbers 

Method of study is 'Learn and Teach'! Study all life long!
$1^{\text {st }}$ Learn, when comprehending, start teaching. In free education fast learners teach slow learners. At work the experienced worker trains new comers. At home, grandparents teach children, grand children. Parents teach children.

## Study advise

When studying or teaching not only research this guide but a variety of others. When finding a well written piece Plagiarize parts you need and expand on these (applies to Scholars and Educators).


Run: spell check and grammar check.
Add: color, images and audio were needed.
Proof read, if needed make changes.
Make your work 'Copyright free' then publish.

## Directory Numbers

Add table $\sim$ Numbers $\sim$ Numbers meaning $\sim$ Magic numbers $\sim$ Numbers usage $\sim$ Numbers value $\sim$ Math symbols $\sim$ Measures $\sim$


## 1 God is waiting to hear from you !

## Education Prayer

Celebrate Education Day 6.1.7. NAtm
Dear 1 God, Creator of the most beautiful Universe
Your most humble faithful custodian guardian ( $1^{\text {st }}$ name)
Promises to seek, gain, apply Knowledge all life long
To Learn and Teach via Free Education
To support public Free education
Pass on Life Experiences to next generation
For the Glory of $\mathbf{1}$ GOD and the Good of Humankind


This prayer is used in class and on Education Day


## Add table

The addition table contains 400 additions. Going from left to right in any row, or from top to bottom in any column, each new number is 1 more (+) than the previous number (successor). Successors are a sequence of numbers e.g. $0,1,2,3,4,5, \ldots$ Shaded boxes are doubles of digits e.g. $\mathbf{2 + 2 = 4}$

| + | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |  |
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |  |
| 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 |  |
| 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 3 |  |
| 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |  |
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 |  |
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 |  |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |  |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 |  |
| 10 | 11 | 12 | 13 | 1 | 15 | 16 | 17 | 18 | 19 | 2 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 |  |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 6 | 27 | 28 | 29 | 0 |  |
| 12 | 13 | 1 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 2 | 2 | 25 | 26 | 27 | 28 | 29 | 30 | 31 |  |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 2 | 21 | 22 | 23 | 24 | 25 | 26 | 2 | 28 | 29 | 30 | 31 | 32 |  |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 2 | 2 | 2 | 2 | 27 | 2 | 29 | 3 | 31 | 32 | 33 |  |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 2 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 3 |
| 16 | 17 | 18 | 19 | 2 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 2 | 30 | 31 | 32 | 33 | 3 | 35 | 36 |
| 17 | 18 | 19 | 20 | 21 | 22 | 2 | 2 | 25 | 2 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 |
| 18 | 19 | 2 | 21 | 2 | 23 | 24 | 25 | 26 | 2 | 28 | 2 | 30 | 31 | 32 | 33 | 34 | 5 | 36 | 37 | 38 |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |

O (zero) is not included; adding O (zero) to any number results in the same number. Pick a number (digit) on the top horizontal line; add (+) with a number on the far left vertical line. Move right on this vertical line until the relevant horizontal line is reached. E.g. $3+5=8$
Note: $3+5$ has the same result as $5+3=8$ Addends can be swapped result is the same.

## Numbers

Numbers are important and 7 is divine!
Once humankind started to use numbers it was ready to evolve towards its Destiny: Custodian of the Physical Universe. Numbers made it possible to describe and measure quantity, speed,..., creating mathematical concepts. Custodian Guardians believe that numbers are a major cornerstone of humankind's intellect.
Numbers are the foundation mathematical concept that humankind uses to create more mathematical concepts. Numbers led to science enabling us to advance and understand more and more of $\mathbf{1}$ GOD's creations. Numbers built civilizations and destroyed them. The cycle of "Beginning, End and Recycling".
Numbers allowed counting :
Fingers on a hand 1, 2, 3, 4, 5. Result (symbol: =) 5 fingers.
Adding (symbol: +) allows to merge more than 1 counting result. Fingers on 2 hands $5+5=10$ fingers on both hands.
Take away (symbol: -) allows to reduce a previous result. 1 hand with 5 fingers has 1 finger cut off (accident): 5-1 = 4 fingers left on hand.
Multiplying (symbol: $\bullet$ ) allows (simpler) counting amounts of similar items. Fingers on 3 hands $3 \cdot 5$ (simpler then $5+5+5$ ) = 15 fingers on 3 hands. When multiplying the same number repeatedly a Power notation is used: $2 \cdot 2 \cdot 2 \cdot 2 \cdot 2\left(\mathbf{2}^{5}\right.$ power of 5$)=32$ the fifth power of 2 .
Numbers allow the creation of a Sequence of numbers, o, 1, 1, 2, 3, 5, $8,13,21,34,55,89,144,233, \ldots$ (symbol: ...) after 2 initial numbers, each number is the sum of the 2 preceding numbers.
Custodian Guardian use the base 10 natural number system. The 1 digit symbols used: o (zero), 1 (one), 2 (two), 3 (three), 4 (four), 5 (five), 6 (six), 7 (seven), 8 (eight), 9 (nine). Numbers: 0, 2, 4, 6, 8 are called even; $1,3,5,7,9$ are called odd. After 9, 2 digits (called 10's) are used: $10,11,12,13,14,15,16,17,18,19$.
The $\mathbf{o}$ placed to the right of any of the 9 numbers creates a 2 digit number called 10's (ten's), e.g. 70. Two 00 are called 100's (hundred's), e.g. 700. Three $\mathbf{0 0 0}$ are called 1000's (thousands), e.g. 7000. Every 3 numbers counted from the right are separated by a comma e.g. 1,000,000 ( 1 million).

Per cent (symbol: \%) means hundreds. A 100's fraction can also be expressed as a per-cent e.g. $7 / 100=7 \%$ or decimal 0.07
(.)A dot is used to show values less than 1 e.g. o.1 (called Decimal). 0.1 (Decimal) can also be expressed as a fraction using the division symbol $1 / 10 \quad 0.1=1 / 10$ or per-cent $10 \%$
Numbers are used in geometric design: 3 sided Triangle, 4 sided Rectangular, Square, 5 sided Pentagon, 6 sided Hexagon, 7 sided Heptagon (symbol of 1 FAITH), 8 sided Octagon. Square ${ }^{2}$ (2 dimensional), Cube ${ }^{3}$ (3 dimensional), Cone, Cylinder...


7 is divine because it took 1 GOD 7 days* to create the Physical Universe and Humankind. 6 work days +1 rest day $=1$ week.
*Note! 1 GOD's week differs from the C.G. Kalender week.
Day 1 Day 2 midweek Day 4 Day 5 weekend Fun-day
1 GOD wants 7 Tribes. Resulting in 7 Provinces ~
1 FAITH based on 7 Scrolls $\sim$ symbol: Heptagon (7 sides, 7 angles)
1 Church: Universe Custodian Guardians have 7 independent provincial administrations (Orackle)~
7 Evils are human Failings, the 'Chain of Evil' has 7 links ~ 7_7 Rule: a committee of equal representation 7 HE and $7 \mathrm{SHE} \sim$

## Numbers meaning

o Out of nothing $\mathbb{1}$ GOD created the physical Universe. Zero is the number of creation. Negative: Zero is the number of destruction.
1 The beginning, being first, the 1 and only. 1 GOD 1 FAITH 1 Church. Negative: The end, being last, endangered. The many.
2 Harmony, Holy matrimony, mating, twins. Negative: Anarchy, separating, pornography, celibacy.
3 Time triangle, 3 pillars of religion ( $\mathbf{1}$ GOD 1 FAITH 1 Church). Negative: 3 is a crowd, cults, earthquakes.
44 seasons (spring, summer, autumn, winter) of the year, quattro year, 4 directions (north, east, west, south), 4 elements (fire, water, earth, air), square, cube, structured rules. Negative: chaos, confusion no rules, lack of coherence, Murphy's law.

5 Vision, pioneering, persevering, action. Negative: prevent, roving, apathy.
6 Group, community, social justice, neighborhood watch, church. Negative: Hermit, isolation, elitist, wealth apartheid, gangs.
71 GOD's latest message the Law Giver Manifest, Meditation, I.P. (intellectual property), prophesy. Negative: Fantasizing, wishful thinking, fake messages, copyright, patent.
8 Justice, career path, responsibility, trust. Negative: Lawlessness, unemployed, immaturity, corrupt, lie.
9 Socialite, cheerful, friendly, public speaking. Negative: Loner, grumpy, not talkative.

## 1 GOD is waiting to hear from you !

Number Prayer
Scroll 1 affirmation 6 LGM
Dear 1 God, Creator of the most beautiful Universe
Your most humble faithful custodian guardian ( $1^{\text {st }}$ name)
Thanks' You for numbers
Numbers help us understand the Universe
Numbers to assist in custodian guardian duties
Numbers for mental stimulation and fun
For the Glory of $\mathbf{1}$ God and the Good of Humankind


This prayer is used when needed !


Magic numbers


The Magic Heptagram numbers are placed at each of the vertices and intersections so that the 4 numbers on each line sum 30!


Create a 7 pointed magic heptagon sun star?

The fun in magic squares is the fact that whichever way numbers in a square are added up: vertically (v), horizontally (h) or diagonally (d) the result is the same.


Create a 49 number magic square?


## Numbers usage

A: Odd numbers consist of $1,3,5,7,9$, and all numbers whose last digit is one of these.

B: Even numbers consist of 0, 2, 4, 6, 8, and all numbers whose last digit is one of these.
C: Whole numbers consist of odd and even numbers.
D: Binary numbers are a base 2 number system using 2 symbols, 0,1 .
E: Percent (\%) to find $15 \%$ of 50 multiply the \% and the number divide by $100=7.5!15 \cdot 50: 100=7.5$
Express a given \% as a fraction, multiply $15 \cdot 100 / 100=15$
Express a given \% as a decimal, multiply $0.15 \cdot 100=15$
F: Fraction 3 steps are needed to convert 15 \% into the common fraction 3 / 20 : 1. omit the $\%$ sign. 2. divide by $100 \_15 / 100$. 3. reduce
to lowest terms _ 3 / 20 .
G: Decimal convert 15\% into decimal. Omit the \% sign. Then move the decimal point of the $\%$ two places to the left $=0.15$
H : Nature sequence numbers allow the creation of a sequence of numbers e.g. $0,1,1,2,3 \ldots$ after 2 initial numbers, each number is the sum of the 2 preceding numbers.
I: Prime numbers, finding them (whole numbers divisible by themselves) E.g. find all prime numbers to 20 . List all numbers from 2 to 20. Highlight 2 disregard all multiples of 2. Highlight the next number (3) that is not highlighted disregard all its multiples. Repeat until the end of the list is reached. The primes are the numbers highlighted. $2,3,5,7,11,13,17,19$,
J: Roman numbers are based on certain letters of the alphabet which are combined to signify the sum or difference of their values.
1 I , 2 II, 3 III, 4 IV, 5 V, 6 VI, 7 VII, 8 VIII, 9 IX, 10 X, 11 XI, 12 XII,.... 20 XX, 30 XXX, 45 XLV, $50 \mathrm{~L}, 76 \mathrm{LXXVI}, 100 \mathrm{C}, 500 \mathrm{D}, 1000 \mathrm{M}$.

## Numbers value

o $>$ Zero
$1>$ One
$5>$ Five
$7>$ Seven
$10>$ Ten
$50>$ Fifty
$100>$ Hundred
$500>$ Five hundred
1,000 $>$ Thousand
5,000 $>$ Five thousand
$10,000>$ Ten thousand
$50,000>$ Fifty thousand
100,000 $>$ Hundred thousand
500,000 $>$ Five hundred thousand
1,000,000 > Million
10,000,000, > Ten million
100,000,000 $>$ Hundred million
1,000,000,000 > Milliard
$10,000,000,000>$ Ten milliard
100,000,000,000 > Hundred milliard

1,000,000,000,000 > Billion
$10,000,000,000,000>$ Ten billion
100,000,000,000,000 > Hundred billion
1,000,000,000,000,000 > Trillion
$10,000,000,000,000,000>$ Ten trillion
100,000,000,000,000,000 > Hundred trillion
1,000,000,000,000,000,000 > Zillion
10,000,000,000,000,000,000 > Ten zillion
$100,000,000,000,000,000,000>$ Hundred zillion
Note! From right to left a comma is placed after each $3^{\text {rd }}$ digit.

## Mathematical symbols

$=$ result equal to $\quad \neq$ not equal to $\quad \equiv$ identically equal to

+ adding merges more than 1 counting result
- take-away reduces a previous result
$\pm$ plus or minus
$\mp$ minus or plus
- or $\mathbf{x}$ multiplying (simpler) counting amounts of similar
 items
$\div$ dividing portioning of a previous result
$>$ greater than < less than
$\geq$ equal to or greater than $\leq$ equal to or less than
$\ngtr$ not greater than
* not less than
\% percent
~ is proportional to
\%o permil
$\approx$ is approximately equal to
$\mathbf{\Omega}$ Omega, sum of all prime factor multiplicities
$\square$ corresponds to
$\boldsymbol{\pi}$ Pi, product of
$\sqrt{ }$ square root
[] square brackets
( ) parentheses
$\therefore$ therefore
$\Delta$ Delta, difference
$\Sigma$ Sigma, sum of
\{ \} braces, empty set
\{ , \} set of (specify)
\{...\} \& so on, infinite set
$\because$ because, since

| $\subseteq$ subset | $\supseteq$ super set |
| :--- | :--- |
| $\in$ element of | $\notin$ not element of |
| $\varnothing$ empty set | U universal set |
| $\int$ integral | $\oint$ closed contour integral |
| $\iint$ double integral | $\oiint$ closed surface integral |
| $\iiint$ triple integral | $\oiiint$ closed volume integral |

## Measures

Custodian Guardian use New Age standards (NAs) to measure. An updated metric version. A U.C.G. community service.
Length Base unit: meter (m) ~
Area Base unit: square-meter ( $\mathrm{m}^{2}$ ) ~ 3 D meter $\left(\mathrm{m}^{3}\right) ~ \sim$
Volume Base unit: liter (l) ~
Weight Base unit: gram (g)
Measure prefixes. Use Capitalized prefixes for positive powers.
Prefix Symbol Power [] Value

| Yotta | Y | $10[24]$ | $1,000,000,000,000,000,000,000,000$ |
| :--- | :--- | :--- | :--- |
| Zetta | Z | $10[21]$ | $1,000,000,000,000,000,000,000$ |
| Exa | E | $10[18]$ | $1,000,000,000,000,000,000$ |
| Peta | P | $10[15]$ | $1,000,000,000,000,000$ |
| Tera | T | $10[12]$ | $1,000,000,000,000$ |
| Giga | G | $10[9]$ | $1,000,000,000$ |
| Mega | M | $10[6]$ | $1,000,000$ |
| Myria | My | $10[4]$ | 10,000 |
| Kilo | K | $10[3]$ | 1,000 |
| Hecto | H | $10[2]$ | 100 |
| Deca | D | $10[1]$ | 10 |

base b $10[0] \quad 1$

| deci d | do [-1] | 0.1 |
| :--- | :--- | :--- |

centi c
$10[-2] \quad 0.01$
milli m
10 [-3]
0.001
micro $\mu$
10 [-6]
0.000,001

| nano | n | $10[-9]$ | $0.000,000,001$ |
| :--- | :--- | :--- | :--- |
| pico | p | $10[-12]$ | $0.000,000,000,001$ |
| femto | f | $10[-15]$ | $0.000,000,000,000,001$ |
| atto | a | $10[-18]$ | $0.000,000,000,000,000,001$ |
| zepto | z | $10[-21]$ | $0.000,000,000,000,000,000,001$ |
| yocto | y | $10[-24]$ | $0.000,000,000,000,000,000,000,001$ |

Length Base unit: meter (m) ~ small letter prefixes are ( $\leq$ ) values of base. [o] Brackets tell power value. Distance between 2 points. E.g.
o.. $\rightarrow$.. $10=10$

| Prefix | Symbol Power [] Value |  |  |
| :--- | :--- | :--- | :--- |
| 1 Yotta | Ym | $10[24]$ | $1,000,000,000,000,000,000,000,000$ |
| 1 Zetta | Zm | $10[21]$ | $1,000,000,000,000,000,000,000$ |
| 1 Exa | Em | $10[18]$ | $1,000,000,000,000,000,000$ |
| 1 Peta | Pm | $10[15]$ | $1,000,000,000,000,000$ |
| 1 Tera | Tm | $10[12]$ | $1,000,000,000,000$ |
| 1 Giga | Gm | $10[9]$ | $1,000,000,000$ |
| 1 Mega | Mm | $10[6]$ | $1,000,000$ |
| 1 Myria | Mym | $10[4]$ | 10,000 |
| 1 Kilo | Km | $10[3]$ | 1,000 |
| 1 Hecto | Hm | $10[2]$ | 100 |
| 1 Deca | Dm | $10[1]$ | 10 |
| 1 meter | m | $10[0]$ | 1 |
| 1 deci | dm | $10[-1]$ | 0.1 |
| 1 centi | cm | $10[-2]$ | 0.01 |
| 1 milli | mm | $10[-3]$ | 0.001 |
| 1 micro | $\mu \mathrm{m}$ | $10[-6]$ | $0.000,001$ |
| 1 nano | nm | $10[-9]$ | $0.000,000,001$ |
| 1 pico | pm | $10[-12]$ | $0.000,000,000,001$ |
| 1 femto | fm | $10[-15]$ | $0.000,000,000,000,001$ |
| 1 atto | am | $10[-18]$ | $0.000,000,000,000,000,001$ |
| 1 zepto | zm | $10[-21]$ | $0.000,000,000,000,000,000,001$ |
| 1 yocto | ym | $10[-24]$ | $0.000,000,000,000,000,000,000,001$ |

Square meter unit: meter ( $\mathrm{m}^{2}$ ) ~ small letter prefixes are ( $\leq$ ) values of base. [o] Brackets tell power value. Width, breadth of an area multiplied . E.g. $10 \cdot 10=100 \mathrm{~m}^{2}$

| Prefix | Symbol Power [] Value |  |  |
| :--- | :--- | :--- | :--- |
| 1 Yotta | $\mathrm{Ym}^{2}$ | $10[24]$ | $1,000,000,000,000,000,000,000,000$ |



Cubic meter unit: meter $\left(\mathrm{m}^{3}\right) \sim$ small letter prefixes are ( $\leq$ ) values of base. [o] Brackets tell power value. Width, breadth, depth of an area multiplied. E.g. $10 \cdot 10 \cdot 10=1000 \mathrm{~m}^{3}$

## Prefix Symbol Power [] Value

| 1 Yotta | Ym ${ }^{3}$ | 10 [24] | 1,000,000,000,000,000,000,000,000 |
| :---: | :---: | :---: | :---: |
| 1 Zetta | $\mathrm{Zm}^{3}$ | 10 [21] | 1,000,000,000,000,000,000,000 |
| 1 Exa | Em ${ }^{3}$ | 10 [18] | 1,000,000,000,000,000,000 |
| 1 Peta | Pm ${ }^{3}$ | 10 [15] | 1,000,000,000,000,000 |
| 1 Tera | Tm ${ }^{3}$ | 10 [12] | 1,000,000,000,000 |
| 1 Giga | $\mathrm{Gm}^{3}$ | 10 [9] | 1,000,000,000 |
| 1 Mega | $\mathrm{Mm}^{3}$ | 10 [6] | 1,000,000 |
| 1 Myria | $\mathrm{Mym}^{3}$ | 10 [4] | 10,000 |
| 1 Kilo | $\mathrm{Km}^{3}$ | 10 [3] | 1,000 |


| 1 Hecto | $\mathrm{Hm}^{3}$ | $10[2]$ | 100 |
| :--- | :--- | :--- | :--- |
| 1 Deca | $\mathrm{Dm}^{3}$ | $10[1]$ | 10 |
| 1 meter | $\mathrm{m}^{3}$ | $10[\mathrm{o}]$ | 1 |
| 1 deci | $\mathrm{dm}^{3}$ | $10[-1]$ | 0.1 |
| 1 centi | $\mathrm{cm}^{3}$ | $10[-2]$ | 0.01 |
| 1 milli | $\mathrm{mm}^{3}$ | $10[-3]$ | 0.001 |
| 1 micro | $\mathrm{mm}^{3}$ | $10[-6]$ | $0.000,001$ |
| 1 nano | $\mathrm{nm}^{3}$ | $10[-9]$ | $0.000,000,001$ |
| 1 pico | $\mathrm{pm}^{3}$ | $10[-12]$ | $0.000,000,000,001$ |
| 1 femto | $\mathrm{fm}^{3}$ | $10[-15]$ | $0.000,000,000,000,001$ |
| 1 atto | $\mathrm{am}^{3}$ | $10[-18]$ | $0.000,000,000,000,000,001$ |
| 1 zepto | $\mathrm{zm}^{3}$ | $10[-21]$ | $0.000,000,000,000,000,000,001$ |
| 1 yocto | $\mathrm{ym}^{3}$ | $10[-24]$ | $0.000,000,000,000,000,000,000,001$ |

Volume Base unit: liter (l) ~ small letter prefixes are ( $\leq$ ) values of base. [o] Brackets tell power value. Volume between 2 measures. E.g. o.. $\rightarrow$.. 10 $=10$

| Prefix | Symbol | Power [ $]$ | Value |
| :--- | :--- | :--- | :--- |
| 1 Yotta | Yl | $10[24]$ | $1,000,000,000,000,000,000,000,000$ |
| 1 Zetta | Zl | $10[21]$ | $1,000,000,000,000,000,000,000$ |
| 1 Exa | El | $10[18]$ | $1,000,000,000,000,000,000$ |
| 1 Peta | Pl | $10[15]$ | $1,000,000,000,000,000$ |
| 1 Tera | Tl | $10[12]$ | $1,000,000,000,000$ |
| 1 Giga | Gl | $10[9]$ | $1,000,000,000$ |
| 1 Mega | Ml | $10[6]$ | $1,000,000$ |
| 1 Myria | Myl | $10[4]$ | 10,000 |
| 1 Kilo | Kl | $10[3]$ | 1,000 |
| 1 Hecto | Hl | $10[2]$ | 100 |
| 1 Deca | Dl | $10[1]$ | 10 |
| 1 liter | l | $10[\mathrm{O}]$ | 1 |
| 1 deci | dl | $10[-1]$ | 0.1 |
| 1 centi | cl | $10[-2]$ | 0.01 |
| 1 milli | ml | $10[-3]$ | 0.001 |
| 1 micro | $\mu \mathrm{l}$ | $10[-6]$ | $0.000,001$ |
| 1 nano | nl | $10[-9]$ | $0.000,000,001$ |
| 1 pico | pl | $10[-12]$ | $0.000,000,000,001$ |
| 1 femto | fl | $10[-15]$ | $0.000,000,000,000,001$ |
| 1 atto | al | $10[-18]$ | $0.000,000,000,000,000,001$ |
| 1 zepto | zl | $10[-21]$ | $0.000,000,000,000,000,000,001$ |



Weight Base unit: gram (g) ~ small letter prefixes are ( $\leq$ ) values of base. [o] Brackets tell power value. Weight between 2 measures. E.g. o.. $\rightarrow$.. $10=10$

Prefix Symbol Power [] Value

| 1 Yotta | Yg | $10[24]$ | $1,000,000,000,000,000,000,000,000$ |
| :--- | :--- | :--- | :--- |
| 1 Zetta | Zg | $10[21]$ | $1,000,000,000,000,000,000,000$ |
| 1 Exa | Eg | $10[18]$ | $1,000,000,000,000,000,000$ |
| 1 Peta | Pg | $10[15]$ | $1,000,000,000,000,000$ |
| 1 Tera | Tg | $10[12]$ | $1,000,000,000,000$ |
| 1 Giga | Gg | $10[9]$ | $1,000,000,000$ |
| 1 Mega | Mg | $10[6]$ | $1,000,000$ |
| 1 Myria | Mg | $10[4]$ | 10,000 |
| 1 Kilo | Kg | $10[3]$ | 1,000 |
| 1 Hecto | Hg | $10[2]$ | 100 |
| 1 Deca | Dg | $10[1]$ | 10 |
| 1 gram | g | $10[\mathrm{0}]$ | 1 |
| 1 deci | dg | $10[-1]$ | 0.1 |
| 1 centi | cg | $10[-2]$ | 0.01 |
| 1 milli | mg | $10[-3]$ | 0.001 |
| 1 micro | $\mu g$ | $10[-6]$ | $0.000,001$ |
| 1 nano | ng | $10[-9]$ | $0.000,000,001$ |
| 1 pico | pg | $10[-12]$ | $0.000,000,000,001$ |
| 1 femto | fg | $10[-15]$ | $0.000,000,000,000,001$ |
| 1 atto | ag | $10[-18]$ | $0.000,000,000,000,000,001$ |
| 1 zepto | zg | $10[-21]$ | $0.000,000,000,000,000,000,001$ |
| 1 yocto | yg | $10[-24]$ | $0.000,000,000,000,000,000,000,001$ |

PS-1 (Packaging-standard) covers consumer needs: honest easily to compare product quantities', packaging. Packaging is recyclable.
Government need to standardize packaging content size: solid (gram, Kg ), liquid (liter). Standard has to apply to commercial, industrial and personal packaging. Packaging must also be recyclable.

## Universe Custodian Guardians Packaging Standard Table.


uted, sold in the 14 quantities shown in the table.
$10 \mathrm{mg}>20 \mathrm{mg}>50 \mathrm{mg}>100 \mathrm{mg}$ $200 \mathrm{mg}>500 \mathrm{mg}>1 \mathrm{~g}>10 \mathrm{~g}>50 \mathrm{~g}$ $100 \mathrm{~g}>200 \mathrm{~g}>500 \mathrm{~g}>$
$1 \mathrm{Kg}>2 \mathrm{Kg}>5 \mathrm{Kg}>10 \mathrm{Kg}>50 \mathrm{Kg}$ $100 \mathrm{Kg}>500 \mathrm{Kg}>1000 \mathrm{Kg}>2000 \mathrm{Kg}$


$$
\begin{aligned}
& 10 \mathrm{ml}>20 \mathrm{ml}>50 \mathrm{ml}>100 \mathrm{ml} \\
& 200 \mathrm{ml}>500 \mathrm{ml}> \\
& \mathrm{l}>10 \mathrm{l}>50 \mathrm{l}>100 \mathrm{l}>200 \mathrm{l} \\
& 500 \mathrm{l}>1000 \mathrm{l}>2000 \mathrm{l}
\end{aligned}
$$

Consumer Guidance: Solid, Liquid weights need to show the price for $1 \mathrm{~kg}, 1 \mathrm{l}$ to compare prices + the actual weight and price. Packaging must be recyclable.

## A product with the lowest kg, l price is the 'Bargain'.

Profit orientated economies allow immoral criminal 'Deceitful Packaging (fraud)'. Consumers need protection from deceitful, greedy, profiteering, dishonest producers, manufacturers and retailers who use 'Deceitful packaging' (down sizing content) to take advantage (rip off) of consumers. MS R3 Support PS-1 Packaging standard and hold accountable deceitful packagers.

Examples: A manufacturer product comes in a 0.440 kg package using their brand label. The same product is also labeled as a retailers home brand, but the package content is reduced to 0.415 kg . This is done so the retailer can sell their home brand at a lower price than the manufacturer brand. This is a deceitful, dishonest and greedy trick to fool the consumer into thinking that the home brand is a bargain because of its lower price. When in fact, because the consumer gets less product there is no saving and sometimes the consumer in reality ends up paying more.
The $2^{\text {nd }}$ manufacturer sells at a lower price, his product looks like a bargain. Because there is less product in the $2^{\text {nd }}$ package it should therefore sell for less, not making it a bargain anymore. The $2^{\text {nd }}$ manufacturer hopes in a deceitful, dishonest and greedy manner, that the consumer will not check the weight since his packaging looks similar to the competing products.
Packaging comes often with less than full content (oversized packaging). This deceit is meant to deceive consumers in believing they get
more then they actually get!
Government need to standardize packaging content size: solid (gram, Kg ) and liquid (liter). Standard has to apply to commercial, industrial and personal packaging. Packaging must also be recyclable.

## Morse code

A method used in telecommunication. Signal duration: dot, dash !
Length of a dot is 1 unit ! Dash is 3 units! The space between parts of same letter is 1 unit. Space between letters 3 units. Space between words is 7 units.


SOS is a Morse code distress signal


