

XVI Tables

This work has never before appeared in book form. This work is fiction. Any similarity to actual persons or events is purely coincidental. Any similarity with any natural, artificial, or fictional languages in regards to vocabulary, process, or system is purely coincidental.

Copyright 2024 by Æ Martinez

All rights reserved. No part of this publication may be reproduced or copied in any form or by any means--graphic, electronic, or mechanical, including photocopying, taping, information storage, or stored in a database or retrieval system, without prior written permission of the author, with the exception of the following:

Permission is granted to make and distribute verbatim copies of the language checklist and glossaries provided the copyright notice and this permission notice are preserved on all copies.

Permission is granted to copy and distribute modified versions of language checklist and glossaries under the conditions for verbatim copying, and provided that the entire resulting derived work is distributed under the terms of a permission notice identical to this one.

XVI Tables

XVI-1. Bep̃beñnë - The Numeral

The bep̃beñni are word forms that represent the numeral names. These denote the number of persons or things. In Mártölämmë, the numeral can be represented by a numeric glyph or a púrmë. In the modern number system, the digits represent the numbers in the decimal number system. However, the Mártönërsi use a vigesimal number system, base-20. A few cultures use the vigesimal number system, particularly the Mesoamerican peoples.

The Mártölämme number names are unusual because their names seems to be based on the physical nature of man, particular the hands and feet. First, the derivative names for the numerals from one to four come from the talyë for the right hand, LUN. The same is true for the numerals from six to nine, which come from the talyë for the left hand, BOT. Similarly, for the numerals from eleven to fourteen, the talyë is the left foot, WUT, and for the numerals from sixteen to nineteen, these come from the talyë for the right foot, POM. Finally, the numbers of five seem to based on the talyë for the hand, WEN.

The Mártönërsi used the vigesimal number system in all aspects of their culture. For example, they used it in mathematics, science, standardized measures, standardized weights, time, and any other thing that required the use of a number system. The Mártölämmë language possesses the cardinal, ordinal, fractional, multiplicative, and adverb numbers.

XVI-1-1. Cardinal Numbers

The cardinal numbers¹, if you remember, are the numbers we use to count with. These represent numbers that are regular; hence, they can be used as verbs, nouns, pronouns, or adjectives. Moreover, the cardinal numbers use the same affixes for nouns: *-ë*, *-a*, *-oy*, *-â*, and *-i*. The cardinal numbers in Mártölämmë are in the following table:

<u>Benë</u>	<u>English Name</u>	<u>Bep̃beñni</u>	<u>Benë</u>	<u>English Name</u>	<u>Bep̃beñni</u>
◊	zero	yúřë	◊	ten, half-score	wemba
l	one	lenë	◊	eleven	wotë
†	two	lena	◊	twelve	wota
‡	three	lenoy	◊	thirteen	wotoy
‡	four	lanâ	◊	fourteen	wotâ
†	five	wembë	†	fifteen	wemboy
H	six	betë	†	sixteen	pumë
h	seven	beta	†	seventeen	puma
K	eight	betoy	†	eighteen	pumoy
h	nine	betâ	†	nineteen	pumâ
l◊	twenty, one-score	wembâ	‡◊	four-score	lenâ-wembâ
ll	twenty-and-one	wembâ-a-lenë	†◊	five-score	wembë-wembâ
l†	twenty-and-19	wembâ-a-pumâ	H◊	six-score	betë-wembâ
†◊	two-score	lena-wembâ	h◊	seven-score	beta-wembâ
†l	two-score-and-1	lena-wembâ-a-lenë	K◊	eight-score	betoy-wembâ
†l†	two-score-and-19	lena-wembâ-a-pumâ	h◊	nine-score	betâ-wembâ
‡◊	three-score	lenoy-wembâ	◊◊	ten-score	wemba-wembâ

Tables

Benë	English Name	Bep'ben'ni	Benë	English Name	Bep'ben'ni
☞☞	eleven-score	wotë-wembâ	𐌹☞	sixteen-score	pumë-wembâ
☞☞	twelve-score	wota-wembâ	𐌹☞	seventeen-score	puma-wembâ
☞☞	thirteen-score	wotoy-wembâ	𐌹☞	eighteen-score	pumoy-wembâ
☞☞	fourteen-score	wotâ-wembâ	𐌹☞	nineteen-score	pumâ-wembâ
𐌹☞	fifteen-score	wemboy-wembâ	𐌹𐌹	19-score-and-19	pumâ-wembâ-a-pumâ
𐌹☞☞	twenty-score, 400	lämë	☞☞☞	ten-20-score	käta
𐌹☞	20-score-and-1	lämë-a-lenë	☞☞☞	11 20-score	rutë
𐌹𐌹	19-score-and-19-score-and-19,	lämë-a-pumâ-wembâ-a-pumâ	☞☞☞	12 20-score	ruta
𐌹☞☞	two-20-score	läma	☞☞☞	13 20-score	rutoy
𐌹☞☞	three-20-score	lämoy	☞☞☞	14 20-score	rutâ
𐌹☞☞	four-20-score	lämâ	𐌹☞☞	15 20-score	kätoy
𐌹☞☞	five-20-score	kätë	𐌹☞☞	16 20-score	pämë
𐌹☞☞	six-20-score	bupë	𐌹☞☞	17 20-score	päma
𐌹☞☞	seven-20-score	bupa	𐌹☞☞	18 20-score	pämoy
𐌹☞☞	eight-20-score	bupoy	𐌹☞☞	19 20-score	pâmâ
𐌹☞☞	nine-20-score	bupâ	𐌹𐌹	19 20-score-and-19-score-and-19	pâmâ-a-pumâ-wembâ-a-pumâ

Table 1-1. Cardinal Numbers

XVI-1-2. Ordinal Numbers

The ordinal numbers² indicate the place occupied by any person or thing in an ordered sequence. In addition, these numbers denote the order, succession, and periods of time. The formation of the ordinal numbers consist of adding the ordinal suffix *-te* or *-ete* unto the bethi. The ordinal numbers employed in Mártölämmë are listed in the following table:

English Name	Bep'ben'ni	English Name	Bep'ben'ni
first	lenëte	tenth	wembate
second	lenate	eleventh	wotëte
third	lenoyte	twelfth	wotate
fourth	lenâte	thirteenth	wotoyte
fifth	wembëte	fourteenth	wotâte
sixth	betëte	fifteenth	wemboyte
seventh	betate	sixteenth	pumëte
eighth	betoyte	seventeenth	pumate
ninth	betâte	eighteenth	pumoyte
		nineteenth	pumâte
twentieth	wembâte	four-twentieth	lenâ-wembâte
twenty-first	wembâ-a-lenëte	five-twentieth	wembë-wembâte
twenty-and-19th	wembâ-a-pumâte	six-twentieth	betë-wembâte
two-twentieth	lena-wembâte	seven-twentieth	beta-wembâte
two-score-and-1st	lena-wembâ-a-lenëte	eight-twentieth	betoy-wembâte
two-score-and-19th	lena-wembâ-a-pumâte	nine-twentieth	betâ-wembâte
three- twentieth	lenoy-wembâte	ten-twentieth	wemba-wembâte
eleven- twentieth	wotë-wembâte	16-twentieth	pumë-wembâte
twelve- twentieth	wota-wembâte	17- twentieth	puma-wembâte
thirteen- twentieth	wotoy-wembâte	18- twentieth	pumoy-wembâte
fourteen- twentieth	wotâ-wembâte	19-twentieth	pumâ-wembâte
fifteen- twentieth	wemboy-wembâte	19-score-and-19	pumâ-wembâ-a-pumâte

Tables

English Name	Bep`ben`ni	English Name	Bep`ben`ni
twenty-twentieth	lämëte	ten-20-twentieth	kätate
20-20th-and-1	lämë-a-lenëte	11 20-twentieth	rutëte
19-score-and-19-score-and-19th,	lämë-a-pumâ-wembâ-a-pumâte	12 20-twentieth	rutate
two-20-twentieth	lämate	13 20-twentieth	rutoyte
three-20-twentieth	lämoyte	14 20-twentieth	rutâte
four-20-twentieth	lämâte	15 20-twentieth	kätoyte
five-20-twentieth	kätëte	16 20-twentieth	pämëte
six-20-twentieth	bupëte	17 20-twentieth	pämäte
seven-20-twentieth	bupate	18 20-twentieth	pämoyte
eight-20-twentieth	bupoyte	19 20-twentieth	pämâte
nine-20-twentieth	bupâte	19 20-score-and-19-score-and-19th	pâmâ-a-pumâ-wembâ-a-pumâte

Table 1-2. Ordinal Numbers

XVI-1-37. Fractional Numbers

The fractional numbers are used to indicate the parts or subdivisions of the whole. These numbers are formed by adding the fractional number circumfix *pe-* and *-e* to the respective bethi. The fractional numbers³ employed in Mártölämmë are listed in the following table:

0	-	-
1	-	-
2	one-half	pime
3	one-third	pene
4	one-fourth	pebe
5	one-fifth	pewene
6	one-sixth	pefe
7	one-seventh	pewote
8	one-eighth	pevape
9	one-ninth	pewoge
10 (A)	one-tenth	pebate
11 (B)	one-eleventh	punse
12 (C)	one-twelfth	pehâme
13 (D)	one-thirteenth	penenge
14 (E)	one-fourteenth	pevâte
15 (F)	one-fifteenth	pesâme
16 (G)	one-sixteenth	pepume
17 (H)	one-seventeenth	petuye
18 (I)	one-eighteenth	pepope
19 (J)	one-nineteenth	pegute
10	one-twentieth	pedame
11	one-twenty-first	dami- pine
1J	one-twenty-nineteenth	dami-pegute
20	-	ima-pedame
21	-	ima-dami- pine
2J	-	ima-dami-pegute
30	-	inî-pedame
40	-	ebi-pedame
50	-	weni-pedame
JJ	-	guti-dami-pegute
100	-	petange
101	-	tangi- pine
200	-	ima-petange

³ The fractional numbers: 2 - 3, 5, 7, 10 - 13, 20 are the only attested fractional numbers; I derived the rest from their respective talyi.

Tables

JJJ	-	guti-tangi-a- guti-dami-pegute
1000	-	pezeme
2000	-	ima-pezeme
5000	-	weni-pezeme
10000	-	petazeme

Table 1-3. Fractional Numbers

Note: Irregular forms are in boldface.

XVI-1-4. Multiplicative Numbers

The multiplicative numbers are used to indicate the composition of or being the number of times as great. These numbers are formed by adding the multiplicative suffix *-isume* to the respective *bethi*. The multiplicative numbers⁴ employed in Mártölämmë are listed in the following table:

0	-	-
1	-	-
2	double, twofold	imisume
3	triple, threefold	enisume
4	quadruple, fourfold	ebisume
5	five	wenisume
6	sextuple, sixfold	efisume
7	septuple, sevenfold	wotisume
8	octuple, eightfold	vapisume
9	nonuple, ninefold	wogisume
10 (A)	tenfold	batisume
11 (B)	elevenfold	unsisume
12 (C)	twelffold	hãmisume
13 (D)	thirteenfold	nengisume
14 (E)	fourteenfold	vãtisume
15 (F)	fifteenfold	sãmisume
16 (G)	sixteenfold	pumisume
17 (H)	seventeenfold	tuyisume
18 (I)	eighteenfold	popisume
19 (J)	nineteenfold	gutisume
10	twentyfold	damisume
11	twenty-onefold	dami- inesume
1J	twenty-and-nineteenfold	dami-gutisume
20	-	ima-damisume
21	-	ima-dami- inesume
2J	-	ima-dami-gutisume
30	-	inĩ-damisume
40	-	ebi-damisume
50	-	weni-damisume
JJ	-	guti-dami-gutisume
100	-	tangisume
101	-	tangi- inesume
200	-	ima-tangi
JJJ	-	guti-tangi-guti- dami-gutisume
1000	-	zemisume
2000	-	ima-zemisume
5000	-	weni-zemisume
10000	-	tazemisume

⁴ The multiplicative numbers: 2 - 3, 7 - 8, 12, 15 are the only attested multiplicative numbers; I derived the rest from their respective *talyi*.

Tables

Table 1-4. Multiplicative Numbers

Note: Irregular forms are in boldface.

XVI-1-5. Adjective and Adverb Numbers

The adverb numbers are used to indicate the number of times of the item or action. These numbers are formed by adding the adverb number circumfix *ta-* and *-u* to the respective bethi. For the adjective word forms, they use the affix *-e*. The adverb numbers⁵ employed in Mártölämmë are listed in the following table:

0	none	yùfu	
1	once	tinu	telanu
2	twice	timu	talanu
3	thrice	tenu	toylanu
4	four times	tabu	tâlanu
5	five times	tawenu	
6	six times	tefu	
7	seven times	tawotu	
8	eight times	tavapu	
9	nine times	tawogu	
10 (A)	ten times	tabatu	
11 (B)	eleven times	tunsu	
12 (C)	twelve times	tahâmu	
13 (D)	thirteen times	tanengu	
14 (E)	fourteen times	tavâtu	
15 (F)	fifteen times	tasâmu	
16 (G)	sixteen times	tapumu	
17 (H)	seventeen times	tatuyu	
18 (I)	eighteen times	tapopu	
19 (J)	nineteen times	tagutu	
10	twenty times	tadamu	
11	twenty-one times	dami- tinu	
1J	twenty-and-nineteen times	dami-tagutu	
20	two-score times	ima-tadamu	
21	two-score-and-one times	ima-dami- tinu	
2J	two-score-and-nineteen times	ima-dami-tagutu	
30	three-score times	inî-tadamu	
40	four-score times	ebi-tadamu	
50	five-score times	weni-tadamu	
JJ	-	guti-dami-tagutu	
100	-	tatangu	
101	-	tangi- tinu	
200	-	ima-tatangu	
JJJ	-	guti-tangi-a-guti-dami-tagutu	
1000	-	tazemu	
2000	-	ima-tazemu	
5000	-	weni-tazemu	
10000	-	tatazemu	

Table 1-5. Adverb Numbers

Note: Irregular forms are in boldface.

XVI-2. Colors

⁵ The adverb numbers: 1 - 3, 6 - 8, 10, 15, 20 are the only attested adverb numbers. I derived the rest from their respective talyi.

Tables

The words of color represent the different hues, brightness, and shades of the visible light spectrum; which, all things can be attributed with the visible sensation or perception of color. The púrmi, derived from their respective bethi, are not irregular--meaning: the púrmi could be either a verb form, noun form, verbal form, adjective form, or adverb form.

The color table includes the bethi of all the known colors to date. Also, it contains the color infixes that can be used referencing the modified color word. These infixes are used only when a color word is used; to include, all grammar and word structure rules will be obeyed in their employment.

black	bālt	grey	mist
slate, blue-grey	yēlb	silver	tāsy
opal	fums	cream	bed's
white	nām	purple	ulaw
violet	krel	blue	hūl
azure	buf	green	yérd
olive	weby	yellow-green	tamr
yellow	pen	gold	man
orange	wos	brown	éřad
dun, greyish-brown	yams	pink	gemp
red	góry		

Table 2-1. Words of Color

vivid	-ářil-	bright	-eny-
deep	-ed'd-	pale	-is's-
slightly	-ims-	dark	-imér-
light	-igér-	dull	-ēlk-

Table 2-2. Infixes of Color

XVI-3. Directions

The cardinal directions are always referenced from the point of the sunrise (i.e. east). The directional compound words are formed by the following: reference direction (east/west), directional infix -ê-, and vector direction (north/south), with appropriate gender/class suffix. The púrmi, derived from directional bethi, are not irregular. The púrmi could be either a verb form, noun form, verbal form, adjective form, or adverb form.

	east	tan-	
'east-north'			'east-south'
tanêmen-			tanêson-
north			south
men-			son-
'west-north'			'west-south'
súřêmen-			súřêson-
	west	súř-	

XVI-4. Time and the Day

The modern time-keeping methods and the representation of time were inherited from the achievements of the ancient peoples of Mesopotamia. The modern time-keeping methodology

Tables

uses the same sexagesimal number system (number system based on sixty) to indicate the divisions of time. Unlike modern or ancient time-keeping methods, the Mártónérsi and some of their contemporary cultures employed the vigesimal number system to indicate units of time. The units of time consist of twenty parts or multiples of twenty.

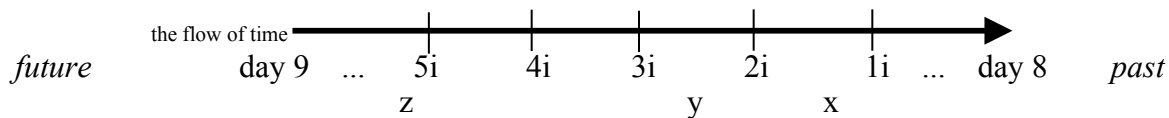
The most important unit of time is the day, which is the approximate 24-hour day measured in modern time-keeping. The 'unit of the day' consists of twenty subdivisions, the 'iterations of the day'. This subdivision, the 'iteration', equals twenty sub-subdivisions, the 'partitions of the iteration'. Again, the 'partition' consists of twenty sub-sub-subdivisions, the 'divisions of partition'. Finally, the sub-sub-subdivision, the 'division', equals twenty 'cycles of the division'.

érvë	One day	=	twenty (20) iterations
āldë	One iteration	=	twenty (20) partitions
pesāldë	One partition	=	twenty (20) divisions
rīldë	One division	=	twenty (20) cycles

To express time in speech or correspondence, the following formula shows the proper annotation of time: 'day-number', current 'iteration of the day', current 'partition', and current 'division'. All units of time are numbered from zero (0) to 19. For example, to state during the eighth day, at the time of 15th iteration, in the zero partition, and in the second division:

8 - 15 - 0 - 2

The expression of time in the day always references the linear temporal perspective. As explained earlier, the simplified nature of time⁶ is represented by the analogy of the "river of time" to model a few examples. Please note: the flow of time flows left-to-right and the events occur from right-to-left on the river, the timeline:



If a person experienced something at the moment x and is at the present y, the person makes a reference to the event of x in a statement. The person will denote the action in the past tense and also will indicate it as behind the moment of y.

Now, if the person is at present y, the person makes a reference to an event at z in respect to the present in a statement. The person will indicate the action in future tense and also will point to the occurrence as before the moment of y.

XVI-4-1. Day Division Words

The earth day consists of two phases, the day and the night. The day begins at the first break⁷ (of the light) of the dawn and ends at the slide⁸ (of the light) of the sunset. The night begins after the slide of the sunset and ends at the break of the sunrise. The Mártölämmë equivalents are listed in the following:

⁶ The Mártónérsi understood the nature of time as an inherent property of physical matter. The linear temporal perspective was used only for time-keeping purposes and to express time as simply as possible; otherwise, the universal temporal perspective was used in other areas of the culture (i.e. sciences, mathematics, etc.).

⁷ The Mártölämmë term for the moment of the sun becomes visible on the horizon, not the glow of the sunlight, meaning roughly "the breaking or the piercing of the day".

⁸ The Mártölämmë term for moment of the sun becomes not visible on the horizon meaning roughly "the sliding or the slipping into the night."

Tables

day (24-hour period)	érvë
day, daytime, diurnal	räyë
night, nighttime, nocturnal	lundë

XVI-4-2. Day Point Words

Some words represent certain points during the day. These points are represented by words such as: dawn, midday, sunset, midnight. Dawn is understood to be the point of the day that is 0-0-0 time on the day of the vernal equinox (approximately 0700 hours). The midday is understood to be the point of the day that is 5-0-0 time on the day of the vernal equinox (approximately 1300 hours); while, the sunset is the point of the day that is 10-0-0 time (approximately 1900 hours). And, midnight is understood to be the point of the day that is 15-0-0 time on the day of the vernal equinox (approximately 0100 hours).

dawn	tañnë
sunrise	tanrë
midday	tářäyë
sunset	súrmë
twilight	súryë
midnight	tälundë

XVI-4-3. Day Segment Words

Additionally, the segments of the day are periods of time that are represented by words, such as: morning, afternoon, evening. In Mártölämmë, the segments are the four periods of the day. The first segment is the morning period which, by tradition, is from dawn till midday. The second segment is the afternoon period which is from midday till sunset; while, the third segment is the evening which, by tradition, is from sunset till midnight. The last segment is a period from midnight till dawn.

morning	räwë
afternoon	déřäwë
evening, night	súrsë
'late night'	oluñnë

XVI-5. Earth Year

The earth year is calendar that is a period of 365 or 366 days. It is a calendar that primarily marked days for festivals, plantings, harvests, seasons, and other days for honor, worship, or celebration. This calendar was initially an agricultural device that apparently developed after the real calendar (i.e. the 'Reckoning of Days'). The reckoning of earth years did not occur. For instance, each new calendar year did not incur an increment of a year number.

The earth year is divided into eighteen (18) months. Each earth month contains twenty (20) days each. The days of no month composed the interim period⁹. This period consisted of five or six days separated the first day of the new year and the last day of the expired year.

⁹ The interim period was a time of great festivities and mighty celebrations to mark the thankgivings for spring harvest and the prayingful hopes for the coming fall harvest. These days included a three day religious activity for the adoration and the worship of the Holy One for the blessings of plentitude, longevity, wisdom, and knowledge unto the people of the lands. The interim period was called the 'Days of the Holy One'. For calendrical purposes, these days were centered on the summer solstice.

Tables

The first day of the new year begins after the last day of the interim period. The first day of the new year is in the zero (0) month and the zero (0) day. The earth months are numbered from zero (0) to 17. The days of the earth month are numbered from zero (0) to 19.

The names of earth months consist of the bethë for 'month', the bethë of the number (indicating its month number), and the appropriate form suffix. As with the month names, the day names were composed in a similar fashion. The names of the days of the month consist of the bethë for 'day', the bethë of the number, and the appropriate form suffix.

month name: [bethë month] + [bethë number] + [suffix]
 day name: [bethë day] + [bethë number] + [suffix]

The table of month names and day names has the noun word forms only. The table contains many irregular forms that are fusions of the bethi; also, these irregular forms are attested, as well as, some of the regular forms.

Number	Month Name	Day Name
0	Month 0	tömyúřë
1	Month 1	tömyinnë
2	Month 2	tömyimë
3	Month 3	tömyennë
4	Month 4	tömyebë
5	Month 5	tömwënë
6	Month 6	tömyefë
7	Month 7	tönwotë
8	Month 8	tömvapë
9	Month 9	tönwogë
10	Month 10	tömbotë
11	Month 11	tömyunsë
12	Month 12	tömhämë
13	Month 13	tönyengë
14	Month 14	tömvätë
15	Month 15	tömsämë
16	Month 16	tömpumë
17	Month 17	töntuyë
18		Day 18 räpopë
19		Day 19 rägutë

Table 5-1. Month Names and Day Names

Note: Irregular forms are in boldface.

XVI-6. Seasonal

The earth calendar primary purpose marked the seasons of the year for the agriculture communities. The seasons divided the earth year into six divisions. The Mártónérse seasons are named according to the climatical periods that were experienced in their homeland providing the general divisions of the seasons. [Note: The words enclosed in quotes are transliterations of the names of the seasons in Mártölämmë.]

summer, 'hot-time'	dúryë
cooling, 'cooling-time'	peñë
cool-winter, 'cold-time'	hweñë
cold-winter, 'freezing-time'	hrisyë
warming, 'warming-time'	mosyë
spring, 'growth-time'	räðyë

Tables

The each season is equal to 60 days; except for the season of spring which includes the interim period. The first season is the summer beginning on zero month and zero day; after that, the seasons cycle through the solar year till the end of spring.

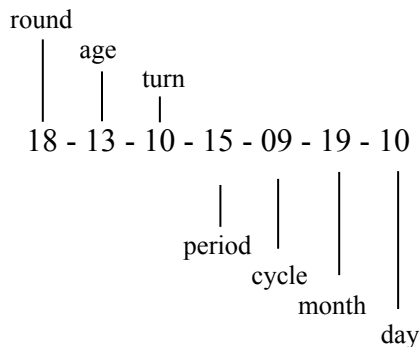
XVI-7. Calendar Reckoning

The Mártónérsi established the first calendar, the 'Reckoning of Days'. The first day is marked as zero (0) day. The 'Reckoning of Days' counts as in the manner of the reckoning of the Julian Day Number. For every new day, the day count is incremented by one day. After many generations, the 'Reckoning of Days' became a very large number to be useful as a calendar marker for official or administrative purposes.

At that point, a new calendar was devised and it is called the 'Cycle of Days'. This calendar is divided by units of twenty. The smallest unit is the calendar day. The basic unit is the calendar month, which consists of twenty (20) days. The next unit is the calendar cycle, which consists of twenty calendar months. The next unit is the calendar day, which is composed of twenty (20) calendar cycles. When required, a new greater cycle was created which encapsulated all lesser calendar cycles.

calendar day	érvë
calendar month	tömë
calendar cycle	tuvë
calendar period	dan'vë
calendar turn	tuv'së
calendar age	damsë
calendar round	gelvë

The 'Cycle of Days' is always represented in numeral nomenclature. As an example:



- 1 Adapted from "What is a cardinal number?" Glossary of linguistic terms, 5 January 2004, SIL International, <http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/WhatIsACardinalNumeral.htm>.
- 2 Adapted from "What is an ordinal number?" Glossary of linguistic terms, 5 January 2004, SIL International, <http://www.sil.org/linguistics/GlossaryOfLinguisticTerms/WhatIsAnOrdinalNumeral.htm>.