

May is when astronomers in these latitudes start to moan that the sun is riding high and we have to do gardening. But all is not lost, because if you stay up late enough, there are still things to see.

Jupiter should become visible as a very bright star towards the South from about 9.30pm. It's good just to be able to identify this wanderer (so called because the planets constantly change position in the sky), but if you have some binoculars, it is also worth a detailed look.

It can be tricky holding binoculars steady, especially after the evening wine ration. But if you can find a wall or something else to rest on, you can get a good view. (The late great Patrick Moore suggested using an upturned broom, but that can be a bit prickly). With binoculars you should be able to see some or all of Jupiter's 4 largest moons as bright points on either side of the planet. These change positions quite quickly, and appear in different places on different nights.

Jupiter is one of the first things to be seen after sunset because it is much brighter than any star. But thereby hangs a tale, because astronomers have a strange way of describing brightness.

It all started with the ancient Greek astronomer Hipparchus who concluded that the brightness of stars was due to their size. So he divided the stars into categories according to their "magnitude". And since it is difficult to compare stars which are some distance apart in the sky, he decided to divide them into six broad categories – first magnitude being the brightest, and sixth magnitude the faintest.

Hipparchus's system has been extensively refined over the years and turned into a precise form of measurement. But it retains the strange feature that high magnitudes represent faint objects, and low magnitudes represent bright objects, with the very brightest having negative values. For example, on average Jupiter has a magnitude of about minus 2.

But magnitude isn't the only strange way astronomers categorize stars. They use an odd system of describing their colour in terms of "classes", in which each class has a letter. But even these don't run in order. The main classes of stars are O, B, A, F, G, K, M, R and N which are often remembered by a politically incorrect mnemonic: "Oh be a fine girl, kiss me right now".

Everyone except the printer seemed to enjoy the night sky colour chart from last month, even if only as abstract art. So I have attempted to reproduce the actual colours of the first seven classes, from hot blue class "O" stars, to cool "red"

class “M” ones. So do get out at night and have a look. Can you see any colour differences in the stars? (Thanks to Mitchel Charity from MIT whose article suggested the true colour values).

Starboy,
Reeth Informal Astronomy group
www.reethastro.org

