

Holyday Dates – 2017
All dates & times are using Jerusalem, Israel
as “the center of the earth” (Ezek 38.12)
Universal Reference Point

1. Passover/First Day of Unleavened Bread – 4/11 Tuesday
2. Last Day of Unleavened Bread – 4/17 Wednesday
3. Feast of Firstfruits/Pentecost – 6/4 Sunday
4. Feast of Trumpets – 9/21 Thursday
5. Day of Atonement – 9/30 Saturday
6. Feast of Tabernacles – 10/5 Thursday
7. Last Great Day – 10/12 Thursday

The Holydays start at the previous day’s sunset. These Holydays are calculated using the astronomical data from <http://timeanddate.com> using the following major steps:

1. Calculate the Spring Equinox in Jerusalem
2. Find the next New Moon as the first month of the year
3. Find the next sunset in Jerusalem as the first day of year
4. Count to the 14th day as the **Passover**
5. Count to the 20th day as the **Last Day of Unleavened Bread**
6. Count 50 days from the morning after the Sabbath (Sunday) during the 14-20th days as the **Feast of Firstfruits/Pentecost** on a Sunday
7. Count to the 7th New Moon
8. Find the next sunset in Jerusalem as the first day of the 7th month and the **Feast of Trumpets**
9. Count to the 10th day as the **Day of Atonement**
10. Count to the 15th day as the **Feast of Tabernacles**
11. Count to the 22nd day as the **Last Great Day**

1. Calculate the Spring Equinox in **Jerusalem** under **Sun & Moon, Sun Calculator**

2017	Sunrise/Sunset		Daylength	
Mar	Sunrise	Sunset	Length	Difference
▼ 15	5:49 am → (92°)	5:47 pm ← (268°)	11:57:49	+1:57
▼ 16	5:48 am → (91°)	5:48 pm ← (269°)	11:59:47	+1:57
▼ 17	5:47 am → (91°)	5:49 pm ← (269°)	12:01:44	+1:57

The **Spring Season** begins at the Spring Equinox, which begins in Jerusalem on the day that starts on **3/16 at 5:48 PM** sunset, and ends **3/17 at 5:49 PM** sunset.

2. After this Spring Equinox date & time, find the first New Moon under **Sun & Moon, Moon Phases**, in **Jerusalem**. This the starting time of the first month of this year.

Moon Phases for Jerusalem, Israel in 2017

Lunation	New Moon		First Quarter	
1163			Jan 5	9:46 pm
1164	Jan 28	2:07 am	Feb 4	6:18 am
1165	Feb 26	4:58 pm	Mar 5	1:32 pm
1166	<u>Mar 28</u>	<u>5:57 am</u>	Apr 3	9:39 pm
1167	Apr 26	3:16 pm	May 3	5:46 am

The first new moon phase in the Spring Season is on March 28 **at 5:57AM**.

3. After above new moon date and time, find the next sunset in Jerusalem. This begins the first day of year.

2017	Sunrise/Sunset	
Mar	Sunrise	Sunset
▼ 26	6:35 am → (87°)	6:55 pm ← (273°)
▼ 27	6:34 am → (86°)	6:55 pm ← (274°)
▼ 28	6:33 am → (86°)	<u>6:56 pm ← (274°)</u>

March 28 at 6:56PM sunset begins the first day of the year, with day portion on **March 29**.

4. Count to the 14th day for **Passover**, which is **April 11** (begins previous sunset).

Calendar for Year 2017 (United States)

January							February							March						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7	5	6	7	8	9	10	11	5	6	7	8	9	10	11
8	9	10	11	12	13	14	12	13	14	15	16	17	18	12	13	14	15	16	17	18
15	16	17	18	19	20	21	19	20	21	22	23	24	25	19	20	21	22	23	24	25
22	23	24	25	26	27	28	26	27	28	26	27	28	29	30	31					
29	30	31																		
5:○	12:○	19:○	27:●	3:○	10:○	18:○	26:●	5:○	12:○	20:○	27:●									

April							May							June							
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	
						1	1	2	3	4	5	6							1	2	3
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10	
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17	
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24	
23	24	25	26	27	28	29	28	29	30	31	25	26	27	28	29	30					
30																					
3:○	11:○	19:○	26:●	2:○	10:○	18:○	25:●	1:○	9:○	17:○	23:●	30:○									

5. Count 7 days, starting on and including Passover, to the **Last Day of Unleavened Bread, April 17th**.

6. Count 50 days from the morning after the Sabbath (Sunday) during the Days of Unleavened Bread to the **Feast of Firstfruits/Pentecost** on a Sunday, **June 4th**.

7. Count to the 7th New Moon, **September 21**, which is the **Feast of Trumpets**.

Calendar for Year 2017 (United States)

January							February							March						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
1	2	3	4	5	6	7				1	2	3	4			1	2	3	4	
8	9	10	11	12	13	14	5	6	7	8	9	10	11	5	6	7	8	9	10	11
15	16	17	18	19	20	21	12	13	14	15	16	17	18	12	13	14	15	16	17	18
22	23	24	25	26	27	28	19	20	21	22	23	24	25	19	20	21	22	23	24	25
29	30	31	26	27	28	26	27	28	29	30	31									
5:☉ 12:☉ 19:☉ 27:☉	3:☉ 10:☉ 18:☉ 26:☉	5:☉ 12:☉ 20:☉ 27:☉																		

April							May							June						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1	1	2	3	4	5	6				1	2	3		
2	3	4	5	6	7	8	7	8	9	10	11	12	13	4	5	6	7	8	9	10
9	10	11	12	13	14	15	14	15	16	17	18	19	20	11	12	13	14	15	16	17
16	17	18	19	20	21	22	21	22	23	24	25	26	27	18	19	20	21	22	23	24
23	24	25	26	27	28	29	28	29	30	31	25	26	27	28	29	30				
30																				
3:☉ 11:☉ 19:☉ 26:☉	2:☉ 10:☉ 18:☉ 25:☉	1:☉ 9:☉ 17:☉ 23:☉ 30:☉																		

July							August							September						
Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa	Su	Mo	Tu	We	Th	Fr	Sa
						1			1	2	3	4	5					1	2	
2	3	4	5	6	7	8	6	7	8	9	10	11	12	3	4	5	6	7	8	9
9	10	11	12	13	14	15	13	14	15	16	17	18	19	10	11	12	13	14	15	16
16	17	18	19	20	21	22	20	21	22	23	24	25	26	17	18	19	20	21	22	23
23	24	25	26	27	28	29	27	28	29	30	31	24	25	26	27	28	29	30		
30	31																			
9:☉ 16:☉ 23:☉ 30:☉	7:☉ 14:☉ 21:☉ 29:☉	6:☉ 13:☉ 20:☉ 27:☉																		

From above chart, it appears that the 7th New Moon occurs on **September 20th**, a Wednesday.

But from below chart, the New Moon in Jerusalem, Israel occurs at 8:29am on September 20th, a Wednesday.

Therefore, the sunset that occurs at the end of September 20th begins the New Moon, and is the Feast of Trumpets. The **day** portion of that Holyday occurs on **September 21st**, a **Thursday**.

Moon Phases for Jerusalem, Israel in 2017

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1163			Jan 5	9:46 pm
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1165	Feb 26	4:58 pm	Mar 5	1:32 pm
1166	Mar 28	5:57 am	Apr 3	9:39 pm
1167	Apr 26	3:16 pm	May 3	5:46 am
1168	May 25	10:44 pm	Jun 1	3:42 pm
1169	Jun 24	5:30 am	Jul 1	3:51 am
1170	Jul 23	12:45 pm	Jul 30	6:23 pm
1171	Aug 21	9:30 pm	Aug 29	11:12 am
1172	<u>Sep 20</u>	<u>8:29 am</u>	Sep 28	5:53 am
1173	Oct 19	10:12 pm	Oct 28	1:22 am
1174	Nov 18	1:42 pm	Nov 26	7:02 pm
1175	Dec 18	8:30 am	Dec 26	11:20 am

8. Count from and including September 21st to the 10th day which is the **Day of Atonement**, September 30th, a Saturday.

9. Count to the 15th day as the **Feast of Tabernacles**, **October 5th**, a Thursday. This Feast lasts 7 days through October 11th, a Wednesday.

10. The next day is the **October 12th**, a Thursday, and is the **Last Great Day**.