

INSTRUCTIONS

The lunawheel is a circular slide-rule moon-phase calendar. It can be used to determine the moon phase for any date between January 1, 1AD and December 31, 4000AD.

First, let's become familiar with the main parts of the lunawheel. From outside inward, there are two yellow dials for selecting the year, two white dials for selecting the month and day, and an inner blue area that gives moon phase information including approximate rise, transit, and set times and tide information.

To begin, find the first two digits of the year on the outer yellow dial (assuming a 4-digit year). Then find the last two digits of the year on the inner yellow dial. Now rotate the inner yellow dial so that the first two and last two digits of the year align. Now find the month on the outer white dial and the black arrowhead on the inner white dial. Rotate the inner white dial so that these align (see special note 1 below for January and February). Finally compare the specific day of the month on the inner white dial with the moon phase indications in the blue field. Additionally, please note the following.

1. There are two possible ways to align for January and February. Choose the one that matches the color of the last two digits of the year (either red or blue). If the last two digits of the year are black, then match the color of the first two digits of the year instead.
2. The number of days in each month is indicated by the colors of the months (except for February, where the number of days therein is indicated by the color of the year (red or blue) as described in 1 above).
3. Moon phase is based on the mean ecliptic longitude of the moon minus the mean ecliptic longitude of the sun. Dates and times are based on mean solar time reckoned from the Greenwich meridian.
4. For dates during the 1500's, 1600's, and 1700's, one must choose either "OS" (Old Style Calendar) or "NS" (New Style Calendar) when selecting the first two digits of the year. (The Old Style Calendar was phased out of common use between 1582 and the mid 1700's in favor of the New Style Calendar.)
5. From center outward, information provided in the blue field is as follows: transit time, rise and set times, range and time of tides (compared to spring tides), and mean elongation of the moon from the sun in degrees.