## What these charts are:

Each calculation in the scales below can be checked by using the Planetary Data Sheet, the Frequencies chart, or the mathematical notebooks at the end of the book. There at least 3 ways you can check them.

I have made errors putting the wrong note for a planet if even the interval was correct, or vice versa. Some are very simple to check or at least guess whether it is correct, then when you look up the note in regard to a specific body you realize they can change notes depending on which planet is the root (or the 'key') in that particular case.

Notes usable for Chords of Mercury by Solar Day Length

## Mercury



| Measured Frequency by Solar Day Length | $\mathbf{6 . 5 7 8 3 4 3 \times 1 0 ^ { - \mathbf { 8 } } \mathbf { ~ H z }}$ |
| :--- | :---: |
| Measured Frequency by Year Length | $\mathbf{1 . 3 1 5 \times 1 0 ^ { - \mathbf { - 7 } } \mathbf { H z }}$ |
| Transposed Frequency by Solar Day Length | $\mathbf{2 8 2 . 5 3 6 9} \mathbf{~ H z}$ |
| Transposed Frequency by Year Length | $\mathbf{5 6 5 . 0 9 3 1} \mathbf{~ H z}$ |
| Measured Orbit to Spin Resonance | $\mathbf{2 : 1}$ |
| Transposed Orbit to Spin Resonance in $\mathrm{O}_{2}$ | $\mathbf{2 : 1}$ |
| Closest Note by Solar Day Length | D flat 4- 277.18 Hz |
| Closest Note by Year Length | D flat 5-554.37 Hz |

Closest Interval by Orbit to Spin Resonance Octave Unison-2:1

```
Db (+Neptune) - F# (Mars + Earth) -G (Eris)
- Ab (Venus & our Moon) - A (Saturn) - Bb
(Jupiter + Pluto) - B (Ceres) - C (Uranus)
```

Chords of Mercury by Solar Day Length
F\# Major or Minor (Mars) -

Notes usable for Chords of Mercury by Year Length
$\mathbf{D b}$ (+Mars+Pluto)- D (Saturn) - F\# (Jupiter) -
$\mathbf{A b}$ (Neptune + Uranus) - $\mathbf{A}$ (Venus) - B (Eris)

- C (Earth)

Chords of Mercury by Year Length
D Major (Saturn) F\# Minor (Jupiter) -

These are notes in the Scales of Mercury if $D b$ is the key.
Scale and Intervals of Mercury by Solar Day Length
Db (Mercury)- F\# (Mars) - Ab (Venus \& our Moon)
Root - Perfect 4th - Perfect 5th

Scale and Intervals of Mercury by Year Length
$\mathbf{D b}$ (+Pluto)- Ab (Nept+Moon) - Bb (Ceres) - B (Eris)
Root - Perfect 5th - Major 6th - Minor 7th

## Venus



| Measured | Frequency | Solar Day | ngth 9.9 | $9.91355 \times 10-8 \mathrm{~Hz}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measured | Frequency | y Year Lengt |  | $5.151 \times 10-8 \mathrm{~Hz}$ |  |  |
| Transpose | d Frequen | by Solar Da | Length 42 | 425.7838848 Hz |  |  |
| Transpose | Frequen | by Year Len |  | 442.469248 Hz |  |  |
| Measured | Orbit to Sp | Resonance |  | 1.92458 : 1 |  |  |
| Closest No | te by Sola | Day Length | A flat 4-415.30 Hz |  |  |  |
| Closest No | te by Year | ength | A 4- 440 Hz |  |  |  |
| These are notes in the Scales of Venus if $A b$ or $A$ is the key. |  |  |  |  |  |  |
| Scale and Intervals of Venus by Solar Day Length |  |  |  |  |  |  |
| Venus | Ceres | Uranus | Mercury |  | Mars |  |
| Moon | 1.42\% |  |  |  |  |  |
| $\mathbf{A b}$ | B | C | Db | - |  | F\# |
| Root | Minor | Major | - Perfect | 4th |  | Mino |

Scale and Intervals of Venus by Year Length
Venus Ceres Eris Pluto Saturn

Moon
A
Bb
B

- Db
D

Root - Minor 2 - Major 2 Major 3 Perfect 4th

## Moon



| Measured Frequency by Solar Day \& Year Length | $3.91942 \times 10-7 \mathrm{~Hz}$ |
| :---: | :---: |
| Transposed Frequency by Solar Day \& Year Length | 420.8454929 Hz |
| Measured Orbit to Spin Resonance | 1: 1 |
| Transposed Orbit to Spin Resonance in $\mathrm{O}_{2}$ | 1: 1 |
| Closest Note by Solar Day Length A fla | t $4-415.30 \mathrm{~Hz}$ |

Closest Interval by orbit-spin resonance Root-1.0000
These are notes in the Scales of Moon if Ab is the key.
Scale and Intervals of Moon by Solar Day Length

| Moon | Saturn | Jupiter | Mercury |
| :---: | :---: | :---: | :---: |
| Venus |  |  |  |
| Ab | - $\mathbf{A}$ | Bb | Db |
| Root | Minor 2 | Major 2 - | Perfect 4th |
| Mars | Eris |  |  |
| F\# | G |  |  |
| Minor | Major |  |  |

Scale and Intervals of Moon by Year Length
Moon Venus Ceres Eris
Neptune
$\mathbf{A b} \quad \mathbf{A} \quad \mathbf{B b} \quad \mathbf{B} \quad \mathbf{D b}$
Root Minor 2 Major 2 Minor 3 Perfect 4

## Saturn

D
Tritone

Notes usable for Chords of Moon by Solar Day Length
$\mathbf{A b}$ (+Venus) - A (Saturn) - Bb (Jupiter) - B (Pluto) - C (Uranus) - Db (Mercury) - F\# (Mars)

## Chords of Moon by Solar Day Length

F\# Major or Minor (Mars) -

Notes usable for Chords of Moon by Year Length

```
Ab (+ Neptune + Uranus) - A (Venus) - Bb
(Ceres) - B (Eris) - Db (Mercury + Pluto) - D
(Saturn + Mars) - F# (Jupiter)
```


## Chords of Moon by Year Length

D Major (Saturn + Mars) -
B Minor (Eris) -
F\# Major or Minor (Jupiter) -

## Earth



| Measured Frequency by Solar Day Length | $\mathbf{1 . 1 5 7 4 0 7 \times 1 0 - 5 ~ H z}$ |
| :--- | :---: |
| Measured Frequency by Year Length | $\mathbf{3 . 1 6 8 8 7 6 \times 1 0 - 8 ~ H z}$ |
| Transposed Frequency by Solar Day Length | $\mathbf{3 8 8 . 3 6 1 4 8} \mathbf{~ H z}$ |
| Transposed Frequency by Year Length | $\mathbf{2 7 2 . 2 0 4 4} \mathbf{~ H z}$ |
| Measured Orbit to Spin Resonance | $\mathbf{3 6 5 . 2 4 2 2 : \mathbf { 1 }}$ |
| Transposed Orbit to Spin Resonance in $\mathrm{O}_{2}$ | $\mathbf{1 . 4 2 6 7 2 7} \mathbf{~ : ~ 1 ~}$ |
| Closest Note by Solar Day Length | G4- 392 Hz |
| Closest Note by Year Length | D flat 4- 277.18 Hz |
| Closest Interval by orbit-spin resonance | Tritone - 1.4142 |

These are notes in the Scales of Earth if G or Db is the key.

Scale and Intervals of Earth by Solar Day Length

| Earth | Saturn | Pluto | Ceres |
| :--- | :---: | :---: | :---: |
| Eris | $1.23 \%$ |  |  |
| G | $\mathbf{A}$ | $\mathbf{B}$ | C |
| Root | Major 2 | Major 3 | - |
| Perfect 4th |  |  |  |
| Neptune |  |  |  |

Perfect 5th

| Earth | Mars |  | Jupiter |
| :---: | :---: | :---: | :---: |
| Db | D | - | F\# |
| Root - | Minor 2 | - | Perfect 4th |

Notes usable for Chords of Earth by Solar Day Length

$$
\begin{aligned}
& \mathbf{G} \text { (+Eris) - Ab (Moon) - A (Saturn) - Bb } \\
& \text { (Jupiter) - B (Pluto) - C (Ceres) - Db (Mercury } \\
& + \text { Uranus) - D (Neptune) }
\end{aligned}
$$

Chords of Earth by Solar Day Length
G Major or Minor (Earth) -

Notes usable for Chords of Earth by Year Length

```
Db (Earth) - D (Mars + Saturn + Pluto +
Mercury) F# (Jupiter) - Ab (Uranus) -
A (Venus)
```

Chords of Earth by Year Length

```
F# Minor (Jupiter) -
D Major (Mars + Saturn + Pluto + Mercury) -
```


## Mars




Notes usable for Chords of Mars by Solar Day Length
$\mathbf{F \#}$ (Mars + Earth) - G (Eris) -
$\mathbf{A b}$ (Venus + Moon) - A (Saturn)-
Bb (Jupiter + Pluto) - B (Ceres) - C (Uranus) -
Db (Mercury + Neptune)

Chords of Mars by Solar Day Length
F\# Major or Minor (Mars + Earth) -

Notes usable for Chords of Mars by Year Length
D (Mars + Saturn) - F\# (Jupiter) -
$\mathbf{A b}$ (Uranus) - A (Venus + Neptune) - B (Eris)

- Db (Earth)

Chords of Mars by Year Length

```
D Major (Mars + Saturn) -
F\# Minor (Jupiter) -
B Minor (Eris) -
```


## Ceres




| Scale and Intervals of Ceres by Year Length |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ceres | Eris | Mercury Pluto | Saturn | Neptune <br> Moon | Venus |
| Bb | B | Db | D | Ab - | A |
| Root | Minor | Minor 3 | Major 3 | Min 7 | Maj 7 |

Notes usable for Chords of Ceres by Solar Day Length
$\mathbf{C}$ (Ceres) - Db (Uranus)- D (Neptune) $\mathbf{G}$ (Earth) - Ab (+Moon) - $\mathbf{A}$ (Saturn) - Bb (Jupiter) - B (Pluto)

Chords of Ceres by Solar Day Length
G Major or Minor (Earth + Mars) -

Notes usable for Chords of Ceres by Year Length
$\mathbf{B b}$ - $\mathbf{B}$ (Eris) - Db (Earth) - D (Mars) $\mathbf{A b}$ (Uranus) - $\mathbf{A}$ (Venus + Neptune)

Chords of Ceres by Year Length

## no minor or major chords

## Jupiter



| Measured Frequency by Solar Day Length | $2.7985 \times 10-5 \mathrm{~Hz}$ |
| :---: | :---: |
| Measured Frequency by Year Length | $2.672629 \times 10-9 \mathrm{~Hz}$ |
| Transposed Frequency by Solar Day Length | h $\quad 469.5119 \mathrm{~Hz}$ |
| Transposed Frequency by Year Length | 367.32334 Hz |
| Measured Orbit to Spin Resonance | 10,471 : 1 |
| Transposed in $\mathrm{O}_{2}$ Orbit to Spin Resonance | 1.278198 : 1 |
| Closest Note by Solar Day Length | B-flat 4-466.16 Hz |
| Closest Note by Year Length | F sharp 4-369.99 Hz |
| Closest Interval in $\mathrm{O}_{2} \mathrm{~N}_{12}$ by orbit-spin resonance | Major 3rd - 1.25992 |

These are notes in the Scales of Jupiter if Bb or F\# is the key.

Scale and Intervals of Jupiter by Solar Day Length

| Jupiter | Mars | Eris | Moon | Saturn |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{B b}$ | $-1.427 \%$ | $\mathbf{F}$ | $\mathbf{A b}$ | $\mathbf{A}$ |
| Root | Minor 6 | Major 6 | Minor 7 | Major 7 |

Scale and Intervals of Jupiter by Year Length

| Jupiter | Venus | Earth | Mars |
| :---: | :---: | :---: | :---: |
| F\# | A - | D. | Db |
| Root - | Minor 3 | Perfect 5 | Minor 6 |

Notes usable for Chords of Jupiter by Solar Day Length
Bb - B (Pluto) - Db (Mercury + Uranus) -
D (Neptune) - F\# (Mars) - G (Eris + Earth) -
$\mathbf{A b}$ (Venus) - A (Saturn)

Chords of Jupiter by Solar Day Length

```
F# Major or Minor (Mars) -
G Major or Minor (Eris + Earth) -
D Major (Neptune) -
B Minor (Pluto)
Bb augmented (+)
```

Notes usable for Chords of Jupiter by Year Length

```
F# (Jupiter) - Ab (Uranus) - A (Venus) -
```

$\mathbf{B}$ (Eris) - Db (Earth) - D (Mars + Saturn)

Chords of Jupiter by Year Length

```
D Major (Mars + Saturn) -
F# Minor (Jupiter) -
B Minor (Eris) -
```


## Saturn



| Measured Frequency by Solar Day Length | $2.6305 \times 10-5 \mathrm{~Hz}$ |
| :---: | :---: |
| Measured Frequency by Year Length | $1.07696 \times 10-9 \mathrm{~Hz}$ |
| Transposed Frequency by Solar Day Leng | 441.3199 Hz |
| Transposed Frequency by Year Length | 296.0336 Hz |
| Measured Orbit to Spin Resonance | 24,451.49 : 1 |
| Transposed in $\mathrm{O}_{2}$ Orbit to Spin Resonance | 1.490697 : 1 |
| Closest Note by Solar Day Length | A4- 440.00 Hz |
| Closest Note by Year Length | D4- 293.66 Hz |
| Closest Interval in $\mathrm{O}_{2} \mathrm{~N}_{12}$ by orbit-spin resonance | fect 5th-1.49831 |

Closest Interval in $\mathrm{O}_{2} \mathrm{~N}_{12}$ by orbit-spin
resonance
Perfect 5th- 1.49831 resonance

These are notes in the Scales of Saturn if $A$ or $D$ is the key.
Scale and Intervals of Saturn by Solar Day Length
Saturn Jupiter Eris
A
Bb

Root - Minor 2
Minor 7

| Saturn | Uranus | Venus | Ceres |
| :---: | :---: | :---: | :---: |
| D - | Moon | $\mathbf{A b}-$ | $\mathbf{A}$ |
| Root - | Tritone | Perfect 5th | Bb |
| Minor 6 |  |  |  |


| Eris | Pluto |
| :---: | :---: |
| B | Db |
| Major 6 | Major 7 |

Notes usable for Chords of Saturn by Solar Day Length

$$
\begin{aligned}
& \text { A (Saturn) - Bb (Jupiter) - B (Pluto) - } \\
& \mathbf{C} \text { (Ceres) - Db (Mercury) - D (Neptune) - } \\
& \mathbf{G} \text { (Earth + Eris) }-\mathbf{A b} \text { (Venus + Moon) }
\end{aligned}
$$

Chords of Saturn by Solar Day Length
G Major or Minor (Earth + Eris) -

Notes usable for Chords of Saturn by Year Length

```
D (+ ) - F# (Jupiter) -
    Ab}\mathrm{ (Uranus + Moon + Neptune) -
    A (Venus) - Bb (Ceres) - B (Eris) -
    Db (Pluto + Mercury)
```

Chords of Saturn by Year Length

```
D Major (Saturn) -
F# Major or Minor (Jupiter) -
B Minor (Eris) -
```


## Uranus




Scale and Intervals of Uranus by Year Length

| Uranus | Venus | Ceres | Eris | Pluto |
| :---: | :--- | :---: | :---: | :---: |
| Moon $1.21 \%$ |  | $1.29 \%$ |  | $1.21 \%$ |
| $\mathbf{A b}-$ | $\mathbf{A}$ | $-\mathbf{B b}$ | $\mathbf{B}-$ | $\mathbf{D b}$ |
| Root - | Minor 2 | Major 2 | Minor 3 | Perfect 4 |
| Saturn | Jupiter |  |  |  |
| $\mathbf{D}$ | F\# |  |  |  |
| Tritone | Minor 7th |  |  |  |

Notes usable for Chords of Uranus by Solar Day Length
Db - D (Mercury + Neptune) -
G (Mars + Earth) - A (Venus + Moon) -
B (Pluto) - C (Ceres)

Chords of Uranus by Solar Day Length
G Major (Mars + Earth) -

Notes usable for Chords of Uranus by Year Length

```
Ab (+ Neptune) - A (Venus ) -
Bb}\mathrm{ (Ceres) - B (Eris) - Db (Pluto + Earth)
D (Mars + Saturn) - F# (Jupiter)
```

Chords of Uranus by Year Length

```
D Major (Mars + Saturn) -
F# Major or Minor (Jupiter) -
B Minor (Eris) -
```


## Neptune



| Measured Frequency by Solar Day Length | $1.7249 \times 10-5 \mathrm{~Hz}$ |
| :---: | :---: |
| Measured Frequency by Year Length | $1.9355 \times 10-10 \mathrm{~Hz}$ |
| Transposed Frequency by Solar Day Length | h 289.39 Hz |
| Transposed Frequency by Year Length | 212.8064 Hz |
| Measured Orbit to Spin Resonance | 89,120.6 : |
| Transposed in $\mathrm{O}_{2}$ Orbit to Spin Resonance | 1.3599 : 1 |
| Closest Note by Solar Day Length | D 4-293.66 Hz |
| Closest Note by Year Length | A-flat 4-415.30 Hz |
| Closest Interval in $\mathrm{O}_{2} \mathrm{~N}_{12}$ by orbit-spin resonance | Perfect 4th-1.3348 |

These are notes in the Scales of Neptune if F\# or $D$ is the
Scale and Intervals of Neptune by Solar Day Length
Neptune Earth Pluto Ceres

| D | - | $\mathbf{G}$ | $\mathbf{B}$ | $\mathbf{C}$ |
| :---: | :---: | :---: | :---: | :---: |
| Root | - | Perfect 4 | Major 6 | Minor 7 |

Uranus
Db
Major 7th

## Pluto



Measured Frequency by Solar Day Length
Measured Frequency by Year Length
Transposed Frequency by Solar Day Length
Transposed Frequency by Year Length
Measured Orbit to Spin Resonance Transposed in $\mathrm{O}_{2}$ Orbit to Spin Resonance

Closest Note by Solar Day Length
Closest Note by Year Length
Closest Interval in $\mathrm{O}_{2} \mathrm{~N}_{12}$ by orbit-spin resonance

These are notes in the Scales of Pluto if B or Db is the key.

Scale and Intervals of Pluto by Solar Day Length

| Pluto | Ceres | Uranus | Neptune | Earth |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{B}$ | - | $\mathbf{C}$ | $\mathbf{D b}$ | $\mathbf{D}$ |
| Root | - | Minor 2 | Major 2 | Minor 3 |
| Minor 6 |  |  |  |  |

## Scale and Intervals of Pluto by Year Length

| Pluto Saturn | Moon | Venus | Ceres |
| :---: | :---: | :---: | :---: |
| Db $-\mathbf{D}$ | $-\mathbf{A b}-$ | $\mathbf{A}$ | $\mathbf{B b}$ |
| Root - Minor 2 | Perfect 5th | Minor 6 | Major 6 |
| Eris |  |  |  |
| B |  |  |  |
| Minor 7 |  |  |  |

Notes usable for Chords of Pluto by Solar Day Length
B - C (Ceres) - Db (Uranus) -
D (Mercury + Neptune) - G (Earth) -
A (Saturn)

Chords of Pluto by Solar Day Length
G Major (Earth) -

Notes usable for Chords of Pluto by Year Length

```
Db (+Mercury +Mars) - D (Saturn) -
F# (Jupiter) - Ab (Moon + Uranus + Neptune)
A (Venus) - Bb (Ceres) - B (Eris)
```

Chords of Pluto by Year Length

F\# Major or Minor (Jupiter) -
D Major (Saturn) -
B Minor (Eris) -

## Eris



| Measured Frequency by Solar Day Length | $\mathbf{7 . 3 3 4 6 \times 1 0 - 7 ~ H z}$ |
| :--- | :---: |
| Measured Frequency by Year Length | $\mathbf{5 . 6 8 9 9 \times 1 0 - 1 1 ~ H z}$ |
| Transposed Frequency by Solar Day Length | $\mathbf{3 9 3 . 7 7 6 ~ H z}$ |
| Transposed Frequency by Year Length | $\mathbf{2 5 0 . 2 4} \mathbf{~ H z}$ |
| Measured Orbit to Spin Resonance | $\mathbf{1 2 , 9 4 0 . 1 7 : \mathbf { 1 }}$ |
| Transposed in $\mathrm{O}_{2}$ Orbit to Spin Resonance | $\mathbf{1 . 5 7 9 6 1 : \mathbf { 1 }}$ |
| Closest Note by Solar Day Length | G4- 392 Hz |
| Closest Note by Year Length | B 4- 246.94 Hz |
| Closest Interval in $\mathrm{O}_{2} \mathrm{~N}_{12}$ by orbit-spin | Major 6-1.5874 | resonance

These are notes in the Scales of Eris if $G$ or $B$ is the key.
Scale and Intervals of Eris by Solar Day Length

| Eris | Moon | Saturn | Jupiter |
| :---: | :---: | :---: | :---: |
| $\mathbf{G}$ | - | $\mathbf{A b}$ | $\mathbf{A}$ |
| Root | - | Minor 2 | Major 2 | Minor 3

Scale and Intervals of Eris by Year Length

| Eris | Pluto | Saturn | Moon | Venus |
| :---: | :---: | :---: | :---: | :---: |
| $\mathbf{B}-$ | $\mathbf{D b}$ | $-\mathbf{D}-$ | $\mathbf{A b}$ | $\mathbf{A}$ |
| Root - Major 2 | Minor 3 | Major 6 | Minor 7 |  |

Ceres

## Bb

Major 7th

Notes usable for Chords of Eris by Solar Day Length
$\mathbf{G}$ (+Earth) - Ab (Venus + Moon) - A (Saturn)Bb (Jupiter) - B (Pluto) - C (Uranus) - Db (Mercury) - D (Neptune) - F\# (Mars)

## Chords of Eris by Solar Day Length

G Major or Minor (Eris + Earth) F\# Major or Minor (Mars) -

Notes usable for Chords of Eris by Year Length
B (Eris) - C (Earth) Db (Mercury + Pluto)) -
D (Mars + Saturn) - F\# (Jupiter) -
$\mathbf{A b}$ (Moon + Uranus + Neptune) - $\mathbf{A}$ (Venus) -
Bb (Ceres) -
Chords of Eris by Year Length
D Major (Mars + Saturn) -
F\# Major or Minor (Jupiter) -
B Minor (Eris) -

