

General Vestertopian Information:
Languages, Numbers, Calendar, and Clocks

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<https://vestertopia.org/LanguagesNumbersCalendarClocks>

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Document History

Version	Date	Changes
፮.፯.፳ 1.1.0	Ekachandrakant ፳፬, ፻ January 1, 2024	- Added notes regarding some Vestertopia-specific subtleties of the casual usage of non-Vestertopian time-of-day systems (such as Eastern Time). - Usages of the word <i>digits</i> in regards to the characters used for written Vestertinglish numbers could have unintentionally given the incorrect impression that they are base ten. Changed such usages to the appropriate unambiguous Vestertinglish, i.e. <i>eptatriacontigits</i>. - Corrected the Vestertinglish representation of the number forty in the table of examples of integers. It had been given as ፯፩ (which is actually forty-one), whereas it should have been ፯፪. - Various minor formatting changes, wording changes, and exposition, mostly in the service of Vestertopia's ongoing fight against L^AT_EX. Vestertopia shall prevail!
፯.፳.፳ 1.0.0	Navamchandrakant ፯፪, ፻፬ August 23, 2022	Initial public release.

1 Languages

1.1 Official Language

The official language of Vestertopia is Vulcan. All documents produced by the Vestertopian government are required to have Vulcan versions available, if possible within the bounds of reason.

Unfortunately, at the present time, there is no one in Vestertopia who knows Vulcan (with the possible exception of cats, but if so, they're not letting on).

1.2 Common Languages

The two most commonly used languages of Vestertopia are Vestertinglish and English. Through an astonishing level of coincidence, the two languages are remarkably similar (though there are some differences).

1.3 Secret Vestertopian Argot

Another language, Vestertopian, also exists, but is currently used only among citizens of Vestertopia, not to be shared with outsiders, and thus will not be described here at this time.

2 Numbers

2.1 Cardinal Numbers

Written Vestertinglish numerals use a base thirty-seven numbering system. The thirty-seven fundamental characters – the eptatriacontigits – are taken from letters of the Glagolitic script. Strangely, though, spoken Vestertinglish numbers are (with two exceptions, described momentarily) the same as spoken English numbers – i.e. base ten, and with the same names. And when they are spelled out as written words, they are spelled the same as English numbers.

For example, 𐌲𐌿 is the written Vestertinglish equivalent of the English 37, with 𐌲 equivalent to the English 1 and 𐌿 being equivalent to the English 0. However, in spoken Vestertinglish, or when spelled out as a word, 𐌲𐌿 is “thirty-seven”, just like in English.

The first exception mentioned above is for the number 𐌹𐌿𐌿. In English, this number is most commonly called “one hundred and eleven”. This is also a valid name for the number in Vestertinglish, but the more common Vestertinglish usage is “eleventy-one”. However, note that “eleventy” and “eleventy-two” (for example) are not common Vestertinglish usages.

The second exception is for the number 𐌿. In English, this number is most commonly called “zero”. Similarly to the first exception, “zero” is also a valid name for the number in Vestertinglish. However, the more common Vestertinglish usage is “nillion”. And note that (for example) “a nillion and one” is not a common Vestertinglish usage.

Please see Table 𐌲 for examples of various integers, including all of the base 𐌲𐌿 eptatriacontigits.

2.2 Examples of Integers

Numeric Vestertinglish	Numeric English	Spelled and Spoken
+	0	nillion (in Vestertinglish only); zero (in both Vestertinglish and English, but uncommon in Vestertinglish).
𐌺	1	one
𐌶𐌿	2	two
𐌶𐌾	3	three
𐌾𐌾	4	four
𐌶	5	five
𐌶𐌾	6	six
𐌶𐌿	7	seven
𐌾𐌾	8	eight
𐌶𐌿	9	nine
𐌶𐌿	10	ten
𐌸	11	eleven
𐌸	12	twelve
𐌿	13	thirteen
𐌾𐌾	14	fourteen
𐌶𐌿	15	fifteen
𐌿	16	sixteen
𐌿	17	seventeen
𐌿	18	eighteen
𐌿	19	nineteen
𐌿	20	twenty
𐌿𐌿	21	twenty-one
𐌿𐌿	22	twenty-two
𐌿𐌿	23	twenty-three
𐌿𐌿	24	twenty-four

Table 𐌺. Some integers (part 𐌺 of 𐌶)

Numeric Vestertinglish	Numeric English	Spelled and Spoken
ᑕ	25	twenty-five
ᑎ	26	twenty-six
ᑭ	27	twenty-seven
ᑭ	28	twenty-eight
ᑭ	29	twenty-nine
ᑭ	30	thirty
ᑭ	31	thirty-one
ᑭ	32	thirty-two
ᑭ	33	thirty-three
ᑭ	34	thirty-four
ᑭ	35	thirty-five
ᑭ	36	thirty-six
ᑭ	37	thirty-seven
ᑭ	38	thirty-eight
ᑭ	39	thirty-nine
ᑭ	40	forty
ᑭ	74	seventy-four
ᑭ	75	seventy-five
ᑭ	110	one hundred and ten
ᑭ	111	eleventy-one (commonly in Vestertinglish); one hundred and eleven (commonly in English)
ᑭ	112	one hundred and twelve
ᑭ	1369	one thousand three hundred and sixty-nine
ᑭ	2738	two thousand seven hundred and thirty-eight
ᑭ	50653	fifty thousand six hundred and fifty-three

Table ᑭ. Some integers (part ᑭ of ᑭ)

2.3 Ordinal Numbers

The representations of ordinal numbers are similarly confused; perhaps even more so. In written and spoken Vestertinglish and English words, the ordinals are the same: first, second, third, etc. (with the corresponding near-exception of “eleventy-first” vs. “one hundred and eleventh”). When written with numerals, though, the appropriate Vestertinglish base thirty-seven eptatriacontigits are followed by the appropriate written English representations of ordinal suffixes, even if those suffixes don’t necessarily make sense when viewed from the base thirty-seven point of view.

For example, the Vestertinglish and English “first” can be written in Vestertinglish as 𐄢st (equivalent to the written English 1st), while “seventy-five” is 𐄢𐄢. From these two facts, one might assume that “seventy-fifth” would be written as 𐄢𐄢st. If so, one would be wrong. Remember that the spoken and the spelled-out Vestertinglish is “seventy-five” for the cardinal, and “seventy-fifth” for the ordinal. Due to this, when written with numerals, “seventy-fifth” is 𐄢𐄢th, not 𐄢𐄢st.

Further note the special case of 𐄢𐄢st, corresponding to the English 111th.

3 Calendar

3.1 Calendrical Background

For the most part, Vestertopian timekeeping does not match up cleanly with the more common methods of timekeeping in the world (for example, the Gregorian calendar and the AM/PM clock). The more common methods are typically rooted, historically and etymologically, in various astronomical events, such as the length of a month relating to the orbit of the moon around the earth, or the length of a year relating to the orbit of the earth around the sun. Due to the fact that these astronomical events do not cleanly line up with each other, though, these calendars do not cleanly line up with them.

This has certain advantages, mainly in terms of simplicity. For example, Gregorian calendar has 12 months in a year, despite the fact that for every orbit of the earth around the sun, there are actually a bit more than 12 orbits of the moon around the earth. This is accomplished via defining “month” to be something fairly close to, but different than, the typical amount of time it takes for the moon to orbit the earth, which in turn leads to the months not lining up with the moon.

Various other common calendars are lunar or lunisolar, such as most Islamic calendars and the Hebrew calendar, respectively. These also do not cleanly line up with the astronomical events, although in different ways than the Gregorian calendar: The months of lunar calendars do match up with the orbit of the moon around the earth, but this causes their year of twelve such months to be shorter than the time it takes for the earth to orbit the sun. This leads to the months precessing through the astronomical year; for example, the month of Ramadan of the year 1436 of the Islamic calendar began in the Northern Hemisphere’s summer, while Ramadan of the year 1437 will start in the spring.

Lunisolar calendars precess similarly, but occasionally have years with a 13th intercalary month to keep the months from precessing too far from the astronomical year (similar in purpose to the intercalary February 29 of the Gregorian calendar’s leap years). They begin precessing again immediately thereafter, however, and thus require this sudden intercalary jolt periodically.

The Vestertopian timekeeping system, on the other hand, is rooted in many of the same astronomical events, but it lines up with them. This comes at the cost of some complexity in practical usage, as will be seen.

3.2 Eras

The Vestertopian calendar has two major divisions, similar to (but different than) the AD and BC divisions of the Gregorian calendar: Anno Vestertopiae and Before Vestertopia (AV and BV, respectively). The year 1 AV is defined as the year in which Vestertopia was founded. The year preceding 1 AV is 1 BV, and the year following 1 AV is 2 AV.

Note that this is not exactly analogous to the Gregorian AD/BC, in which there is no year 0. Rather, 1 BC in the Gregorian calendar is immediately followed by 1 AD.

Similarly to the Gregorian AD/BC system, the meaning of a year without an explicit era is context-dependent, but in typical usage it will usually refer to AV.

3.3 Years

The Vestertopian year is defined to begin exactly at the time of the winter solstice in Vestertopia Invicta, and to end exactly at the time of the next such solstice.

As mentioned above in the section “Eras”, the year † AV is defined as the year in which Vestertopia was founded. In the Gregorian calendar, Vestertopia was founded on April ८, ८९०० AD. Therefore, the Vestertopian year † AV corresponds to the time from the start of the winter solstice (in Vestertopia) of the Gregorian year ८९० to the start of the winter solstice (in Vestertopia) of the Gregorian year ८९०० AD.

3.4 Months

Vestertopian months begin exactly with the new moon (in Vestertopia), and end exactly at the next one. The names of the months are each a Sanskrit numerical prefix followed by “chandrakant” (Sanskrit – or at least Vestertanskrit – for “beloved of the moon”).

Table ९९ shows the names of the months:

Month Number	Month Name
८	Ekachandrakant
९९	Dvichandrakant
९०	Trichandrakant
००	Chaturchandrakant
३	Panchachandrakant
००	Shatchandrakant
३	Saptachandrakant
००	Ashtachandrakant
९९	Navamchandrakant
९९	Dashamchandrakant
९	Ekadashamchandrakant
९९	Dvadashamchandrakant
९	Trayodashamchandrakant
००	Chaturdashamchandrakant

Table ९९. Vestertopian months

Note that the winter solstice is unlikely to line up exactly with the new moon. In this case, the same month can be referred to in two ways. For example:

In the Gregorian calendar, the winter solstice of the year ८९०० occurs on December ००. This is the start of the Vestertopian year ८. However, this date is near the end of its associated lunar cycle, which runs from Gregorian November ०१ to December ०१. This is the ९th lunar cycle which at least partially occurs in the year † , and the ८st

lunar cycle which at least partially occurs in the year 𐌸. Therefore, this month is both Trayodashamchandrakant of 𐌸 and Ekachandrakant of 𐌸.

Context is normally used to choose which way to use to refer to such a month. For example, the 3th day of the month in the above example is contained entirely in the year 𐌸, and thus is likely to be referred to as Trayodashamchandrakant 𐌸, 𐌸 rather than Ekachandrakant 𐌸, 𐌸.

3.5 Weeks and Weekdays

Unlike most of the Vestertopian timekeeping system, a week and the days of the week do not correspond to any particular astronomical event. Instead, they correspond exactly to their analogues in the common Western system, as measured in Vestertopia. The only difference is their names, as shown in Table 𐌹 :

Vestertopian Weekday	English Weekday
Lateday	Sunday
Blueday	Monday
Ekamyocardialinfarctionday	Tuesday
Dvimyocardialinfarctionday	Wednesday
Unstartingday	Thursday
Loveday	Friday
Waitday	Saturday

Table 𐌹. Vestertopian weekdays

Note that since days of the week do not (typically) line up with the orbits of the earth or the moon, they also do not line up with years or months. Any particular day of the week may begin in one month and end in another, or begin in one year and end in another. Furthermore, as will soon be described, Vestertopian weekdays do not (ever) line up with Vestertopian days (of the “date” sense); any particular Vestertopian weekday will always straddle two different Vestertopian days.

3.6 Days (in the “date” sense)

A Vestertopian day is defined to begin at sunrise in Vestertopia, and to end at the next one. Note, therefore, that any two days are probably not the same length.

Similarly to the relationship between months and years, Vestertopian days do not necessarily line up with any other Vestertopian timekeeping measures. So, for example, a particular day may belong to more than one month, more than one year, or more than one weekday. In such cases (and again, similarly to the relationship between months and years), the day can be described in more than one way.

For example, the sixth new moon indicates both the end of Panchachandrakant and the beginning of Shatchandrakant. In the year 𐌸, this occurs on the 𐌶st day of

Panchachandrakant. Therefore, the day Panchachandrakant 𐌲𐌵, 𐌲 is the same as the day Shatchandrakant 𐌲𐌵, 𐌲.

Typically, any particular instant of that day will be described in terms of the month (and/or year) that that instant is part of. That is, any particular instant from the start of the day (i.e. sunrise) to the end of the month (i.e. the new moon) will typically be described as being on Panchachandrakant 𐌲𐌵, while any particular instant from the end of the month to the end of the day (i.e. the next sunrise) will typically be described as being on Shatchandrakant 𐌲𐌵.

3.7 An Important Note on Possible Calendrical Exceptions

this section has been redacted for public release to protect vital Vestertopian national secrets

4 Time of Day

4.1 Vestertopian Timekeeping Systems

Vestertopia has two entirely different systems of keeping track of the time of day unique to it: Vestertopian Ultimate Time (abbreviated VUT) and Vestertopian Zeitgeberic Time (VZT).

4.1.1 Vestertopian Ultimate Time

Under Vestertopian Ultimate Time (VUT), it is always 𐍺𐍩 o'clock in Vestertopia.

4.1.2 Vestertopian Zeitgeberic Time

Under Vestertopian Zeitgeberic Time (VZT), unlike under Vestertopian Ultimate Time, the time of day is not static. However, it does not easily correspond to any of the more widely known methods of measuring the time of day.

4.1.2.1 Divisions of the Day - AOc and POc At the highest level, the day is split into two parts: from sunrise to sunset, and from sunset to sunrise. Analogously to the common time system's divisions of AM and PM, these are called ante occasum and post occasum (AOc and POc, respectively).

Note that these two parts of any particular day will be of two different lengths of absolute time (except on equinoxes), and moreover either part of one day will be of a different length than the same part of the next day.

4.1.2.2 Tyds, Scrupuls, Hanlawhiles Tyds, scrupuls, and hanlawhiles are respectively analogous to (but different than) the hours, minutes, and seconds of the common 𐍺-hour timekeeping system.

Both the AOc and the POc are divided into 𐍺𐍩 equal tyds. Each tyd is divided into 𐍺𐍩 equal scrupuls. Each scrupul is divided into 𐍺𐍩 equal hanlawhiles. Each of these divisions is defined to start at 𐍩. Note that this is unlike in the common timekeeping system, wherein minutes and seconds start at 𐍩 but hours start at 𐍺 (or 𐍮, depending on your point of view). For example, 𐍩:𐍩:𐍩 AOc corresponds to sunrise, while 𐍺:𐍩:𐍩 AOc corresponds to the point in time that is one 𐍺𐍩th of the way from sunrise to sunset.

Note that any particular tyd (or scrupul or hanlawhile) is likely to be of a different length of absolute time than any other (with the most common exception being those in the same part of the same day, which are of equal length by definition).

4.2 Non-Vestertopian Timekeeping Systems

Vestertopia being a part of broader human and feline society, the timekeeping system common in non-Vestertopian locations is also used frequently in Vestertopia (albeit typically in non-official or casual situations). In particular, Vestertopia Invicta is located on the Eastern Seaboard of North America, and so one will often encounter times described in terms of the Eastern Time Zone. However, there are some extremely

important (though perhaps seemingly minor or even insignificant) differences between the Vestertopian usage of this system and that common outside of Vestertopia:

First, when using Eastern Time, Vestertopians are strongly encouraged to aspire to use Eastern Standard Time (EST) exclusively, year-round. Use of Eastern Daylight Time (EDT) is discouraged, no matter the time of year.

Second, Vestertopian law explicitly requires all documents produced by the government to avoid usages of phrases such as *Daylight Time*, *Daylight Saving Time*, *Eastern Daylight Time*, and *EDT* (with certain exceptions allowed, such as for direct quotes, or, as is being done in this very document, for the purposes of explaining the law in question). Instead, such usages are to be replaced by phrases such as *Substandard Time*, *Eastern Substandard Time*, and *ESST*.