

# לה"ו **PHILOTORAH**

יהי רצון מלפניך ה' אלהינו וא'להי אבותינו שתשלח מהרה רפואה שלמה מן השמים,  
 רפואת הנפש ורפואת הגוף לפצועי המלחמה, ולנפגעי מעשי טרור ואנטישמיות  
 בישראל ובכל מקום שהם - עם שאר חולי ישראל. אמן.

**May HaShem protect our soldiers; may He send Refu'ah Sh'leima to the many injured;  
 may He console the bereaved families and all of Israel; may He end these wars with  
 total success and peace for Medinat Yisrael and Klal Yisrael wherever we are.**



**YERUSHALAYIM** in/out times for **KI TAVO**

**ט"ז אלול ה'תשפ"ו • August 28-29, '26**

 **6:33PM** Plag **5:47PM** •  **7:44PM** R' Tam **8:19PM**

Use the Z'MANIM link for other locales



## RH 5787

As I have written from time to time over the years (Torah Tidbits and PhiloTorah), I believe that knowing how the Jewish Calendar works is part of the mitzva of HaChodesh HaZeh Lachem, the mitzva to set the Jewish Calendar.

This knowledge is not necessary for us to know when Rosh HaShana is. Anyone can buy or download a ready-made calendar and see that Rosh HaShana 5787 is on Shabbat & Sunday, the first and second of Tishrei, Sept. 12-13.

But our knowing the workings of the Calendar - both when we have a Sanhedrin and when we don't, shows an appreciation to HKBH for the gift He gave AM YISRAEL right at its national birth.

With that said, let's look at how, with our current calendar, Rosh HaShana is fixed.

We start with the molad, the New Moon of Tishrei.

To do that, we have to see what the Rambam writes in his Hilchot Kiddush HaChodesh.

First, the definition of the Molad is the instant that the Sun and the

Moon are aligned as seen from Earth. That moment is considered the beginning of the cycle of the Moon through its phases - from no moon to crescent to waxing half to full moon (known as the Nigud, opposition) to waning half, to crescent to no moon once again.

That cycle varies from month to month (due to Kepler's Second Law of Planetary Motion - which I like to call G-d's Second Law of Planetary Motion that Kepler discovered) by up to several hours, but the average length of a lunation (the time from one Molad to the next) is 29 days, 12 hours, 44 minutes, and 1 cheilek (with 18 chalakim in a minute, a part is three and a third seconds).

The Rambam establishes the Molad of Creation and from that point he basically adds that 29:12:44:1 for each month until whatever time he wants. Actually, he breaks that time down to 28 days plus 1 day 12h 44m 1p which is the remainder after taking away four full weeks. The result is that the molad of any month is 1d 12h 44m 1p after the previous month's molad. He calculates the remainders for a full year, both a 12-month and a 13-month year. Then he finds the remainder of a 19-year lunar cycle which allows the calculation of the molad of Tishrei of the first year of a cycle.

The next step is to determine what year of a Lunar cycle we want. We

take the year's number - 5787 in our case, and divide it by 19. The result is 304 remainder 11. This means that 304 Lunar (19-year) cycles have been completed since Creation and that 5787 is the 11th year of the current cycle, the 305th one.

This tells us the status of the coming year. Years 3, 6, 8, 11, 14, 17, and 19 of a cycle are Shana M'uberet, 13-month years with two Adars.

Back to the molad of Tishrei 5787. It will be on Friday night (Leil RH) at 20h 59m 1p (corresponding to 9:35pm Israel Summer Time).

The Molad of Tishrei will determine when the first of Tishrei (the first day of RH) is.

The rule is that Rosh HaShana is the day of the Molad of Tishrei - UNLESS

Unless one of four exceptions exist.

If the Molad is after noon (which 9:35pm on Friday definitely is), then RH is on the following day.

This fits our situation exactly. The Molad is after chatzot, RH is the following day.

Also note that even had the molad been before noon, another "push" would take effect. Namely, when the Molad of Tishrei is on a Sunday, Wednesday, or Friday - RH is pushed to the following day.

Bottom line, Rosh HaShana 5787 is

Shabbat (and Sunday).

Let's finish up with another detail of the 5787 calendar. Knowing that it is a 13-month year, the Molad of the following year's Tishrei will be on a Thursday, 18h 31m 14p. That means that the Molad being after noon on Thursday pushes RH to Friday and then it gets pushed a second time because of LO ADU ROSH, Rosh HaShana is not fixed on a Sunday, a Wednesday, or a Friday.

So RH 5788 is scheduled to also be Shabbat-Sunday.

Last step: To go from Shabbat-RH 5787 to Shabbat-RH 5788 requires 5787 to have 385 days. In order for that to happen, Marcheshvan 5787 needs to be SHALEIM, needs to have a 30th day.

The coming year 5787 is coded - MEM-ZAYIN-SHIN.

MEM is for M'uberet - two Adars.

ZAYIN is for Shabbat, first day of RH.

SHIN is for Shaleim, both Marcheshvan and Kislev have 30days.

Buying a calendar or downloading one is easier. But this (for some people) is more fun, as well as it reflecting the twice used word in the mitzva presentation of LACHEM. The calendar, says HaShem, is YOURS. Use it, know it, and realize how special it makes AM YISRAEL.