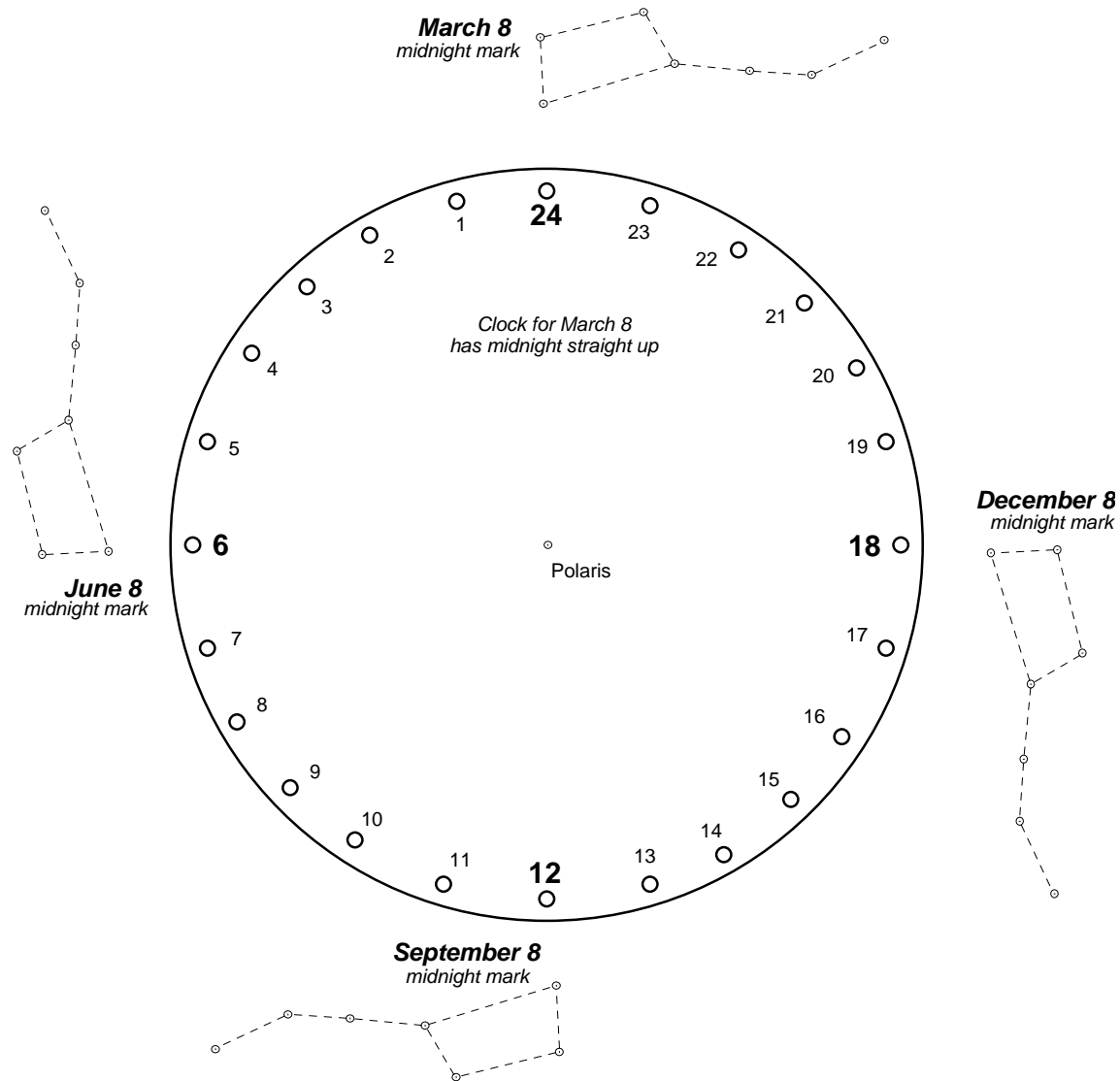


Astronomy Merit Badge

TELL TIME BY THE BIG DIPPER



Using the Big Dipper to tell time (by the line from the pointer stars to Polaris) is easy.

- It's a backwards (counter-clockwise) running 24-hour clock, because the earth turns west to east a full turn every 24 hours, and
- It runs fast. Due to the earth's yearly orbit around the sun, it gains 24 hours each year.

So to use the clock you only need to do two things.

- Remember the 24-hour clock face, shown above, and
- Adjust the 24-hour (midnight) mark on the clock to the current date. 24 hours in 12 months is two hours every month, so shift the midnight mark up by two hours (counter-clockwise) on the clock each month, or a half-hour each week. Some key dates to remember are shown on the drawing.