Zodiac constellations 5: Sagittarius



The name of the 15th largest constellation is Latin for 'the archer'. One of Ptolemy's Greek 48 constellations, the half-animal / half-human centaur with a bow represents mythological Crotus, the son of Pan. However, it was the Babylonians who first identified this group of stars as one of their gods, a strange centaur-like creature firing an arrow from a bow. This god had invented archery and went hunting on horseback with his weapon.

The Sun passes through Sagittarius from late December to late-January and is, thus, the constellation of the winter solstice in the northern hemisphere. It is located between Scorpius and Capricornus on the ecliptic. The archer's arrow points at Antares, the 'heart' of Scorpius.



The most recognisable feature of this large, prominent constellation is the 'teapot'. In clear conditions, the dense area of the Milky Way appears to be steam rising from spout. The exact centre of the galaxy is thought to coincide with radio source Sagittarius A*, a prominent radio source found near where borders of Sagittarius, Ophiochus and Scorpius meet.

Because the sightline to the galaxy centre passes through Sagittarius, the constellation contains numerous clusters and nebulae, including 15 Messier objects.

Notable features include

- Lagoon nebula (M8): a large patch of glowing gas visible to the naked eye.
- Omega nebula (M17): a gaseous nebula taking its name from the similarity in its shape to Greek letter omega (Ω). It is also known as the Swan nebula. It is visible through binoculars.



• Trifid nebula (M20): this spectacular emission nebula is named for the three dark lands of dust that trisect it. It is visible through a telescope.

- M22: an impressive globular cluster. Although visible to the naked eye, it is best viewed with binoculars. A telescope enables observation of individual stars.
- M23: a large open cluster. Binoculars give a general view, while a telescope allows sighting of individual stars.
- M24: a bright Milky Way starfield visible through binoculars.

In the southern hemisphere, these, and other objects in Sagittarius can be observed during the winter months.

Sources: Ridpath, I (Ed) 2012 Oxford dictionary or astronomy Oxford, OUP, Ridpath, I (Ed) 2006 Astronomy London, Dorling Kindersley, en.wikipedia.org