

Perpetual Calendar based upon Calendrical Documents 4Q320 and 4Q321

	1st	2nd	3rd	4th	5th	6th	Sab		1st	2nd	3rd	4th	5th	6th	Sab		1st	2nd	3rd	4th	5th	6th	Sab		1st	2nd	3rd	4th	5th	6th	Sab
Abib				1	2	3	4	4th				1	2	3	4	7th				1	2	3	4	10th				1	2	3	4
	5	6	7	8	9	10	11		5	6	7	8	9	10	11		5	6	7	8	9	10	11		5	6	7	8	9	10	11
	12	13	14	15	16	17	18		12	13	14	15	16	17	18		12	13	14	15	16	17	18		12	13	14	15	16	17	18
	19	20	21	22	23	24	25		19	20	21	22	23	24	25		19	20	21	22	23	24	25		19	20	21	22	23	24	25
26	27	28	29	30			26	27	28	29	30			26	27	28	29	30			26	27	28	29	30						
2nd					1	2	5th	3	4	5	6	7	8	9	8th					1	2	11th					1	2			
	3	4	5	6	7	8		9	3	4	5	6	7	8		9	3	4	5	6	7		8	9	3	4	5	6	7	8	9
	10	11	12	13	14	15		16	10	11	12	13	14	15		16	10	11	12	13	14		15	16	10	11	12	13	14	15	16
	17	18	19	20	21	22		23	17	18	19	20	21	22		23	17	18	19	20	21		22	23	17	18	19	20	21	22	23
24	25	26	27	28	29	30	24	25	26	27	28	29	30	24	25	26	27	28	29	30	24	25	26	27	28	29	30				
3rd	1	2	3	4	5	6	7	6th	1	2	3	4	5	6	7	9th	1	2	3	4	5	6	7	12th	1	2	3	4	5	6	7
	8	9	10	11	12	13	14		8	9	10	11	12	13	14		8	9	10	11	12	13	14		8	9	10	11	12	13	14
	15	16	17	18	19	20	21		15	16	17	18	19	20	21		15	16	17	18	19	20	21		15	16	17	18	19	20	21
	22	23	24	25	26	27	28		22	23	24	25	26	27	28		22	23	24	25	26	27	28		22	23	24	25	26	27	28
29	30	SS					29	30	AE					29	30	WS					29	30	VE								

God's Appointed Times (as interpreted in 4Q320 and 4Q321) [Leviticus 23]:

Sabbath (*Shabbat*) on the seventh day of every week [Leviticus 23:3].

14th of *Abib* = Passover (*Pasach*) [Leviticus 23:5].

15th through 21st of *Abib* = Unleavened Bread (*Hag HaMatzah*); the first and seventh days are holy convocations [Leviticus 23:6-8].

26th of *Abib* = Waving of the (Barley) Sheaf/Early Firstfruits (*Bikkurim*) [Leviticus 23:10-14].

14th of the Second Month = Second Passover [Numbers 9:10-14].

15th of the Third Month = Feast of Weeks/Pentecost/Latter Firstfruits (*Shavuot/Yom HaBikkurim*) [Leviticus 23:15-22].

1st of the Seventh Month = Day of Memorial/Feast of the Blowing (of Shofar) [Leviticus 23:24-25]. **Rosh Hashanah is a misnomer!**

10th of the Seventh Month = Day of Atonement (*Yom Kippur*) [Leviticus 23:27-32].

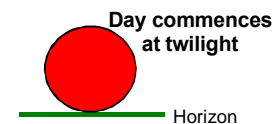
15th through 22nd of the Seventh Month = Feast of Tabernacles/Booths (*Sukkot*); the first and eighth days are holy convocations [Leviticus 23:34-43].

Other Feasts:

1. Feast of New Wine on the third day of the fifth month.
2. Feast of New Oil on the 22nd day of the sixth month.
3. Feast of Offering of Wood on the 29th day of the sixth month.

Notes:

1. The first month is *Abib* as is prescribed in Torah [Exodus 13:4]; this is corroborated by 4QpaleoExod.
2. Each month consists of 30 days except for the months culminating with equinoxes and solstices (that is, the 3rd, 6th, 9th, and 12th months).
3. An intercalary day added to the end of the third month accounts for the summer solstice; denoted as **SS** on the calendar.
4. An intercalary day added to the end of the sixth month accounts for the autumnal equinox; denoted as **AE** on the calendar.
5. An intercalary day added to the end of the ninth month accounts for the winter solstice; denoted as **WS** on the calendar.
6. An intercalary day added to the end of the twelfth month accounts for the vernal equinox; denoted as **VE** on the calendar.
7. Each quarter consists of thirteen complete weeks (52 weeks in a year) for a total of 364 days.
8. All appointed times fall on the same day of the week every year; in fact, each quarter represents a repetitive pattern.
9. A day commences when the sun's orb sets just on top of the horizon; aka "twilight" (see illustration).



**Cycle of Priestly Courses from Calendrical Documents 4Q320 and 4Q321
Course Year 1 of 6**

Year	Week	Course	Start		End		Appointed Times/Feasts	Moon Phases
			Month	Day	Month	Day		
1	1	Gamul	12	28	1	3		1: Full Moon
	2	Delaiah	1	4	1	10		
	3	Maaziah	1	11	1	17	14: Passover	17: New Moon
	4	Jehoiarib	1	18	1	24		
	5	Jedaiah	1	25	2	1	26: Waving of the Sheaf	30: Full Moon
	6	Harim	2	2	2	8		
	7	Seorim	2	9	2	15	14: Second Passover	
	8	Malchijah	2	16	2	22		17: New Moon
	9	Mijamin	2	23	2	29		
	10	Hakkoz	2	30	3	6		30: Full Moon
	11	Abijah	3	7	3	13		
	12	Jeshua	3	14	3	20	15: Feast of Weeks	16: New Moon
	13	Shecaniah	3	21	3	27		
	14	Eliashib	3	28	4	3		29: Full Moon
	15	Jakim	4	4	4	10		
	16	Huppah	4	11	4	17		15: New Moon
	17	Jeshebeab	4	18	4	24		
	18	Bilgah	4	25	5	1		28: Full Moon
	19	Immer	5	2	5	8	3: Feast of New Wine	
	20	Hezir	5	9	5	15		14: New Moon
	21	Happizzez	5	16	5	22		
	22	Pethahiah	5	23	5	29		27: Full Moon
	23	Jehezkel	5	30	6	6		
	24	Jachin	6	7	6	13		
	25	Gamul	6	14	6	20		14: New Moon
	26	Delaiah	6	21	6	27	22: Feast of New Oil	27: Full Moon
	27	Maaziah	6	28	7	3	29: Feast of Offering of Wood	
	28	Jehoiarib	7	4	7	10	1: Day of Memorial	
	29	Jedaiah	7	11	7	17	10: Day of Atonement	12: New Moon
	30	Harim	7	18	7	24	15: Feast of Tabernacles	
	31	Seorim	7	25	8	1		25: Full Moon
	32	Malchijah	8	2	8	8		
	33	Mijamin	8	9	8	15		12: New Moon
	34	Hakkoz	8	16	8	22		
	35	Abijah	8	23	8	29		25: Full Moon
	36	Jeshua	8	30	9	6		
	37	Shecaniah	9	7	9	13		11: New Moon
	38	Eliashib	9	14	9	20		
	39	Jakim	9	21	9	27		24: Full Moon
	40	Huppah	9	28	10	3		
	41	Jeshebeab	10	4	10	10		10: New Moon
	42	Bilgah	10	11	10	17		
	43	Immer	10	18	10	24		23: Full Moon
	44	Hezir	10	25	11	1		
	45	Happizzez	11	2	11	8		
	46	Pethahiah	11	9	11	15		9: New Moon
	47	Jehezkel	11	16	11	22		22: Full Moon
	48	Jachin	11	23	11	29		
	49	Gamul	11	30	12	6		
	50	Delaiah	12	7	12	13		9: New Moon
	51	Maaziah	12	14	12	20		
	52	Jehoiarib	12	21	12	27		22: Full Moon

Notes:

- The primary text utilized in determining the calendar and courses was *The Complete Dead Sea Scrolls* in English by Geza Vermes (ISBN 0-14-027807-9).
- Each course commences on the Sabbath so that there is no interruption of service; this is corroborated by 4Q322, 4Q323, and 4Q324.
- Missing information regarding full and New Moon phases were extrapolated where applicable.
- 4Q325 and 4Q327 introduce three additional feasts: Feast of New Wine, Feast/Festival of New Oil, and Feast of the Offering of Wood. These were observed on the third day of the fifth month, the 22nd day of the sixth month, and the 29th day of the sixth month, respectively.
- The Levitical/Aaronic priesthood was instituted on the first Sabbath after the original Passover in Egypt (i.e., 18 Abib). According to [1 Chronicles 24:7-18](#), Jehoiarib would have been the first course to commence the six-year priestly cycle; this coincides with the empirical evidence highlighted above. The 22nd course of Gamul is in progress on 1 Abib in the first year of this cycle because it is actually nearing the end of the six-year cycle (or can be back-calculated from the first course of Jehoiarib on 18 Abib).

Cycle of Priestly Courses from Calendrical Documents 4Q320 and 4Q321 Course Year 2 of 6

Year	Week	Course	Start		End		Appointed Times/Feasts	Moon Phases
			Month	Day	Month	Day		
2	1	Jedaiah	12	28	1	3		
	2	Harim	1	4	1	10		7: New Moon
	3	Seorim	1	11	1	17	14: Passover	
	4	Malchijah	1	18	1	24		20: Full Moon
	5	Mijamin	1	25	2	1	26: Waving of the Sheaf	
	6	Hakkoz	2	2	2	8		7: New Moon
	7	Abijah	2	9	2	15	14: Second Passover	
	8	Jeshua	2	16	2	22		20: Full Moon
	9	Shecaniah	2	23	2	29		
	10	Eliashib	2	30	3	6		6: New Moon
	11	Jakim	3	7	3	13		
	12	Huppah	3	14	3	20	15: Feast of Weeks	19: Full Moon
	13	Jeshebeab	3	21	3	27		
	14	Bilgah	3	28	4	3		
	15	Immer	4	4	4	10		5: New Moon
	16	Hezir	4	11	4	17		
	17	Happizzez	4	18	4	24		18: Full Moon
	18	Pethahiah	4	25	5	1		
	19	Jehezkel	5	2	5	8	3: Feast of New Wine	4: New Moon
	20	Jachin	5	9	5	15		
	21	Gamul	5	16	5	22		17: Full Moon
	22	Delaiah	5	23	5	29		
	23	Maaziah	5	30	6	6		4: New Moon
	24	Jehoiarib	6	7	6	13		
	25	Jedaiah	6	14	6	20		17: Full Moon
	26	Harim	6	21	6	27	22: Feast of New Oil	
	27	Seorim	6	28	7	3	29: Feast of Offering of Wood	2: New Moon
						1: Day of Memorial		
	28	Malchijah	7	4	7	10	10: Day of Atonement	
	29	Mijamin	7	11	7	17	15: Feast of Tabernacles	15: Full Moon
	30	Hakkoz	7	18	7	24		
	31	Abijah	7	25	8	1		
	32	Jeshua	8	2	8	8		2: New Moon
	33	Shecaniah	8	9	8	15		15: Full Moon
	34	Eliashib	8	16	8	22		
	35	Jakim	8	23	8	29		
	36	Huppah	8	30	9	6		1: New Moon
	37	Jeshebeab	9	7	9	13		
	38	Bilgah	9	14	9	20		14: Full Moon
	39	Immer	9	21	9	27		
	40	Hezir	9	28	10	3		
	41	Happizzez	10	4	10	10		
	42	Pethahiah	10	11	10	17		13: Full Moon
	43	Jehezkel	10	18	10	24		
	44	Jachin	10	25	11	1		29: New Moon
	45	Gamul	11	2	11	8		
	46	Delaiah	11	9	11	15		12: Full Moon
	47	Maaziah	11	16	11	22		
	48	Jehoiarib	11	23	11	29		29: New Moon
	49	Jedaiah	11	30	12	6		
	50	Harim	12	7	12	13		12: Full Moon
	51	Seorim	12	14	12	20		
	52	Malchijah	12	21	12	27		

Cycle of Priestly Courses from Calendrical Documents 4Q320 and 4Q321 Course Year 3 of 6

Year	Week	Course	Start		End		Appointed Times/Feasts	Moon Phases
			Month	Day	Month	Day		
3	1	Mijamin	12	28	1	3		28: New Moon
	2	Hakkoz	1	4	1	10		10: Full Moon
	3	Abijah	1	11	1	17	14: Passover	
	4	Jeshua	1	18	1	24		
	5	Shecaniah	1	25	2	1	26: Waving of the Sheaf	27: New Moon
	6	Eliashib	2	2	2	8		
	7	Jakim	2	9	2	15	14: Second Passover	10: Full Moon
	8	Huppah	2	16	2	22		
	9	Jeshebeab	2	23	2	29		26: New Moon
	10	Bilgah	2	30	3	6		
	11	Immer	3	7	3	13		9: Full Moon
	12	Hezir	3	14	3	20	15: Feast of Weeks	
	13	Happizzez	3	21	3	27		26: New Moon
	14	Pethahiah	3	28	4	3		
	15	Jehezkel	4	4	4	10		8: Full Moon
	16	Jachin	4	11	4	17		
	17	Gamul	4	18	4	24		24: New Moon
	18	Delaiah	4	25	5	1		
	19	Maaziah	5	2	5	8	3: Feast of New Wine	7: Full Moon
	20	Jehoiarib	5	9	5	15		
	21	Jedaiah	5	16	5	22		24: New Moon
	22	Harim	5	23	5	29		
	23	Seorim	5	30	6	6		
	24	Malchijah	6	7	6	13		7: Full Moon
	25	Mijamin	6	14	6	20		
	26	Hakkoz	6	21	6	27	22: Feast of New Oil	23: New Moon
	27	Abijah	6	28	7	3	29: Feast of Offering of Wood	
	28	Jeshua	7	4	7	10	1: Day of Memorial	5: Full Moon
	29	Shecaniah	7	11	7	17	10: Day of Atonement	
	30	Eliashib	7	18	7	24	15: Feast of Tabernacles	22: New Moon
	31	Jakim	7	25	8	1		
	32	Huppah	8	2	8	8		5: Full Moon
	33	Jeshebeab	8	9	8	15		
	34	Bilgah	8	16	8	22		21: New Moon
	35	Immer	8	23	8	29		
	36	Hezir	8	30	9	6		4: Full Moon
	37	Happizzez	9	7	9	13		
	38	Pethahiah	9	14	9	20		
	39	Jehezkel	9	21	9	27		21: New Moon
	40	Jachin	9	28	10	3		3: Full Moon
	41	Gamul	10	4	10	10		
	42	Delaiah	10	11	10	17		
	43	Maaziah	10	18	10	24		19: New Moon
	44	Jehoiarib	10	25	11	1		
	45	Jedaiah	11	2	11	8		2: Full Moon
	46	Harim	11	9	11	15		
	47	Seorim	11	16	11	22		19: New Moon
	48	Malchijah	11	23	11	29		
	49	Mijamin	11	30	12	6		2: Full Moon
	50	Hakkoz	12	7	12	13		
	51	Abijah	12	14	12	20		18: New Moon
	52	Jeshua	12	21	12	27		

Cycle of Priestly Courses from Calendrical Documents 4Q320 and 4Q321 Course Year 4 of 6

Year	Week	Course	Start		End		Appointed Times/Feasts	Moon Phases
			Month	Day	Month	Day		
4	1	Shecaniah	12	28	1	3		1: Full Moon
	2	Eliashib	1	4	1	10		
	3	Jakim	1	11	1	17	14: Passover	17: New Moon
	4	Huppah	1	18	1	24		
	5	Jeshebeab	1	25	2	1	26: Waving of the Sheaf	30: Full Moon
	6	Bilgah	2	2	2	8		
	7	Immer	2	9	2	15	14: Second Passover	
	8	Hezir	2	16	2	22		17: New Moon
	9	Happizzez	2	23	2	29		
	10	Pethahiah	2	30	3	6		30: Full Moon
	11	Jehezkel	3	7	3	13		
	12	Jachin	3	14	3	20	15: Feast of Weeks	16: New Moon
	13	Gamul	3	21	3	27		
	14	Delaiah	3	28	4	3		29: Full Moon
	15	Maaziah	4	4	4	10		
	16	Jehoiarib	4	11	4	17		15: New Moon
	17	Jedaiah	4	18	4	24		
	18	Harim	4	25	5	1		28: Full Moon
	19	Seorim	5	2	5	8	3: Feast of New Wine	
	20	Malchijah	5	9	5	15		14: New Moon
	21	Mijamin	5	16	5	22		
	22	Hakkoz	5	23	5	29		27: Full Moon
	23	Abijah	5	30	6	6		
	24	Jeshua	6	7	6	13		
	25	Shecaniah	6	14	6	20		14: New Moon
	26	Eliashib	6	21	6	27	22: Feast of New Oil	27: Full Moon
	27	Jakim	6	28	7	3	29: Feast of Offering of Wood	
	28	Huppah	7	4	7	10	1: Day of Memorial	
	29	Jeshebeab	7	11	7	17	10: Day of Atonement	
	30	Bilgah	7	18	7	24	15: Feast of Tabernacles	12: New Moon
	31	Immer	7	25	8	1		25: Full Moon
	32	Hezir	8	2	8	8		
	33	Happizzez	8	9	8	15		12: New Moon
	34	Pethahiah	8	16	8	22		
	35	Jehezkel	8	23	8	29		25: Full Moon
	36	Jachin	8	30	9	6		
	37	Gamul	9	7	9	13		11: New Moon
	38	Delaiah	9	14	9	20		
	39	Maaziah	9	21	9	27		24: Full Moon
	40	Jehoiarib	9	28	10	3		
	41	Jedaiah	10	4	10	10		10: New Moon
	42	Harim	10	11	10	17		
	43	Seorim	10	18	10	24		23: Full Moon
	44	Malchijah	10	25	11	1		
	45	Mijamin	11	2	11	8		
	46	Hakkoz	11	9	11	15		9: New Moon
	47	Abijah	11	16	11	22		22: Full Moon
	48	Jeshua	11	23	11	29		
	49	Shecaniah	11	30	12	6		
	50	Eliashib	12	7	12	13		9: New Moon
	51	Jakim	12	14	12	20		
	52	Huppah	12	21	12	27		22: Full Moon

Cycle of Priestly Courses from Calendrical Documents 4Q320 and 4Q321 Course Year 5 of 6

Year	Week	Course	Start		End		Appointed Times/Feasts	Moon Phases
			Month	Day	Month	Day		
5	1	Jeshebeab	12	28	1	3		
	2	Bilgah	1	4	1	10		7: New Moon
	3	Immer	1	11	1	17	14: Passover	
	4	Hezir	1	18	1	24		20: Full Moon
	5	Happizzez	1	25	2	1	26: Waving of the Sheaf	
	6	Pethahiah	2	2	2	8		7: New Moon
	7	Jehezkel	2	9	2	15	14: Second Passover	
	8	Jachin	2	16	2	22		20: Full Moon
	9	Gamul	2	23	2	29		
	10	Delaiah	2	30	3	6		6: New Moon
	11	Maaziah	3	7	3	13		
	12	Jehoiarib	3	14	3	20	15: Feast of Weeks	19: Full Moon
	13	Jedaiah	3	21	3	27		
	14	Harim	3	28	4	3		
	15	Seorim	4	4	4	10		5: New Moon
	16	Malchijah	4	11	4	17		
	17	Mijamin	4	18	4	24		18: Full Moon
	18	Hakkoz	4	25	5	1		
	19	Abijah	5	2	5	8	3: Feast of New Wine	4: New Moon
	20	Jeshua	5	9	5	15		
	21	Shecaniah	5	16	5	22		17: Full Moon
	22	Eliashib	5	23	5	29		
	23	Jakim	5	30	6	6		4: New Moon
	24	Huppah	6	7	6	13		
	25	Jeshebeab	6	14	6	20		17: Full Moon
	26	Bilgah	6	21	6	27	22: Feast of New Oil	
	27	Immer	6	28	7	3	29: Feast of Offering of Wood	2: New Moon
						1: Day of Memorial		
	28	Hezir	7	4	7	10	10: Day of Atonement	
	29	Happizzez	7	11	7	17	15: Feast of Tabernacles	15: Full Moon
	30	Pethahiah	7	18	7	24		
	31	Jehezkel	7	25	8	1		
	32	Jachin	8	2	8	8		2: New Moon
	33	Gamul	8	9	8	15		15: Full Moon
	34	Delaiah	8	16	8	22		
	35	Maaziah	8	23	8	29		
	36	Jehoiarib	8	30	9	6		1: New Moon
	37	Jedaiah	9	7	9	13		
	38	Harim	9	14	9	20		14: Full Moon
	39	Seorim	9	21	9	27		
	40	Malchijah	9	28	10	3		
	41	Mijamin	10	4	10	10		
	42	Hakkoz	10	11	10	17		13: Full Moon
	43	Abijah	10	18	10	24		
	44	Jeshua	10	25	11	1		29: New Moon
	45	Shecaniah	11	2	11	8		
	46	Eliashib	11	9	11	15		12: Full Moon
	47	Jakim	11	16	11	22		
	48	Huppah	11	23	11	29		29: New Moon
	49	Jeshebeab	11	30	12	6		
	50	Bilgah	12	7	12	13		12: Full Moon
	51	Immer	12	14	12	20		
	52	Hezir	12	21	12	27		

Cycle of Priestly Courses from Calendrical Documents 4Q320 and 4Q321 Course Year 6 of 6

Year	Week	Course	Start		End		Appointed Times/Feasts	Moon Phases
			Month	Day	Month	Day		
6	1	Happizzez	12	28	1	3		28: New Moon
	2	Pethahiah	1	4	1	10		10: Full Moon
	3	Jehezkel	1	11	1	17	14: Passover	
	4	Jachin	1	18	1	24		
	5	Gamul	1	25	2	1	26: Waving of the Sheaf	27: New Moon
	6	Delaiah	2	2	2	8		
	7	Maaziah	2	9	2	15	14: Second Passover	10: Full Moon
	8	Jehoiarib	2	16	2	22		
	9	Jedaiah	2	23	2	29		26: New Moon
	10	Harim	2	30	3	6		
	11	Seorim	3	7	3	13		9: Full Moon
	12	Malchijah	3	14	3	20	15: Feast of Weeks	
	13	Mijamin	3	21	3	27		26: New Moon
	14	Hakkoz	3	28	4	3		
	15	Abijah	4	4	4	10		8: Full Moon
	16	Jeshua	4	11	4	17		
	17	Shecaniah	4	18	4	24		24: New Moon
	18	Eliashib	4	25	5	1		
	19	Jakim	5	2	5	8	3: Feast of New Wine	7: Full Moon
	20	Huppah	5	9	5	15		
	21	Jeshebeab	5	16	5	22		
	22	Bilgah	5	23	5	29		24: New Moon
	23	Immer	5	30	6	6		
	24	Hezir	6	7	6	13		7: Full Moon
	25	Happizzez	6	14	6	20		
	26	Pethahiah	6	21	6	27	22: Feast of New Oil	23: New Moon
	27	Jehezkel	6	28	7	3	29: Feast of Offering of Wood	
	28	Jachin	7	4	7	10	1: Day of Memorial	5: Full Moon
	29	Gamul	7	11	7	17	10: Day of Atonement	
	30	Delaiah	7	18	7	24	15: Feast of Tabernacles	22: New Moon
	31	Maaziah	7	25	8	1		
	32	Jehoiarib	8	2	8	8		5: Full Moon
	33	Jedaiah	8	9	8	15		
	34	Harim	8	16	8	22		21: New Moon
	35	Seorim	8	23	8	29		
	36	Malchijah	8	30	9	6		4: Full Moon
	37	Mijamin	9	7	9	13		
	38	Hakkoz	9	14	9	20		
	39	Abijah	9	21	9	27		21: New Moon
	40	Jeshua	9	28	10	3		3: Full Moon
	41	Shecaniah	10	4	10	10		
	42	Eliashib	10	11	10	17		
	43	Jakim	10	18	10	24		19: New Moon
	44	Huppah	10	25	11	1		
	45	Jeshebeab	11	2	11	8		2: Full Moon
	46	Bilgah	11	9	11	15		
	47	Immer	11	16	11	22		19: New Moon
	48	Hezir	11	23	11	29		
	49	Happizzez	11	30	12	6		2: Full Moon
	50	Pethahiah	12	7	12	13		
	51	Jehezkel	12	14	12	20		18: New Moon
	52	Jachin	12	21	12	27		

Lunar Cycles from Calendrical Documents 4Q320 and 4Q321

Lunar Cycle 1 of 3

	1st	2nd	3rd	4th	5th	6th	Sab
Abib				FM	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	NM	18
	19	20	21	22	23	24	25
	26	27	28	29	FM		
2nd						1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	NM	18	19	20	21	22	23
	24	25	26	27	28	29	FM
3rd	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	NM	17	18	19	20	21
	22	23	24	25	26	27	28
	FM	30	SS				
4th				1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	NM	16	17	18
	19	20	21	22	23	24	25
	26	27	FM	29	30		
5th						1	2
	3	4	5	6	7	8	9
	10	11	12	13	NM	15	16
	17	18	19	20	21	22	23
	24	25	26	FM	28	29	30
6th	1	2	3	4	5	6	7
	8	9	10	11	12	13	NM
	15	16	17	18	19	20	21
	22	23	24	25	26	FM	28
	29	30	AE				

	1st	2nd	3rd	4th	5th	6th	Sab
7th				1	2	3	4
	5	6	7	8	9	10	11
	NM	13	14	15	16	17	18
	19	20	21	22	23	24	FM
	26	27	28	29	30		
8th						1	2
	3	4	5	6	7	8	9
	10	11	NM	13	14	15	16
	17	18	19	20	21	22	23
	24	FM	26	27	28	29	30
9th	1	2	3	4	5	6	7
	8	9	10	NM	12	13	14
	15	16	17	18	19	20	21
	22	23	FM	25	26	27	28
	29	30	WS				
10th				1	2	3	4
	5	6	7	8	9	NM	11
	12	13	14	15	16	17	18
	19	20	21	22	FM	24	25
	26	27	28	29	30		
11th						1	2
	3	4	5	6	7	8	NM
	10	11	12	13	14	15	16
	17	18	19	20	21	FM	23
	24	25	26	27	28	29	30
12th	1	2	3	4	5	6	7
	8	NM	10	11	12	13	14
	15	16	17	18	19	20	21
	FM	23	24	25	26	27	28
	29	30	VE				

Lunar Month	# of Days
1st	29
2nd	30
3rd	29
4th	30
5th	29
6th	30
7th	29
8th	30
9th	29
10th	30
11th	29
12th	30
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Notes:

1. Full moon is denoted as **FM**, and new moon is designated as **NM**.
2. **SS**, **AE**, **WS**, and **VE** denote summer solstice, autumnal equinox, winter solstice, and vernal equinox, respectively.
3. The month enumeration apparently commences with the full moon. For example, the first lunar month is comprised of solar days 1-29, totaling 29 days. Hebrew *chadash chodesh* and Greek *neomenia* refer to "new months" not "new moons."
4. The first year of the lunar cycle concludes on the 21st day of the twelfth month.
5. Apparently, this scenario assumes that the moon was created on the fourth day and that it was fully illuminated (i.e., a full moon). This concurs with the literal interpretation of the Genesis account.
6. The 354-day lunar year is exactly ten days less than the solar year of 364 days.

Lunar Cycles from Calendrical Documents 4Q320 and 4Q321

Lunar Cycle 2 of 3

	1st	2nd	3rd	4th	5th	6th	Sab
Abib				1	2	3	4
	5	6	NM	8	9	10	11
	12	13	(14)	(15)	16	17	18
	19	FM	(21)	22	23	24	25
	(26)	27	28	29	30		
2nd						1	2
	3	4	5	6	NM	8	9
	10	11	12	13	(14)	15	16
	17	18	19	FM	21	22	23
	24	25	26	27	28	29	30
3rd	1	2	3	4	5	NM	7
	8	9	10	11	12	13	14
	(15)	16	17	18	FM	20	21
	22	23	24	25	26	27	28
	29	30	SS				
4th				1	2	3	4
	NM	6	7	8	9	10	11
	12	13	14	15	16	17	FM
	19	20	21	22	23	24	25
	26	27	28	29	30		
5th						1	2
	(3)	NM	5	6	7	8	9
	10	11	12	13	14	15	16
	FM	18	19	20	21	22	23
	24	25	26	27	28	29	30
6th	1	2	3	NM	5	6	7
	8	9	10	11	12	13	14
	15	16	FM	18	19	20	21
	(22)	23	24	25	26	27	28
	(29)	30	AE				

	1st	2nd	3rd	4th	5th	6th	Sab
7th				(1)	NM	3	4
	5	6	7	8	9	(10)	11
	12	13	14	FM	16	17	18
	19	20	21	(22)	23	24	25
	26	27	28	29	30		
8th						1	NM
	3	4	5	6	7	8	9
	10	11	12	13	14	FM	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
9th	NM	2	3	4	5	6	7
	8	9	10	11	12	13	FM
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	NM				
10th				1	2	3	4
	5	6	7	8	9	10	11
	12	FM	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	NM	30		
11th						1	2
	3	4	5	6	7	8	9
	10	11	FM	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	NM	30
12th	1	2	3	4	5	6	7
	8	9	10	11	FM	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	NM
	29	30	VE				

Lunar Month	# of Days
1st	29
2nd	30
3rd	29
4th	30
5th	29
6th	30
7th	29
8th	30
9th	29
10th	30
11th	29
12th	30
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Note:

The second year of the lunar cycle commences with the 22nd day of the twelfth month from the previous solar year and concludes with the 11th day of the twelfth month.

Lunar Cycles from Calendrical Documents 4Q320 and 4Q321

Lunar Cycle 3 of 3

	1st	2nd	3rd	4th	5th	6th	Sab
Abib				1	2	3	4
	5	6	7	8	9	FM	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	NM	28	29	30		
2nd						1	2
	3	4	5	6	7	8	9
	FM	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	NM	27	28	29	30
3rd	1	2	3	4	5	6	7
	8	FM	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	NM	27	28
	29	30	SS				
4th				1	2	3	4
	5	6	7	FM	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	NM	25
	26	27	28	29	30		
5th						1	2
	3	4	5	6	FM	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	NM	25	26	27	28	29	30
6th	1	2	3	4	5	6	FM
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	NM	24	25	26	27	28
	29	30	AE				

	1st	2nd	3rd	4th	5th	6th	Sab
7th				1	2	3	4
	FM	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	NM	23	24	25
	26	27	28	29	30		
8th						1	2
	3	4	FM	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	NM	22	23
	24	25	26	27	28	29	30
9th	1	2	3	FM	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	NM
	22	23	24	25	26	27	28
	29	30	WS				
10th					1	2	FM
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	NM	20	21	22	23	24	25
	26	27	28	29	30		
11th						1	FM
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	NM	20	21	22	23
	24	25	26	27	28	29	30
12th	1	FM	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	NM	19	20	21
	22	23	24	25	26	27	28
	29	30	VE				

Lunar Month	# of Days
1st	29
2nd	30
3rd	29
4th	30
5th	29
6th	30
7th	29
8th	30
9th	29
10th	30
11th	29
12th	30
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Notes:

1. The third year of the lunar cycle commences with the 12th day of the twelfth month from the previous solar year and concludes with the 1st day of the twelfth month.
2. After the third solar year, the lunar cycles are exactly 30 solar days, or one solar month, deficient. A consequence of this occurrence is that the lunar cycles realign with the solar calendar -- with no intercalation required -- and creates an 'ot (sign) denoted in [4Q319](#).