

Tables of the relations between planets/moon period, Rotations about the sun and Sound and Light from Cousto, H. (1987/1988) (trans. C. Baker and J. Harrison) The Cosmic Octave: Origin of Harmony, Planets-Tones-Colors. LifeRhythm, (pp. 108-111)

RELATIONS BETWEEN THE PERIODS OF THE PLANETS' ROTATION ABOUT THE SUN AND THE AUDIBLE AND VISIBLE FREQUENCY REALMS

Planet	Period (μ) in days	(f_t) in Hz	(n) of octave	Name of tone	Corresponding tuning pitch A' in Hz	(f_s) in Hz times 10^{14}	(p) number of octave	Wave length (λ) in micro-meters	Color
Mercury	87.969	141.27	30	D	423.34	6.213	72	.483	Blue
Venus	224.7008	221.23	32	A	442.46	4.865	73	.616	Orange
Earth	1 year tropical	136.10	32	C [#]	432.10	5.986	74	.501	Blue-green
Mars	686.9798 (ca. 2 years)	144.72	33	D	433.67	6.365	75	.471	Blue
Jupiter	4332.588 (ca. 12 years)	183.58	36	F [#]	436.62	4.037	77	.743	Red
Saturn	10,759.21 (ca. 30 years)	147.85	37	D	433.04	6.502	79	.461	Blue
Uranus	30,685.93 (ca. 84 years)	207.36	39	G [#]	439.37	4.559	80	.685	Orange-red
Neptune	60,187.64 (ca. 165 years)	211.44	40	A	422.87	4.650	81	.645	Orange-red
Pluto	90,737.2 (ca. 248 years)	140.25	40	C [#]		6.168	82	.486	Blue
Moon-Synodic	29.530588	210.42	29	G [#]	445.86	4.627	70	.648	Orange-red
Moon-Sidereal	27.321661	227.43	29	A [#]	429.33	5.001	70	.599	Yellow-orange
Sun	Theory	126.22	8 down	C					Light green
Average day	1 day = 24 hours	194.18	24	G	435.92	4.270	65	.702	
Sidereal day	23 hours 56 mins 4.091 secs.	194.71	24	G	437.11	4.282	65	.700	Orange-red
Platonic year	25,920 years	344.12	48	F	433.65	7.567	89	.396	Red-violet

Translating from solar system body's movement (period) to Sound (frequency, Hz)

From the period (μ) the reciprocal value $1/\mu$ is formed. This, multiplied by n octaves, yields the frequency in the audible range: $[f_t = (1 \div \mu) (2^n)]$. Then the chromatic note (based on A' of 435 Hertz) which lies closest to this frequency is located... From the note thus ascertained the semitones to A' are counted. When there are m semitones, the chromatic A' which correlated to (f_t) can be calculated with the formula ($f_t \cdot 12 \cdot 2^m$). Electronic tuning machines with a frequency indicator for the note A' can then be attuned accordingly

Translating from audible sound (pitch, Hz) to the frequency of Light (color)

The corresponding frequency of light in the visible range is attained by multiplying the reciprocal value ($1/\mu$) of the period (μ) with p octaves according to the formula $(1 \div \mu) (2^p)$. The formula for the frequency in the visible range is therefore $f_s = (1 \div \mu) (2^p)$. The wave length (λ) is calculated from the equation $\lambda = c/f$, where c = the speed of light.

Definitions:

Earth: *Average Solar Day* = 24 hours. *Sidereal Day* = the daily rotation of the firmament (at the end of a sidereal day the same stars reach their highest point, the upper culmination above the horizon). It's about 4 minutes shorter than the average solar day. *Tropical Year* = the period of time from one sun's passage of the spring equinox till the next (365.242 198 79 days). *Platonic Year* = the amount of time (about 25,920 years) the axis of the earth takes to describe a full circle, the vernal equinox journeying through each of the signs of the zodiac in this time. The vernal equinox is the position of the sun at the beginning of spring. It takes an average of 2,160 years to travel through a sign of the zodiac. This period of time is known as an "age."

Moon: *Sidereal Month* = the time between the moon's two successive passings of the same star (a duration of 27 days, 7 hours, 43 minutes. 4.7 seconds.) *Synodic Month* = the time between two moon phases of the same kind (a duration of 29 days, 12 hours, 44 minutes. and 2.8 seconds).

CHROMATIC FREQUENCIES
TUNING SYSTEMS (Hz)

	Old Paris Standard Pitch	Average Day	Tropical Year	Platonic Year	
C	129.3263	129.6001	128.4634	128.8994	C
C#	137.0164	137.3065	136.1022	136.5642	C#
D	145.1638	145.4712	144.1953	144.6847	D
D#	153.7957	154.1214	152.7696	153.2881	D#
E	162.9409	163.2859	161.8537	162.4031	E
F	172.6299	172.9954	171.4780	172.0601	F
F#	182.8950	183.2822	181.6747	182.2913	F#
G	193.7705	194.1807	192.4776	193.1309	G
G#	205.2927	205.7273	203.9229	204.6151	G#
A	217.5000	217.9605	216.0488	216.7821	A
A#	230.4332	230.9211	228.8957	229.6726	A#
B (H)	244.1355	244.6524	242.5066	243.3297	B (H)
C	258.6525	259.2002	256.9268	257.7988	C
C#	274.0328	274.6130	272.2044	273.1283	C#
D	290.3277	290.9424	288.3905	289.3694	D
D#	307.5914	308.2427	305.5391	306.5762	D#
E	325.8818	326.5718	323.7074	324.8062	E
F	345.2597	345.9907	342.9561	344.1202	F
F#	365.7899	366.5644	363.3493	364.5826	F#
G	387.5409	388.3615	384.9552	386.2618	G
G#	410.5853	411.4547	407.8458	409.2301	G#
A	435.0000	435.9210	432.0976	433.5642	A
A#	460.8664	461.8422	457.7914	459.3453	A#
B (H)	488.2710	489.3048	485.0131	486.6594	B (H)
C	517.3051	518.4004	513.8535	515.5977	C