## **STAR PARTY DATES for 2020**

## --- CHANDLER MOUNTAIN SATURDAYS ---

| Date   |   | Sun<br>Set<br>PM | Moon<br>Rise |    |   | Moon<br>Set |    | Moon<br>Phase   |       | <b>Civil</b><br>PM | Twilight<br>Nautical<br>PM | Astron. |
|--------|---|------------------|--------------|----|---|-------------|----|-----------------|-------|--------------------|----------------------------|---------|
| 25-Jan |   | 5:08             | 7:29         | AM |   | 5:59        | PM | Crescent Waxing | (0.1) | 5:39               | 6:09                       | 6:39    |
| 22-Feb |   | 5:35             | 6:42         | AM | * | 4:48        | РМ | Crescent Waning | [1.5] | 6:04               | 6:33                       | 7:02    |
| 21-Mar | M | 5:58             | 6:16         | AM | * | 3:39        | РМ | Crescent Waning | [3]   | 6:26               | 6:55                       | 7:25    |
| 18-Apr |   | 7:19             | 4:48         | AM | * | 3:28        | РМ | Crescent Waning | [4.6] | 7:49               | 8:19                       | 8:51    |
| 23-May |   | 7:45             | 6:21         | AM |   | 8:50        | РМ | Crescent Waxing | (0.2) | 8:18               | 8:52                       | 9:29    |
| 20-Jun |   | 7:59             | 5:46         | AM | * | 7:39        | РМ | Crescent Waning | [1.2] | 8:32               | 9:08                       | 9:47    |
| 18-Jul |   | 7:54             | 4:28         | AM | * | 6:26        | РМ | Crescent Waning | [2.8] | 8:27               | 9:02                       | 9:39    |
| 15-Aug |   | 7:31             | 3:10         | AM | * | 5:09        | РМ | Crescent Waning | [4.3] | 8:01               | 8:33                       | 9:06    |
| 19-Sep |   | 6:45             | 8:53         | AM |   | 7:59        | РМ | Crescent Waxing | (1.8) | 7:14               | 7:43                       | 8:12    |
| 17-Oct |   | 6:08             | 7:39         | AM |   | 7:03        | РМ | Crescent Waxing | (0.2) | 6:37               | 7:06                       | 7:35    |
| 14-Nov |   | 4:41             | 6:35         | AM | * | 4:33        | РМ | Crescent Waning | [1.4] | 5:12               | 5:42                       | 6:12    |
| 12-Dec |   | 4:37             | 5:24         | AM | * | 3:05        | РМ | Crescent Waning | [3]   | 5:09               | 5:40                       | 6:10    |

## **Twilight Legend:**

Civil = ends when the center of the Sun is more than 6° below the horizon (the point of civil dusk)

Nautical = when the center of the Sun is more than 6° below the horizon but less than 12°
Astronomical = when the center of the Sun is more than 12° below the horizon but less than 18°

## Moon Phase Legend:

Crescent Waxing = just past new; setting in western sky after sundown

Gibbous Waxing = just before full; sets in western sky between midnight and sunrise

Full = rises at sunset and transits at midnight

Gibbous Waning = just past full; rises in eastern sky after sundown

Crescent Waning = just before new; rises in eastern sky before dawn (sets before sundown)

\* Moon rise time next morning (important on Crescent Waning only, and on Gibbous Waning just

before midnight, since third quarter rises at midnight)

The cuttoff of concern is given by 29.5306 / 4 + 1 day, since after this point the Moon will rise

after midnight (i.e., the next day)

(#) number of days after new

[#] number of days before new

Daylight Savings Time (DST) begins March 8 and ends November 1

During Daylight Savings Time CDT+5=UT
During Standard Time CST+6=UT