



# Stargazing Guide: September 2019

## The Moon

You will see the different phases of the Moon at different times of day as they will be placed differently with respect to the Sun.

A good time to look is at First Quarter, when the Moon is visible in the early evening and lit from the side, casting long shadows which highlight its features.



## Planets

**Mercury, Venus, and Mars**, all start the month close to The Sun and will be impossible to see safely, as the month progresses they all start to distance themselves with Mars appearing ahead of the Sun and therefore visible before sunrise at the end of the month. Mercury and Venus trail behind the Sun and can be seen shortly after sunset to the west.

**Jupiter and Saturn** continue to be visible in the sky towards the South as the sun sets, one either side of the band of the Milky way. Jupiter sets first before midnight throughout the month and the Saturn around two hours later.

## Tip of the Month

When trying to see faint objects try looking slightly to one side, rather than directly. This is called **Averted Vision**.

Inside the back of your eye (on the **retina**) there are light receptors which detect the light entering your eye and send signals through to your brain. There are two different types of light receptor: **rods** and **cones**. Rods only detect light/dark, but don't need a lot of light to work. **Cones** see different colours, but need quite bright light to do this.

In the very centre of your eye (the **macula**) you have mostly cones. This means the centre of your vision is not very good for seeing in the dark! Try looking out of the corner of your eye so you catch the starlight on the edge of your retina. It's amazing how much more you can see.

This reliance on rods explains why it's difficult to see the colour of stars. You can sometimes see the colour of very bright stars, else binoculars or long-exposure photography can help.

Download this star guide and those for other months from:  
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