

# This is the 2018 **The Refiner's Fire** calendar.

NOTE For 2018 this calendar and the modern Jewish calendar differ *only slightly!* For example, the 1<sup>st</sup> day of the month sometimes differs due to the way the two calendars determine the new month. However, this calendar does not follow the “rules” of the modern Jewish calendar and the Torah readings will seldom be the same between the two calendars. This I regrettable but unavoidable. Questions can be directed to The Refiner’s Fire, [Calendar@therefinersfire.org](mailto:Calendar@therefinersfire.org).

This calendar has no authority! You are not asked or expected to follow it. See the explanation for this calendar beginning on the pages following the December calendar grid. Genesis 1:14 says “Let there be lights in the dome of the sky to divide the day from the night; let them be for signs, seasons, days and years”. A calendar should use the real sun, moon and stars as they are witnesses in and of themselves – no “two (human) witnesses” are needed to attest to a “sighted crescent” to determine the beginning of the month.

Levites of old observed the moon throughout the whole month, every month, including all these factors: New crescent, full moon rise & set, old crescent, its position with respect to the sun at sunrise and sunset, as well as the time of sunset in Jerusalem. All these heavenly witnesses come together to provide the 1st day of the new Hebrew month in advance. Indeed, When the new month arrived, the sighting of the crescent only established that the 1<sup>st</sup> day had just ended, and the new crescent only sanctified that the month had begun. (See Maimonides).

While the modern traditional rabbinic calendar *calculates* the 1<sup>st</sup> day of a new month by an “average moon” and by man-made “rules” establishing *future* High Holy Days (commanded Feast Days) such that the rabbis don’t permit Yom Kippur to fall on Friday or Sunday, this calendar permits all Holy Days to fall when they fall! This calendar also recognizes the importance of the *Full Moon* as a Genesis 1:14 witness of the middle of the Hebrew month. When the full or nearly full moon rises just before or at sunset (in Jerusalem), the Hebrew calendar date *should* be changing from the 14<sup>th</sup> to the 15<sup>th</sup>! The moon is clearly announcing the middle of the month! If instead you relied on the “sighted moon”, then *the month will have always begun a day or two late*, and come the “15<sup>th</sup>”, the *moon will rise an hour or more after sunset*, already well-past full, and you should go “uh oh” because the moon itself is declaring the month is well past half over!

This calendar recognizes that when the Moon is “renewed”, in conjunction before sunset in Israel, the very next sunset that evening becomes the *first day* of the new

A note on the colors used in the calendar grids:

A date colored “Purple” is always the 1st day of the common month of the Gregorian Calendar, Jan-Dec.

Dates colored “Yellow” denote the period of the Full moon. Cells colored “Green” denote the period of the New moon.

Dates colored “Blue” denote the 1st of the Hebrew month (which actually began at sunset the prior evening).

Two consecutive days are displayed as Yellow for Full moon or Green for New Moon because the event (i.e., “full” or “new” moon) crosses “two” days – that is, the event happens sometime within the overlap of the Gregorian day and the Hebrew day.

Updated: October 6, 2017

month. Thus, this calendar lists the time of New Moon from Jerusalem and the time of sunset in Jerusalem as an aid to validate the 1<sup>st</sup> day. Again, refer to the details after the December calendar grid.

## Summary of the Holy Days for 2018:

- **Pesach:** Mar 31 (begins late afternoon and into the evening)
- **Feast of Unleavened Bread:** Apr 1 to Apr 7 (1st and last day are High Sabbath\* days)
- **First Fruits:** Apr 2 (1st day of Omer)
- **Shavuot:** May 21 (High Sabbath day)
- **Yom Teruah:** Sep 11 (High Sabbath day)
- **Yom Kippur:** Sep 20 (High Sabbath day)
- **Sukkot:** Sep 25 to Oct 2 (1st and last day are High Sabbath days)

### Compare to the 2018 Rabbinic dates:

- **Pesach:** Mar 30
- **FULB:** Mar 31 to Apr 6
- **First Fruits:** Apr 1
- **Shavuot:** May 20
- **Yom Teruah:** Sep 10
- **Yom Kippur:** Sep 19
- **Sukkot:** Sep 24 to Oct 1

(\*High Sabbath: These are the set-apart days of the commanded feasts. They are called “high Sabbaths” because they are days of holy convocations, no work, time with YHWH, and rest. The weekly Sabbath is set apart on its own, distinct from the high Sabbaths. See Leviticus 23.)

## The Hebrew Calendar:

Month	Name	Falls in:	Month	Name	Falls in:
1	Nisan	Mar-Apr	7	Tishri	Sep-Oct
2	Iyar	Apr-May	8	Cheshvan	Oct-Nov
3	Sivan	May-Jun	9	Kislev	Nov-Dec
4	Tammuz	Jun-Jul	10	Tevet	Dec-Jan
5	Av	Jul-Aug	11	Shevat	Jan-Feb
6	Elul	Aug-Sep	12	Adar (I)	Feb-Mar
			13†	Adar (II)	Mar-Apr

(†The new moon of Nisan each year is chosen so Pesach falls on or after the start of Spring. If Pesach would fall before Spring, then a “leap month” is added. In leap years, the 2nd Adar is always known as “Adar” though on calendars the two months are usually labeled “Adar I & Adar II”, or “Adar & Adar Sheni”. Purim and Adar birthdays are always in the 2nd Adar if there is one that year.)

Note: “Parsha”, the weekly Torah portion, is used in the calendar grids. It is the same as “Parashat ha-Shavua”.

**January 2018** (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
Dec 31 13 Tevet	Jan 1 14 Tevet	Jan 2 15 Tevet  FM 4:24 AM	Jan 3 16 Tevet	Jan 4 17 Tevet	Jan 5 18 Tevet	Jan 6 19 Tevet Parsha 13) <b>Shemot:</b> Torah: Exodus 1:1-6:1 Haftorah: Isaiah 27:6-28:13 Brit Chadasha: John 17:1-26
Jan 7 20 Tevet	Jan 8 21 Tevet	Jan 9 22 Tevet	Jan 10 23 Tevet	Jan 11 24 Tevet	Jan 12 25 Tevet	Jan 13 26 Tevet Parsha 14) <b>Vayera:</b> Torah: Exodus 6:2-9:35 Haftorah: Ezekiel 28:25-29:21 Brit Chadasha: Romans 9:14-17; 2 Corinthians 6:14-7:1
Jan 14 27 Tevet	Jan 15 28 Tevet	Jan 16 29 Tevet	Jan 17 30 Tevet NM 4:17 AM	Jan 18 1 Shevat	Jan 19 2 Shevat	Jan 20 3 Shevat Parsha 15) <b>Bo:</b> Torah: Exodus 10:1-13:16 Haftorah: Jeremiah 46:13-28 Brit Chadasha: Luke 2:22-24; John 19:31-37; Acts 13:16-17; Revelation 8:6-9:12, 16:1-21
Jan 21 4 Shevat	Jan 22 5 Shevat	Jan 23 6 Shevat	Jan 24 7 Shevat	Jan 25 8 Shevat	Jan 26 9 Shevat	Jan 27 10 Shevat Parsha 16) <b>B'shallach:</b> Torah: Exodus 13:17-17:16 Haftorah: Judges 4:4-5:31 Brit Chadasha: John 6:25-35, 19:31-37; 1 Corinthians 10:1-13; 2 Corinthians 8:1-15; Revelation 15:1-4
Jan 28 11 Shevat	Jan 29 12 Shevat	Jan 30 13 Shevat	Jan 31 14 Shevat  FM 3:27 PM			

## February 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
				Feb 1 15 Shevat	Feb 2 16 Shevat	Feb 3 17 Shevat Parsha 17) <b>Yitro</b> : Torah: Exodus 18:1-20:23 Haftorah: Isaiah 6:1-7:14 Brit Chadasha: 1 Timothy 3:1-14
Feb 4 18 Shevat	Feb 5 19 Shevat	Feb 6 20 Shevat	Feb 7 21 Shevat	Feb 8 22 Shevat	Feb 9 23 Shevat	Feb 10 24 Shevat Parsha 18) <b>Mishpatim</b> : Torah: Exodus 21:1-24:18 Haftorah: Jeremiah 34:8-22, 31:31-34 Brit Chadasha: Hebrews 9:15-22
Feb 11 25 Shevat	Feb 12 26 Shevat	Feb 13 27 Shevat	Feb 14 28 Shevat	Feb 15 29 Shevat  NM 11:05 PM	Feb 16 30 Shevat	Feb 17 1 Adar Parsha 19) <b>Terumah</b> : Torah: Exodus 25:1-27:19 Haftorah: 1 Kings 5:12-6:13 Brit Chadasha: Hebrews 8:1-13
Feb 18 2 Adar	Feb 19 3 Adar	Feb 20 4 Adar	Feb 21 5 Adar	Feb 22 6 Adar	Feb 23 7 Adar	Feb 24 8 Adar Parsha 20) <b>Tetzaveh</b> : Torah: Exodus 27:20-30:10 Haftorah: Ezekiel 43:10-27 Brit Chadasha: Philippians 4:10-20
Feb 25 9 Adar	Feb 26 10 Adar	Feb 27 11 Adar	Feb 28 12 Adar (Fast of Esther begins on the 13 <sup>th</sup> which is at sunset tonight. )			

## March 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
				Mar 1 13 Adar Fast of Esther	Mar 2 14 Adar Purim outside of Israel. Purim inside of Israel begins @ sunset. (Scroll of Esther read). FM 2:52 AM	Mar 3 15 Adar Parsha 21) <b>Ki Tissa:</b> Torah: Exodus 30:11-34:35 Haftorah: 1 Kings 18:1-39 Brit Chadasha: 2 Corinthians 3:1-8  Purim inside of Israel.
Mar 4 16 Adar	Mar 5 17 Adar	Mar 6 18 Adar	Mar 7 19 Adar	Mar 8 20 Adar	Mar 9 21 Adar	Mar 10 22 Adar Parsha 22) <b>Vayachel:</b> Torah: Exodus 35:1-38:20 Haftorah: 1 Kings 7:40-50 Brit Chadasha: Hebrews 9:1-14 Parsha 23) <b>Pekudei:</b> Torah: Exodus 38:21-40:38 Haftorah: 1 Kings 7:51-8:21 Brit Chadasha: Acts 1:1-11 <u>Shabbat (Purim) Parah:</u> Exodus 17:8-16, Numbers 19:1-22, Ezekiel 36:16-38, John 11:45-53.
Mar 11 23 Adar	Mar 12 24 Adar	Mar 13 25 Adar	Mar 14 26 Adar	Mar 15 27 Adar	Mar 16 28 Adar	Mar 17 29 Adar Parsha 24) <b>Vayiqra:</b> Torah: Leviticus 1:1-6:1 Haftorah: Isaiah 43:21-44:23 Brit Chadasha: Romans 8:1-13 NM 3:11 PM Sunset 5:48 PM
Mar 18 1 Nisan	Mar 19 2 Nisan	Mar 20 3 Nisan  <b>Vernal Equinox 6:15 PM</b>	Mar 21 4 Nisan	Mar 22 5 Nisan	Mar 23 6 Nisan	Mar 24 7 Nisan Parsha 25) <b>Tzav:</b> Torah: Leviticus 6:1-8:36 Haftorah: Jeremiah 7:21-8:3 Brit Chadasha: Romans 12:1-8
Mar 25 8 Nisan	Mar 26 9 Nisan	Mar 27 10 Nisan	Mar 28 11 Nisan	Mar 29 12 Nisan	Mar 30 13 Nisan	Mar 31 14 Nisan Parsha 26) <b>Shemini:</b> Torah: Leviticus 9:1-11:47 Haftorah: 2 Samuel 6:1-7:17 Brit Chadasha: Mark 7:1-23 Passover lamb slain late afternoon today. <b>1<sup>st</sup> day of Feast of Unleavened Bread (15<sup>th</sup>) begins at sunset.</b> FM 2:37 PM (Watch for Full Moon to rise at sunset)

## April 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
Apr 1 <b>15 Nisan</b> High Shabbat-FULB* <b>Pesach**, 1st day:</b> Exodus 12:21-51, Numbers 28:16-25, Joshua 3:5-7, 5:2-6:1; Luke 2:41-52 Omer count begins @sunset	Apr 2 16 Nisan <b>"FirstFruits"</b> 1st day of Omer <b>Pesach, 2nd day:</b> Leviticus 22:26-23:44, Numbers 28:16-25, 2 Kings 23:1-9, 21-25; John 18:28-40	Apr 3 17 Nisan Omer 2 <b>Pesach, 3rd day</b> <b>Shabbat of the week</b> <b>of Pesach/FULB:</b> Exodus 33:12-34:26, Numbers 28:16-25, 2 Samuel 22:1-51, Luke 23:54-56	Apr 4 18 Nisan Omer 3 <b>Pesach, 4th day</b>	Apr 5 19 Nisan Omer 4 <b>Pesach, 5th day</b>	Apr 6 20 Nisan Omer 5 <b>Pesach, 6th day</b>	Apr 7 21 Nisan Omer 6 <b>Pesach, 7th day</b> High Shabbat-no work allowed. Deuteronomy 15:19- 16:17, Isaiah 10:32-12:6, John 21:1-25 <b>Shabbat of the week of Pesach/FULB:</b> Exodus 33:12-34:26, Numbers 28:16-25, 2 Samuel 22:1-51, Luke 23:54-56
Apr 8 22 Nisan Omer 7	Apr 9 23 Nisan Omer 8	Apr 10 24 Nisan Omer 9	Apr 11 25 Nisan Omer 10	Apr 12 26 Nisan Omer 11	Apr 13 27 Nisan Omer 12	Apr 14 28 Nisan Omer 13 Parsha 27) <b>Tazria:</b> Torah: Leviticus 12:1-13:59 Haftorah: 2 Kings 4:42-5:19 Brit Chadasha: Matthew 8:1-4; Luke 17:11-19 Parsha 28) <b>Mtzora:</b> Torah: Leviticus 14:1-15:33 Haftorah: 2 Kings 7:3-20 Brit Chadasha: Mark 5:24-34
Apr 15 29 Nisan Omer 14	Apr 16 30 Nisan Omer 15  NM 3:57 AM	Apr 17 <b>1 Iyar</b> Omer 16	Apr 18 2 Iyar Omer 17	Apr 19 3 Iyar Omer 18	Apr 20 4 Iyar Omer 19	Apr 21 5 Iyar Omer 20 Parsha 29) <b>Acharei Mot:</b> Torah: Leviticus 16:1-18:30Haftorah: 2 Kings 4:42-5:19 Brit Chadasha: Matthew 8:1-4; Luke 17:11-19 Parsha 30) <b>Kedoshim:</b> Torah: Leviticus 19:1-20:27 Haftorah: Amos 9:7-15 Brit Chadasha: Acts 15:1-21-34
Apr 22 6 Iyar Omer 21	Apr 23 7 Iyar Omer 22	Apr 24 8 Iyar Omer 23	Apr 25 9 Iyar Omer 24	Apr 26 10 Iyar Omer 25	Apr 27 11 Iyar Omer 26	Apr 28 12 Iyar / Omer 27 Parsha 31) <b>Emor:</b> Torah: Leviticus 21:1-24:23 Haftorah: Ezekiel 44:15-31 Brit Chadasha: Colossians 2:11-23
Apr 29 13 Iyar Omer 28	Apr 30 14 Iyar Omer 29 FM 2:58 AM	*FULB = Feast of Unleavened Bread, 15-21 Nisan		**Note on Pesach (Passover): Pesach is actually only one evening, from late afternoon Nisan 14 through the evening after sunset, when the date has become the 15th. The calendar date of the 15th is the "1st day of the Feast of Unleavened Bread", which continues till Nisan 21. <i>Tradition refers to the entire period, Nisan 15-21 simply as "Pesach".</i>		

## May 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
		May 1 15 Iyar Omer 30	May 2 16 Iyar Omer 31	May 3 17 Iyar Omer 32	May 4 18 Iyar Omer 33	May 5 19 Iyar Omer 34 Parsha 32) <b>BaHar:</b> Torah: Leviticus 25:1-26:2 Haftorah: Jeremiah 32:6-27 Brit Chadasha: Luke 4:16-21; Galatians 5:1-13
May 6 20 Iyar Omer 35	May 7 21 Iyar Omer 36	May 8 22 Iyar Omer 37	May 9 23 Iyar Omer 38	May 10 24 Iyar Omer 39	May 11 25 Iyar Omer 40	May 12 26 Iyar Omer 41 Parsha 33) <b>BeChukkotai:</b> Torah: Leviticus 26:3-27:34 Haftorah: Jeremiah 16:19-17:14 Brit Chadasha: Ephesians 2:11-19
May 13 27 Iyar Omer 42	May 14 28 Iyar Omer 43	May 15 29 Iyar Omer 44  NM 1:48 PM Sunset 6:29 PM	May 16 1 Sivan Omer 45	May 17 2 Sivan Omer 46	May 18 3 Sivan Omer 47	May 19 4 Sivan Omer 48 Parsha 34) <b>BaMidbar:</b> Torah: Numbers 1:1-4:20 Haftorah: Hosea 2:1-11 Brit Chadasha: Luke 2:1-7; 1 Corinthians 12:12-31
May 20 5 Sivan Omer 49	May 21 6 Sivan <b>Shavuot</b> High Shabbat (no work allowed)	May 22 7 Sivan	May 23 8 Sivan	May 24 9 Sivan	May 25 10 Sivan	May 26 11 Sivan Parsha 35) <b>Naso:</b> Torah: Numbers 4:21-7:89 Haftorah: Judges 13:2-25 Brit Chadasha: Acts 21:17-32
May 27 12 Sivan	May 28 13 Sivan	May 29 14 Sivan  FM 4:20 PM	May 30 15 Sivan	May 31 16 Sivan		

## Jun 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
					Jun 1 17 Sivan	Jun 2 18 Sivan Parsha 36) <b>B'Haalotcha:</b> Torah: Numbers 8:1-12:16 Haftorah: Zechariah 2:14-4:7 Brit Chadasha: Hebrews 4:1-16
Jun 3 19 Sivan	Jun 4 20 Sivan	Jun 5 21 Sivan	Jun 6 22 Sivan	Jun 7 23 Sivan	Jun 8 24 Sivan	Jun 9 25 Sivan Parsha 37) <b>Shlach Lecha:</b> Torah: Numbers 13:1-15:41 Haftorah: Joshua 2:1-24 Brit Chadasha: Hebrews 3:7-19
Jun 10 26 Sivan	Jun 11 27 Sivan	Jun 12 28 Sivan	Jun 13 29 Sivan  NM 9:43 PM	Jun 14 30 Sivan	Jun 15 1 Tammuz	Jun 16 2 Tammuz Parsha 38) <b>Korach:</b> Torah: Numbers 16:1-18:32 Haftorah: 1 Samuel 11:14-12:22 Brit Chadasha: Jude 1:1-25
Jun 17 3 Tammuz	Jun 18 4 Tammuz	Jun 19 5 Tammuz	Jun 20 6 Tammuz	Jun 21 7 Tammuz  <b>Summer Solstice 12:07 PM</b>	Jun 22 8 Tammuz	Jun 23 9 Tammuz Parsha 39) <b>Chukkat:</b> Torah: Numbers 19:1-22:1 Haftorah: Judges 11:1-33 Brit Chadasha: John 3:19-21
Jun 24 10 Tammuz	Jun 25 11 Tammuz	Jun 26 12 Tammuz	Jun 27 13 Tammuz	Jun 28 14 Tammuz  FM 6:53 AM	Jun 29 15 Tammuz	Jun 30 16 Tammuz Parsha 40) <b>Balak:</b> Torah: Numbers 22:2-25:9 Haftorah: Micah 5:6-6:8 Brit Chadasha: 2 Peter 2:1-22

## July 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
Jul 1 17 Tammuz	Jul 2 18 Tammuz	Jul 3 19 Tammuz	Jul 4 20 Tammuz	Jul 5 21 Tammuz	Jul 6 22 Tammuz	Jul 7 23 Tammuz Parsha 41) <b>Pinchus:</b> Torah: Numbers 25:10-30:1 Haftorah: 1 Kings 18:46-19:21 Brit Chadasha: Acts 2:1-21
Jul 8 24 Tammuz	Jul 9 25 Tammuz	Jul 10 26 Tammuz	Jul 11 27 Tammuz	Jul 12 28 Tammuz	Jul 13 29 Tammuz  NM 4:48 PM Sunset 6:47 PM	Jul 14 1 Av Parsha 42) <b>Matot:</b> Torah: Numbers 30:1-32:42 Haftorah: Jeremiah 1:1-2:3 Brit Chadasha: Matthew 5:33-37 Parsha 43) <b>Masei:</b> Torah: Numbers 33:1-36:13 Haftorah: Jeremiah 2:4-28 Brit Chadasha: James 4:1-12
Jul 15 2 Av	Jul 16 3 Av	Jul 17 4 Av	Jul 18 5 Av	Jul 19 6 Av	Jul 20 7 Av	Jul 21 8 Av Parsha 44) <b>Devarim:</b> Torah: Deuteronomy 1:1-3:22 Haftorah: Isaiah 1:1-27 Brit Chadasha: John 15:1-11 Tisha B'Av begins at sunset.
Jul 22 9 Av "Tisha B'Av"-fast for the Rabbinic day the Temples were destroyed. Actual destruction dates are on the 10 <sup>th</sup> of Av.	Jul 23 10 Av	Jul 24 11 Av	Jul 25 12 Av	Jul 26 13 Av	Jul 27 14 Av  FM 10:21 PM	Jul 28 15 Av Parsha 45) <b>VaEtchanan:</b> Torah: Deuteronomy 3:23-7:11 Haftorah: Isaiah 40:1-26 Brit Chadasha: Matthew 4:1-11
Jul 29 16 Av	Jul 30 17 Av	Jul 31 18 Av				

## August 2018 (5778)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
			Aug 1 19 Av	Aug 2 20 Av	Aug 3 21 Av	Aug 4 22 Av Parsha 46) <b>Ekev</b> : Torah: Deuteronomy 7:12-11:25 Haftorah: Isaiah 49:14-51:3; 52:1-15 Brit Chadasha: Luke 4:1-13
Aug 5 23 Av	Aug 6 24 Av	Aug 7 25 Av	Aug 8 26 Av	Aug 9 27 Av	Aug 10 28 Av	Aug 11 29 Av Parsha 47) <b>Re'eh</b> : Torah: Deuteronomy 11:26-16:17 Haftorah: Isaiah 44:11-45:5 Brit Chadasha: 1 Corinthians 5:9-13; 1 John 4:1-6, 2:18-25 NM 11:57 AM Sunset 6:27 PM
Aug 12 1 Elul	Aug 13 2 Elul	Aug 14 3 Elul	Aug 15 4 Elul	Aug 16 5 Elul	Aug 17 6 Elul	Aug 18 7 Elul Parsha 48) <b>Shoftim</b> : Torah: Deuteronomy 16:18-21:9 Haftorah: Isaiah 9:1-6, 49:1-6 Brit Chadasha: Acts 7:35-60
Aug 19 8 Elul	Aug 20 9 Elul	Aug 21 10 Elul	Aug 22 11 Elul	Aug 23 12 Elul	Aug 24 13 Elul	Aug 25 14 Elul Parsha 49) <b>Ki Teze</b> : Torah: Deuteronomy 21:10-25:19 Haftorah: Isaiah 40:1-11 Brit Chadasha: Mark 1:1-14
Aug 26 15 Elul  FM 1:56 PM	Aug 27 16 Elul	Aug 28 17 Elul	Aug 29 18 Elul	Aug 30 19 Elul	Aug 31 20 Elul	

## September 2018 (5778/5779)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
						Sep 1 21 Elul Parsha 50) <b>Ki Tavo</b> : Torah: Deuteronomy 26:1-29:8 Haftorah: Isaiah 60:1-22 Brit Chadasha: Matthew 13:1-23
Sep 2 22 Elul	Sep 3 23 Elul	Sep 4 24 Elul	Sep 5 25 Elul	Sep 6 26 Elul	Sep 7 27 Elul	Sep 8 28 Elul Parsha 51) <b>Nitzavim</b> : Torah: Deuteronomy 29:9-30:20 Haftorah: Isaiah 61:1-63:9 Brit Chadasha: Romans 9:30-10:13
Sep 9 29 Elul  NM 8:01 PM Sunset 5:54 PM	Sep 10 30 Elul Yom Teruah/Rosh Hashanna begins at sunset.	Sep 11 1 Tishri 5779 (High Shabbat, no work, day of rest and rejoicing) Torah: Leviticus 23:23-25; Numbers 29:1-6; Brit Chadasha: Matthew 24:30-31; 1 Thes 4:16-17; Revelation 11:15	Sep 12 2 Tishri	Sep 13 3 Tishri	Sep 14 4 Tishri	Sep 15 5 Tishri Parsha 52) <b>Vayelech</b> : Torah: Deuteronomy 31:1-31:30 Haftorah: Hosea 14:1-10 Brit Chadasha: Matthew 28:16-20
Sep 16 6 Tishri	Sep 17 7 Tishri	Sep 18 8 Tishri	Sep 19 9 Tishri Yom Kippur begins at sunset  Fast begins before sunset and ends after sunset 10 Tishri.	Sep 20 10 Tishri - <b>YOM KIPPUR</b> High Shabbat (no work allowed) <u>Yom Kippur, Morning:</u> Leviticus 16:1-34, Numbers 29:7-11, Isaiah 57:14-58:14, Matthew 27:1-32 <u>Yom Kippur, Afternoon:</u> Leviticus 18:1-30, Jonah 1:1-4:11, Micah 7:18-20, Matthew 27:33-66	Sep 21 11 Tishri	Sep 22 12 Tishri Parsha 53) <b>HaAzinu</b> : Torah: Deuteronomy 32:1-32:52 Haftorah: 2 Samuel 22:1-51 Brit Chadasha: Romans 10:14-21  (Parashah 54 is read on 22 Tishri)
Sep 23 13 Tishri  <b>Autumnal Equinox 3:54 AM</b>	Sep 24 14 Tishri Sukkot begins At sunset (Watch for Full Moon to rise at sunset)	Sep 25 15 Tishri High Shabbat (no work) <b>Sukkot, 1st Day:</b> Leviticus 22:26-23:44, Numbers 29:12-16, Zechariah 14:1-21, John 1:1-14, 7:1-36 FM 4:53 AM	Sep 26 16 Tishri <b>Sukkot, 2nd Day:</b> Leviticus 22:26-23:44, Numbers 29:12-16, 1 Kings 8:2-21, John 1:1-14, 7:1-36	Sep 27 17 Tishri <b>Sukkot, 3rd Day</b>	Sep 28 18 Tishri <b>Sukkot, 4th Day</b>	Sep 29 19 Tishri <b>Sukkot, 5th Day</b> <b>Shabbat During the Middle of Sukkot</b> Exodus 33:12-34:26, Ezekiel 38:18-39:16, John 7:1-36
Sep 30 20 Tishri <b>Sukkot, 6th Day</b>						

**October 2018** (5779)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
	Oct 1 21 Tishri <b>Sukkot, 7th Day</b>	Oct 2 22 Tishri High Shabbat (no work) <b>Sukkot, Last Day:</b> Deut 14:22-16:17, Num 29:35-30:1, 1 Kings 8:54-66 Parsha 54) <b>VeZot HaBrachah</b> Torah: Deut 33:1-34:12 Haftarah: Joshua 1:1-18 Gospels and Emissaries: John 7:37-52 and Matthew 5:1-20 The Major Testimonies: Yehudah 1:8-9	Oct 3 23 Tishri	Oct 4 24 Tishri	Oct 5 25 Tishri	Oct 6 26 Tishri Parsha 1) <b>Beresheeth:</b> Torah: Genesis 1:1-6:8 Haftarah: Isaiah 42:5-43:10 Brit Chadasha: John 1:1-18
Oct 7 27 Tishri	Oct 8 28 Tishri	Oct 9 29 Tishri  NM 5:47 AM Sunset 5:15 PM	Oct 10 1 Cheshvan	Oct 11 2 Cheshvan	Oct 12 3 Cheshvan	Oct 13 4 Cheshvan Parsha 2) <b>Noach:</b> Torah: Genesis 6:9-11:32 Haftarah: Isaiah 54:1-55:5 Brit Chadasha: Matthew 24:36-44
Oct 14 5 Cheshvan	Oct 15 6 Cheshvan	Oct 16 7 Cheshvan	Oct 17 8 Cheshvan	Oct 18 9 Cheshvan	Oct 19 10 Cheshvan	Oct 20 11 Cheshvan Parsha 3) <b>Lech Lecha:</b> Torah: Genesis 12:1-17:27 Haftarah: Isaiah 40:27-41:16 Brit Chadasha: Romans 3:19-5:6
Oct 21 12 Cheshvan	Oct 22 13 Cheshvan	Oct 23 14 Cheshvan	Oct 24 15 Cheshvan  FM 6:45 PM	Oct 25 16 Cheshvan	Oct 26 17 Cheshvan	Oct 27 18 Cheshvan Parsha 4) <b>Vayera:</b> Torah: Genesis 18:1-22:24 Haftarah: 2 Kings 4:1-37 Brit Chadasha: James 2:14-24
Oct 28 19 Cheshvan	Oct 29 20 Cheshvan	Oct 30 21 Cheshvan	Oct 31 22 Cheshvan			

## November 2018 (5779)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
				Nov 1 23 Cheshvan	Nov 2 24 Cheshvan	Nov 3 25 Cheshvan Parsha 5) <b>Chayai Sarah:</b> Torah: Genesis 23:1-25:18 Haftarah: 1 Kings 1:1-31 Brit Chadasha: Matthew 8:19-22; Luke 9:37-62
Nov 4 26 Cheshvan	Nov 5 27 Cheshvan	Nov 6 28 Cheshvan	Nov 7 29 Cheshvan  NM 6:02 PM Sunset 4:45 PM	Nov 8 30 Cheshvan	Nov 9 1 Kislev	Nov 10 2 Kislev Parsha 6) <b>Toldot:</b> Torah: Genesis 25:19-28:9 Haftarah: Malachi 1:1-2:7 Brit Chadasha: Romans 9:6-16
Nov 11 3 Kislev	Nov 12 4 Kislev	Nov 13 5 Kislev	Nov 14 6 Kislev	Nov 15 7 Kislev	Nov 16 8 Kislev	Nov 17 9 Kislev Parsha 7) <b>Vayetze:</b> Torah: Genesis 28:10-32:2 Haftarah: Hosea 12:13-14:10 Brit Chadasha: John 1:43-51
Nov 18 10 Kislev	Nov 19 11 Kislev	Nov 20 12 Kislev	Nov 21 13 Kislev	Nov 22 14 Kislev	Nov 23 15 Kislev  FM 7:39 AM	Nov 24 16 Kislev Parsha 8) <b>Vayishlach:</b> Torah: Genesis 32:3-36:43 Haftarah: Hosea 11:7-12:12 Brit Chadasha: 1 Corinthians 5:1-13
Nov 25 17 Kislev	Nov 26 18 Kislev	Nov 27 19 Kislev	Nov 28 20 Kislev	Nov 29 21 Kislev	Nov 30 22 Kislev	

## December 2018 (5779)

Yom Rishon Sun-day	Yom Sheni Mon-day	Yom Sh'lishi Tues-day	Yom Revi'i Wednes-day	Yom Chamishi Thurs-day	Yom Shishi Fri-day	Shabbat
						Dec 1 23 Kislev Parsha 9) <b>Vayeshev</b> : Torah: Genesis 37:1-40:23 Haftarah: Amos 2:6-3:8 Brit Chadasha: Acts 7:9-16
Dec 2 24 Kislev Hanukkah begins at sunset	Dec 3 25 Kislev HANUKKAH 1	Dec 4 26 Kislev HANUKKAH 2	Dec 5 27 Kislev HANUKKAH 3	Dec 6 28 Kislev HANUKKAH 4	Dec 7 29 Kislev HANUKKAH 5  9:21 AM Sunset 4:35 PM	Dec 8 1 Tevat HANUKKAH 6 Parsha 10) <b>Miketz</b> : Torah: Genesis 41:1-44:17 Haftarah: 1 Kings 3:15-4:1 Brit Chadasha: Acts 7:9-16. <u>Shabbat for Hanukkah</u> : Zechariah 2:14-17, 1 Kings 7:40-50, Matthew 12:1-13, John 10:1-22
Dec 9 2 Tevat HANUKKAH 7	Dec 10 3 Tevat HANUKKAH 8 Hanukkah ends at sunset.	Dec 11 4 Tevat	Dec 12 5 Tevat	Dec 13 6 Tevat	Dec 14 7 Tevat	Dec 15 8 Tevat Parsha 11) <b>Vayigash</b> : Torah: Genesis 44:18-47:27 Haftarah: Ezekiel 37:15-28 Brit Chadasha: John 10:11-19
Dec 16 9 Tevat	Dec 17 10 Tevat	Dec 18 11 Tevat	Dec 19 12 Tevat	Dec 20 13 Tevat	Dec 21 14 Tevat	Dec 22 15 Tevat Parsha 12) <b>Vayechi</b> : Torah: Genesis 47:28-50:26 Haftarah: 1 Kings 2:1-12 Brit Chadasha: 1 Peter 2:11-17 FM 7:49 PM <b>Winter Solstice 12:23 AM</b>
Dec 23 16 Tevat	Dec 24 17 Tevat	Dec 25 18 Tevat	Dec 26 19 Tevat	Dec 27 20 Tevat	Dec 28 21 Tevat	Dec 29 22 Tevat Parsha 13) <b>Shemot</b> : Torah: Exodus 1:1-6:1 Haftarah: Isaiah 27:6-28:13 Brit Chadasha: John 17:1-26
Dec 30 23 Tevat	Dec 31 24 Tevat	Jan 1 25 Tevat	Jan 2 26 Tevat	Jan 3 27 Tevat	Jan 4 28 Tevat	Jan 5 29 Tevat Parsha 14) <b>Vayera</b> : Torah: Exodus 6:2-9:35 Haftarah: Ezekiel 28:25-29:21 Brit Chadasha: Romans 9:14-17; 2 Corinthians 6:14-7:1

2018 The Refiner's Fire calendar, copyright 2017-2018

(Purple—Gregorian Month, Green—New Moon, Blue—Hebrew month, Yellow—Full Moon) (Hebrew day begins @ sunset prior) (NM, FM and sunset times from Jerusalem)

## Detailed explanation of this Calendar:

This calendar originated because the modern calendar of Judaism, (the “current Hebrew calendar” or what we refer to as the “traditional calendar”), is so clearly wrong. Just how the current Hebrew calendar is wrong will be addressed shortly. However, we recognize that *no individual or group* has any responsibility or authority for establishing a “Hebrew calendar”, so we recognize this calendar has no authority, and as such, we do not, and have never expected, demanded, requested, or required that anyone follow this calendar! So, you may wish to ask: “Without authority, why do you advocate this calendar?” It is a fair question.

The answer is that YHWH our Creator commanded His Feast Days, His Moed, to be kept at the right time beginning with Pesach (Passover, Deuteronomy 16:1 and 16:6). As you will learn shortly, the current Hebrew calendar, not only often begins the new month when the Moon itself has not yet declared itself “renewed”, but, more and more often, establishes the 1<sup>st</sup> month of the new year at the *wrong* new moon! The “The Refiner’s Fire” calendar seeks to provide a calendar which reproduces all the heavenly signs of the sun, moon, and stars (as these bodies declare to all who would simply watch them) and establish and maintain the commanded Moedim *in their proper seasons*.

Who are we to take on such responsibility? Who are we to say we know what is right and what is not? It’s not a simple answer. We are just a teaching ministry! We have no authority! We are **not** saying “We’re right while others are wrong!” However, few others are looking at the current traditional calendar and recognizing its clear errors, and we feel a responsibility at least to identify the problems, inform people, and advocate a solution more in-line with scripture. The sun, moon, and stars are truly actually there for anyone to observe and see how the calendar works – as they have been for thousands of years – yet *hardly anyone today* does!

There is, today, no **Great Sanhedrin**. The Great Sanhedrin is the only body authorized in Judaism to adjudicate the calendar. *But there has been no authorized Sanhedrin since the 4<sup>th</sup> century CE* – yet modern Judaism has repeatedly changed the approved calendar of that age, adding new man-made rules and requirements well after the last Great Sanhedrin was disbanded. Indeed, the current Hebrew calendar has been altered several times in the last 1500 years, *without Sanhedrin authority*. (Some will take exception to that comment, citing that “today’s rabbis carry the authority”, but the fact remains that today’s rabbis do not hold the authority of the Great Sanhedrin and as a result, today’s Hebrew calendar is largely a mess!) Even those in Israel attempting to restore an authorized Sanhedrin recognize the current Hebrew calendar is growing more and more out-of-sync with the

real sun, moon and stars! See:

[http://www.thesanhedrin.org/en/index.php?title=Committee\\_concerning\\_the\\_fixing\\_of\\_the\\_Calendar](http://www.thesanhedrin.org/en/index.php?title=Committee_concerning_the_fixing_of_the_Calendar).

So, what is wrong with the established Calendar of modern Judaism? Much! In a nutshell:

1. The current Hebrew calendar calculates the first day of each new month using an “average moon” instead of the real moon. That is, the lunation is held to approximately 29.53 days, while the lunation of the actual moon varies from a low of 29.27 days to a high 29.84 days. The result is that sometimes the 1<sup>st</sup> of the calendar month is declared by the traditional calendar when the moon clearly has not yet reached conjunction and has not “renewed”. Thus, the month sometimes begins a day too early and often a day too late.
2. The length of each Hebrew month in the authorized calendar is fixed in advance while ignoring the actual signs of the sun and moon! This means that the month of Nisan, for example, is always 30 days long and the next month, Iyar is always 29 days. But by the actual moon, Nisan could be 29 days one year, while Iyar would be 30, and so on as declared by the actual signs of the moon. And two months in the modern Hebrew calendar, Cheshvan and Kislev are declared “floaters”, that is, they are set to 29 or 30 days depending on the need to keep the calendar year fixed to predetermined total number of days. Therefore, the length of the months of Cheshvan and Kislev are also not established by the real moon, rather, they are determined to satisfy man-made calendar rules.
3. The current Hebrew calendar “postpones” the 1<sup>st</sup> day of the 7<sup>th</sup> month to prevent Yom Kippur from falling on a Friday or a Sunday. There is simply no scriptural foundation for this rule! None! It is done simply for man-made convenience.
4. And finally, and this is very important, the determination of the new moon establishing the critical “1<sup>st</sup> month of each moed year” is done by the rigid application of the Metonic cycle, where the required leap month is added by a fixed schedule of intercalation – completely ignoring the real moon! This sometimes causes the wrong new moon to be identified as the 1<sup>st</sup> month of the moedim, the month of Nisan. This error, when it happens, establishes ALL COMMANDED FEAST DAYS for the entire following 12 months to be observed in the wrong lunar month! This is happening more and more often in the current Jewish calendar as the centuries progress. (This problem is

well recognized, even in modern Judaism – see the link in this article, above.)

Applying the Metonic cycle to the Hebrew calendar is *perfectly fine over the whole 19-year cycle*, but it is dreadfully wrong to apply the “rules” of the Metonic cycle by its rigid schedule of intercalation within the 19-year period. The *actual moon declares* which year should be the intercalary year, not a rigid, predetermined schedule, yet the actual moon is ignored!

So, you are probably asking: “If the current Jewish calendar is so wrong, why not use the ‘sighted moon’ calendar? Isn’t that easier and more correct? Doesn’t that solve the problem?” *No, it does not solve the problem!* By waiting to spot the sighted moon, *one is automatically beginning EVERY month usually a day late, sometimes 2 days late!* To make a long story short, anyone who has actually watched the moon over a long time would establish that the new visible crescent is only a solid indication (sign) *that the new month has already begun!* By the time you can “see” the thin crescent, the moon has clearly moved passed its unseen renewal! It *should* be recognized as “unacceptable” for a calendar, yet the historical record suggests that the sighted crescent was “the method” the ancient Hebrews established the 1<sup>st</sup> day of the new month. Can that be true? No. What we are seeing with the “sighted crescent” establishing the 1<sup>st</sup> day of the new month is a myth. It has been written as “fact” for so long that it is simply now accepted as “truth”. But the truth was known centuries ago!

Maimonides, (also known as Rambam), a great rabbi of the late 12<sup>th</sup> century CE writes, in his “The Sanctification of the New Moon”:

“Each month the moon disappears and becomes invisible for about two days, or somewhat more or less – for about one day at the end of the old month, before it reaches its conjunction with the sun, and for about one day after its conjunction with the sun. Then it reappears in the evening in the west, and this night, on which it becomes visible in the west after its disappearance, is the beginning of the month. From this day on 29 days were counted, and if the new crescent appeared on the *night* of the 30<sup>th</sup> day, this 30<sup>th</sup> day was the first day of the new month. If however, it did not appear on that night, the 30<sup>th</sup> day would belong to the old month and the 31<sup>st</sup> day would be the first day of the new month. And no matter whether the moon did or did

not appear in the night of the 31<sup>st</sup> day, no attention was paid to it, for the lunar month never lasts longer than thirty days.” (The Code of Maimonides, Book 3, Treatise 8, from the Hebrew by Solomon Gandz, 1956).

Please pay careful attention to what Maimonides was saying 800 years ago! He said, (rephrasing): *If the crescent was spotted at sunset, that sunset did NOT become the 1<sup>st</sup> of the month, rather, the day just ending was declared the 1<sup>st</sup> day of the month!* He said, in no uncertain terms, that you DO NOT *begin* the month with the sighting of the new crescent, rather, the new crescent is expected to be seen at the END of the 1<sup>st</sup> day of the month and that sometimes it will not be seen until the 2<sup>nd</sup> day is ending!

This is a most clear indication that rabbi Maimonides understood that the new month was NOT established by the crescent, rather, the new month was established by the unseen conjunction and the crescent of the new month would appear, at the earliest, at the END of the 1<sup>st</sup> day of the month! When the crescent is spotted, it WOULD NOT mean the 1<sup>st</sup> day was only just now beginning, it means the 1<sup>st</sup> day was *ending!*

But today, Karaites and most everyone else using the “sighted crescent” have seriously misunderstood the meaning and use of the crescent. This misconception has been “ingrained” in history, for so long, that of course the historical record is going to *suggest* that the “sighted moon” begins the 1<sup>st</sup> day of the month! But it is wrong!

Also, *determining the beginning of the month by sighting the crescent is NOT found in scripture* - as many argue. Many say that “scripture says the ‘chodesh’, (Hebrew for the ‘beginning of the month’ or “head of the month”), is by the crescent”. But scripture does not say that! Chodesh only means the “head of the month” or the “beginning of the month” – it does *not* convey **how** the 1<sup>st</sup> is determined or require that a crescent be sighted.

So this is our (admittedly) unprovable understanding: *The methods of the ancient Levites to know in advance the day of the conjunction was a closely guarded secret*. It makes sense that the learned Levites who guarded the calendar would *not* want the general public to know their methods lest the Levites be accused of participating in activities of the occult and being equated with all the pagans who used all the same signs (the many visible signs of the sun, moon, and stars) which were given to

all people. Such “heavenly body worship” was forbidden of the Hebrews! (See Deuteronomy 4:19).

The sanctification of the month was therefore a celebratory event where members of the public were invited to bring their visual sighting of the new moon to the seated Sanhedrin. This only meant that the sanctification was a “formalized party” to declare the new month had begun. Note that according to Maimonides, when the new crescent was spotted, and two lucky citizens were accepted as the “witnesses” of the great event, upon accepting the reports, that day just ending was announced as the 1<sup>st</sup> day of the new month, meaning at that very sunset, the date became the 2<sup>nd</sup> of the month! In this manner, the methods of the learned Levites who knew in advance which day would be the 1<sup>st</sup> day of the new month, remained hidden, protected. Unfortunately, this hideous myth was born that “the new month was declared by two witnesses who spotted the crescent” and it took root, ultimately supplanting reality.

So this calendar rejects the “sighted crescent” as the proper calendar because, in its apparent “simplicity”, it errs significantly and is therefore simply folly. Yes, and we repeat, YES, we understand the overwhelming historical record *suggests* the Hebrew calendar month was established by the “sighted crescent”. We can’t help it if the real, actual, visible-to-all-who-simply-look signs of the moon *completely negate the “sighted crescent” method!* The “sighted crescent”, at least today’s sighted crescent where the 1<sup>st</sup> day of the new month only begins with the sunset the crescent is observed, is simply wrong.

## The neglected importance of the Full Moon

While many simply can’t accept or have never thought about the importance of this next concept and tend to “poo-poo” it, *three of the seven annual moedim are required to be at the MIDDLE of the month (Passover; the beginning of the Feast of Unleavened Bread; and the beginning of Sukkot).* Thus, near the sunset of the 14<sup>th</sup> of the calendar month, one SHOULD be able to turn toward the east and observe a full or nearly full moon rise! If the calendar says it is just now becoming the 15<sup>th</sup> of the month (i.e., sunset the 14<sup>th</sup>) and you watch for the moon to rise only to see it rise well after sunset, then *your calendar is dreadfully wrong, as your calendar clearly does not match the calendar as declared by the moon!* We make no apologies for this simple fact! The calendar month should be established by the moon and remain in-sync with the

moon, and *therefore the calendar should match the signs of the cottin’ pickin’ moon!*

## Which leads to this calendar of The Refiner’s Fire.

[First, a note about the term “month”: There is the “month” as declared by the “calendar”, i.e., the “calendar month”, with days numbered “1” to “29 (or 30)”, and there is the “month” of the moon itself – that is, the time it takes the moon to go once around the earth!

Ignore for a moment the “calendar” and consider only the moon. The moon orbits the earth and when the moon has completed one full orbit as seen from the earth, that is the “moon’s month”. The visual evidence that the moon has completed one, full “moon month” is when the moon once again appears to us at the exact same “phase” it was the month before. It does not matter the phase that we chose to observe and measure, but we must be able to “see” that phase in order to assess if the moon has returned to that “same phase”!

So, “full moon to full moon” is a perfectly valid measure of a “moon month”, however it is so difficult to *visually see* when the moon is *exactly* “full”! And conjunction is a valid measure of a “moon month”, but we can’t visually see at all when the moon at the exact moment it passes through conjunction! “1<sup>st</sup> sighted crescent” is clearly no good because one never sees the 1<sup>st</sup> crescent at *exactly* the same phase! So what’s left?

There is 1<sup>st</sup> and 3<sup>rd</sup> quarter moon. The approximate time of the 1<sup>st</sup> quarter moon can be observed, and the approximate time of the 3<sup>rd</sup> quarter moon can be observed. Indeed, it is through repeated observations of a visual phase of the moon over many years that led the ancient Hebrews to know with great accuracy the average period of the “moon’s month”! One does not need to know exactly the time of the event, rather, the approximate time observed converges on the actual value. Thus, by simply watching and estimating, ancient Hebrews determined the “moon’s month” to average 29.53059 days, remarkably close to the actual value known today.

So there is the “calendar month” which is always 29 or 30 days, and there is the “moon’s month” which is always a “near” 29.53059 days – sometimes greater and sometimes less. But the “moon’s month” is never 30-days! The “calendar month” *attempts* to “balance” the calendar date around the moon’s month and thus the calendar month

must *always* be 29 or 30 full days! Please keep this in mind. There is the “month” that the moon “sees” (and which is the “heavenly standard” of the month) and there is the “calendar month” that we humans must observe, which we try to “fit” to the “moon’s month”. The “calendar month” always “fits” the real “moon month” as best we can fit it! The challenge is finding that rule to begin the “calendar month” so it best fits the “moon month”.]

This calendar relies on a few simple rules to match the calendar to the moon. First: ***The moon is renewed at the unseen conjunction and the 1<sup>st</sup> day of the new calendar month begins at the first sunset to follow that unseen conjunction.***

It is inconceivable that anyone who has ever watched the repeating cycle of the moon could deny this. The moon, very clearly, ends its “month” and begins its “new month” while it is *not visible* to us humans.

Maimonides clearly recognized this (as discussed earlier). Anyone, over the years, who ever *actually watched* the moon is sure to come to this inescapable conclusion. While many say: “*You can’t use the conjunction of the moon because the conjunction can’t be seen and a ‘sign’ must be visible!*”, the inescapable truth is that *the absence of the moon during conjunction IS the sign!* **Think about that a minute!** Most “signs” would be expected to be ‘visible’, but the moon has a unique “sign”! The moon is *always* visible every day of every month at some time during every day or night, **except** when it is being renewed while in conjunction! That means, very clearly, that the *unseen moon IS A SIGN*, and a very clear sign! The complete absence of something that would otherwise be visible, **IS** decidedly a sign! So: The only question is how can we know when the moon is in conjunction when it can’t be seen?

Glad you asked! Turns out, there are two viable methods the ancients likely used to know the day the moon was in conjunction, even if they did not have the advanced knowledge to calculate the day and time of conjunction through orbital mechanics as we can easily do today.

First, there is the method of simply watching the moon *all the time*, every day of every month, and committing to record what is observed. The moon presents *many* signs of its age throughout the month and these signs are always visible to anyone who takes the time to watch the moon. But I’m not going to describe all the signs of the moon, rather, I’m going to briefly describe only the signs of the “old month”.

In the last few days of each month, the moon becomes a thin crescent in the *morning* before sunrise. Each morning the “old” crescent gets thinner and thinner and is observed to appear closer and closer to the sun before sunrise till, finally, one morning the crescent is no longer visible before the sun rises. If one took the time to watch that “old” crescent, *become familiar with it*, and come to recognize the *signs* of the old crescent, *one can very accurately estimate on which day the moon is expected to pass through conjunction!* Please don’t dismiss! It is fact! I am dead serious because I have done this myself, many, many times over the years and most people are *completely oblivious* to the fact this can be done!

I’ve been an astronomer all my life and as a result, I have watched the sky for many decades. For a great part of my adult life, I had the good fortune of travelling to work in the wee period before sunrise and each month even on those days the old, morning crescent was observed aging. I would watch the moon carefully.

I would watch the moon and make mental note of the “thickness” of the crescent, its distance from the horizon and its angle from the sun, and the angle of the “horns” of the crescent, and I began to “see” a clear correlation of these signs to the time it would take before the crescent of the *renewed* moon would again be observed days later. It was not long after that realization, that I began to see that the visible signs I witnessed would also tell me on which day the conjunction was to take place! I could “know” in advance the day of conjunction!

I began to do exactly that! That is, I would watch the old moon, and I would *predict* the day on which I expected the conjunction. Without fail, I found that I picked the right day! I soon realized this was no fluke. I realized that there before me were the ever-present signs of the moon, always there from Adam, available to anyone who simply watched the moon - the moon itself announcing the coming conjunction. I realized that if I could do it, so could have the ancient Levite Priest in-charge of the Hebrew calendar!

Additionally, since you know the calendar date, that is, you’ve been counting the days of the month, so all you are really doing is using the moon to help you decide if the current month will have 29 or 30 days. It cannot have 28 or 31, so this is not a difficult task. So that’s the 1<sup>st</sup> viable method to know in advance the day of the conjunction.

A second method, for a slightly more sophisticated observer, an observer who understands some simple arithmetic (“rate times time” type functions, and the meaning and measure of angles), is a bit too much to explain here, but the simplified method is this:

In the period of the last few days of the current month, watch the old crescent, and at the moment of sunrise, measure the elongation (angle) from the *point of sunrise* to the visible moon. Record that angle. The next morning, do the same thing. The difference between the angles measured those two successive mornings reveals the *number of degrees* the moon traveled in that previous full day (i.e., the previous 24-hrs)! A little arithmetic provides you with the estimated number of hours from that point till the moon would be expected to be in conjunction! Therefore, this relatively simple measurement provides a *computed day and hour* of conjunction by observation of the moon alone which can be compared to the known or expected hour of sunset, thus providing a very good estimate of the day of conjunction.

(Measuring the elongation at the moment of sunrise simply makes the measurement at a repeatable time (sunrise) and easier to perform – no clock is needed. It is much harder to measure the elongation of the moon before or after sun has risen. If trying to assess the elongation of the moon after sunrise, the sun is blinding to look at, and for another, the faint crescent close to the sun, is soon washed out by the bright morning sky and it is far harder to measure an angle between two objects in the sky – one that is blinding and one that simply can no longer be seen! One also must be able to accurately measure the time of day if you measure the moon’s elongation after sunrise. The moment of sunrise, however, anchors one side of the measurement to the horizon and to a particular time and eliminates the need for an accurate clock, and makes the angle measurement fairly easy.)

This method is not perfect! Though it *usually* results in the correct day of conjunction, it is possible, that the method results in the computed time of conjunction after the expected sunset when the actual (unknown) time of conjunction would have been *before* sunset. In that case, when the prediction is after sunset, it results in the computed day of conjunction to be in the *next* day. However, it turns out this is *not a serious problem* – briefly discussed in this document later. The point is that this is another completely sound method which provides an estimate of the day of the unseen conjunction which many say is not

possible to be known! Those who insist the unseen conjunction cannot be known are simply wrong!

As mentioned earlier, estimating the day of conjunction, (actually by either method), *may* result in the estimate of conjunction on the wrong day. What follows is a brief explanation of the problem and why it resolves itself:

If the predicted day of conjunction is *not* the actual day of conjunction, it is only possible that the predicted day will be *one day late* or *one day early*. If the prediction is a day late, the resulting *calendar month* for the new month works just fine because the new month simply becomes a 29-day month when it would have been a 30-day month. All “signs” of the age of the month by the moon remain the same, that is the full moon still happens at the right time in the resulting calendar.

Example: If you predicted the day of conjunction a day later than the *actual* conjunction, then you essentially started the calendar month 1 day *later* than the actual moon declared. But that only means that come the real full moon period, the calendar date will indicate that the full moon is happening “early”, in the period when the full moon would be expected, and this is nothing but a sign that the current month will only have 29 days. (Had you begun the calendar on the correct day, the full moon would have fallen “later” in the middle of the *calendar* month, indicating that the month would likely be a 30-day month.) In other words, the moon itself “corrects” the calendar month!

Similarly, if the day of conjunction was predicted one day early, the moon itself “corrects” the calendar month and what would have been a 29-day month likely becomes a 30-day month.

The main issue is that most of the time, month after month, the predicted day of conjunction will be absolutely correct. The only time when there is a potential for the incorrect day of conjunction being selected is when the signs indicate a “late” conjunction – that is, a predicted time of conjunction near the time of sunset when the day itself is incremented. But hopefully you can visualize that if the time of conjunction is so near sunset, that you can’t accurately tell if conjunction is before or after sunset, you simply chose what the signs are telling you, and the moon itself will determine if the new month is 29 or 30 days long as a result of that decision!

(Note that this natural “correction” is not possible using the “sighted crescent” method! In the case of the sighted moon, there is a “built-in” 1 to 2-day delay in the start of the new month and the proper calendar day for the full moon is automatically missed and *cannot* be naturally corrected by the signs of the moon.)

Now, given that I have established there are at least two ways to determine the day of conjunction *in advance*, by observation alone, we can discuss the resulting calendar – this calendar.

## How this calendar works:

Since the time of conjunction can happen any time during the *last day* of the moon’s month (which should coincide with the last day of the *calendar* month), the actual time of the conjunction has no importance whatsoever. You see you have only two choices: Since the day is binary and the Hebrew calendar-day begins at sunset, the time of conjunction can only be before or after the time of sunset! (Truth be had, the time of conjunction can also be, though very rarely, *exactly* at the time of sunset - let me address that case later).

The very definition of “conjunction” whether used in the broader, ancient sense, meaning “the time period of the absence of the visible moon”, which is, by definition, the undeniable period of renewal, or the modern astronomical definition defined mathematically as it is today, the ultimate meaning is the pretty much the same. Observable or not, “conjunction” is the time when the moon passes from “old” to “new” (or to say it in other words, the moon “is renewed”). So let’s consider when the conjunction *should happen* in relation to the *calendar month* which is necessarily fixed to “whole days” defined by sunset to sunset.

Since the day must end and begin at sunset, the time of conjunction when the moon is renewed must (ideally) be either *before* sunset, or *after* sunset! (Again, ignoring for the moment the special case when it is exactly the same time as sunset is to be addressed later). Thus, there are only two possibilities for the 1<sup>st</sup> day of the new calendar month. This is not rocket science!

Some organizations, such as 119 Ministries (at least the last time I checked), assess that the new calendar month begins on the day of conjunction. That is, the 119 calendar begins the 1<sup>st</sup> day of the new month at the sunset before the moon has passed from old to new,

requiring conjunction to happen on the 1<sup>st</sup> day of the new month. But that is clearly wrong. Here’s why:

The *year* (determined by the sun) is greater than the month (determined by the moon). (Remember the sun is the “greater light”, Genesis 1:16). Not that, even if we did not have the moon, the year would still be determined by the sun! Then the *month* is greater than the *day* because both the year and the month are made-up of “days”. Therefore, the year is established by the position of the sun against the background of fixed stars (and would establish the year even if the moon did not exist), while the month of the year is established by the periodic renewal of the moon on a particular day. And the day itself is simply the steady progression of sunset to sunset whether you are counting days of the month or days of the year.

So the completion of the month, *must happen before* the day completes. That is, the moon must pass through its renewal first, then that “day” can end and the new *calendar month* can commence. If instead you end the day, which you consider the last day of the month, *before* the moon has passed from old to new, then you have inadvertently granted supremacy to the day and not the month. So the 1<sup>st</sup> day of the new *calendar* month cannot begin while the moon is not yet renewed.

## The Year

So let’s discuss the year. To make a very long story short, there are only two logical times of the entire year to use as the “anchor” of where to end and begin the year. Ignore scripture, for a moment, and all you know about *any* calendar. Those two times which clearly demark the year are the two equinoxes – the Autumnal Equinox in the fall, and the Vernal Equinox in the spring. Since planting and harvesting are very closely tied to the seasons the year which are determined by the sun, it actually makes enormous sense that one would choose the *Autumnal* Equinox as that time when the old year would end and the new year would begin. After all, in the autumn, the last of the current year’s crops are being harvested and the new crops of the new agricultural season will be planted after this quite natural season. We strongly believe that the *original* Hebrew calendar ended and began the year at what we all today the Autumnal Equinox.

(The only other logical times which are possible times to establish the measure of the year are the two solstices – the Summer and Winter

Solstices. But the exact day on which the solstices happen is vague, not directly observable, and therefore, the solstices are not ideal candidates to establish the year.)

So, ignoring for a moment the moon as a measure of the “month”, let’s briefly address the *natural* “demark” of the year. This, very clear, easy to identify “point in time” called the “autumnal equinox” is the day the sun is observed rising (or setting) in the due East (or west) as the sun is observed in its annual circuit moving from the north to the south. So one simply watches the sun rise & set day after day as the summer progresses and the sun progresses steadily southward on the horizon, and the day the sun is seen to rise and set exactly due east (or west), that day ends the old year and the new year begins at the next sunset.

Counting the number of days which elapsed since the last time you saw the sun at this same point, heading southward (i.e., at the Autumnal Equinox), you find that 365 days have passed! (Once every few years, you find you must count 366 days instead of 365. This is the natural evidence that leads us to realize that the “average” year is about 365 ¼ days long. Describing this is beyond the scope of this article.)

## The Month

So now, we have a method to measure and establish the “year”. What would be the proper determinant for the 1<sup>st</sup> month of the year? In keeping with the hierarchy of the sun and moon, the *logical* thing to do is to begin the 1<sup>st</sup> month of the new year with the 1<sup>st</sup> new moon which follows the Autumnal Equinox. Indeed, that works fine except for the fact that you need some additional mechanism to keep the months associated with the agricultural seasons the months come to represent.

Here is what I mean. If you count the 12 renewals of the moon in the solar year, then the 1<sup>st</sup> renewed moon of the new year will soon be observed before the Autumnal Equinox. Then the next year, the 1<sup>st</sup> new moon of the year is even earlier. This happens every year and soon the “1<sup>st</sup> Month” of the year is several new moons before the Autumnal Equinox and your agricultural indicators are getting completely out-of-sync with the sun!

So you “compensate” for this “drift” of the desired calendar month by adding a single extra moon-month to the calendar once-in-a-while when you need to so the new moon of the 1<sup>st</sup> month will always begin on or after the Autumnal Equinox. The added month is called an “intercalary

month”, and all it means is that the *calendar* that year had one more month (a 13<sup>th</sup>), so the 1<sup>st</sup> month maintains its position at the “head” of the year.

This is actually a pretty simple concept. If the 1st new moon would be before the Autumnal equinox – the day of which you know in advance because you’ve been counting the days of the year, you simply call that new moon the 13<sup>th</sup> month instead, and the next new moon is the 1<sup>st</sup> new moon of the new year. That automatically “forces” the new moon of the 1<sup>st</sup> month of the year to be on or after the Autumnal Equinox.

Thus, it is our estimation that the Hebrews began their year at the Autumnal Equinox for agricultural reasons, and that they probably began the month of Tishri at the 1<sup>st</sup> new moon following the Autumnal Equinox, though this, we admit, is just a guess based on the sun, moon, and stars.

## YHWH changed the calendar!

Then we see that after centuries of Egyptian captivity, the Hebrews were freed in the Exodus, and what happened? YHWH changed the calendar!

YHWH changed the calendar from whatever it was so the “1<sup>st</sup> calendar month” of the moed year would coincide with the month of the exodus instead of the month of change of the crop-year. The month of the exodus was the month of the “abib”, that is, the month in which the crops began to turn green, today, known as Nisan (Exodus 12:2). That month, in which the early crops would start to turn green, was the “month of Spring”. Remember, that before the change of the month count, *the month of spring had already been FIXED by another calendar which had begun (likely) in the fall!* So no one, absolutely no one, watched for the barley to turn green to “establish” the “month of the abib” barley! The month of the abib barley was established a half-year earlier, in the fall!

Now, please pay close attention to these next comments. YHWH didn’t simply change which month was to be the 1<sup>st</sup> month of the calendar year, He change how the 1<sup>st</sup> month would be determined! While the calendar probably had always been anchored to the moon, while the calendar month was anchored to the sun, He anchored the day of the exodus, the day of the Passover, to the sun instead of simply changing the “determination of the 1<sup>st</sup> month by the moon! He anchored Passover to the sun, He did not anchor the month of Passover to the moon! (Now don’t get ahead of me. Yes, the month of Spring had already happened,

and scripture identified the preparation for the pass-over to happen on the night of the 14<sup>th</sup>/15<sup>th</sup> of the month, the pass-over would happen at midnight, when the date had become the 15<sup>th</sup>. So clearly, the pass-over was automatically tied to the month.)

You see, had YHWH only changed the month of the abib to the “1<sup>st</sup> month”, *the Hebrews would have used the same “rule” they formerly used for the month of Tishri in the Autumn.* Here, with the commanded change of the 1<sup>st</sup> month to commemorate the exodus, they would have (likely) assigned the 1<sup>st</sup> month to the 1<sup>st</sup> new moon *after* the Vernal Equinox. (It would make sense that way.) But in Deuteronomy 16:1, we learn that the month of Spring, i.e., the abib month, had already happened the year the exodus began, and the command was to observe the month of the abib, and THEN observe the Passover. This means that it was the pass-over that was anchored to the occasion and not the day of the new moon. YHWH further says in Deuteronomy 16:6 that the Passover was *from then on*, to be “at the time of year that you came out of Egypt.” It is most important to understand what that means.

Had YHWH only wanted the Hebrews to observe the Passover “in the month of the abib”, He would not have had to command the Passover to be “at the time of year that you came out of Egypt,” Nor would there be any reason to change the way the Hebrews established the year (by a new moon after one of the equinoxes). In making this condition, *YHWH anchored Passover – not the moon - to the Vernal Equinox.* He changed the month of the abib to become the 1<sup>st</sup> month of the moed year, but he mandated that the recurrence of the observance of the day of the Passover would take precedence over establishing the 1<sup>st</sup> month of the moed year by the moon.

Thus, as all of Judaism has long understood, the change to the calendar was that Passover would fall on or after the Vernal Equinox. The command was not to simply change the calendar to the new moon on or after the Vernal Equinox! Spring (i.e., the Vernal Equinox) comes first, then Passover – NOT spring comes first, then the new moon, then Passover! One does not “establish the month of the abib, then Passover happens”! No! The command is to keep Passover “at the time of year that you came out of Egypt.” That ties Passover to the sun, not the moon to the sun! But since Passover happens the late afternoon of the 14<sup>th</sup> of the month, it remains tied to the lunar month as well, it’s simply that you no longer watch for the day of the new moon to begin the year, instead

you assess the calendar for the proper day of the Passover to begin the year!

Therefore, the rule to determine the month of the abib (modern Nisan) is the new moon that establishes Passover on or after the Vernal Equinox. That month is the 1<sup>st</sup> month of the moed year. This is the rule used by The Refiner’s Fire calendar.

But there remains the key difference between this calendar and the “authoritative” calendar of Judaism. The modern, authoritative calendar of Israel applies that rigid, though erred, Metonic cycle to their calendar, while our calendar only intercalates when Passover would fall before the Vernal Equinox. We have seen in recent years (2016 and 2019 for example) as the accepted calendar of Judaism is more and more divergent from the real sun, moon, and stars, the date of Passover and all commanded moedim in some years fall in the wrong lunar-month.

We strive to provide a calendar that most closely resembles the calendar alluded to in scripture while holding true to the real sun, moon, and stars.

The rules for The Refiner’s Fire calendar are therefore summarized as follows:

1. The 1<sup>st</sup> day of the new Hebrew month is the sunset which follows the conjunction of the moon. Calculating the time of conjunction and comparing that with the time of sunset (at Jerusalem, of course) matches what the ancient Levite observers could have done.
2. The 1<sup>st</sup> month of the calendar year is the new moon which establishes Passover (the afternoon of the 14<sup>th</sup> of Nisan), on or after the Vernal Equinox).
3. No other rules are added. All the designated Moedim fall on the days they fall. If Yom Kippur is on a Friday or a Sunday, then that’s when it is. No “postponements” are imposed.

For questions on this calendar, please do not write to The Refiner’s Fire website. Write instead to: [calendar@therefinersfire.org](mailto:calendar@therefinersfire.org).