



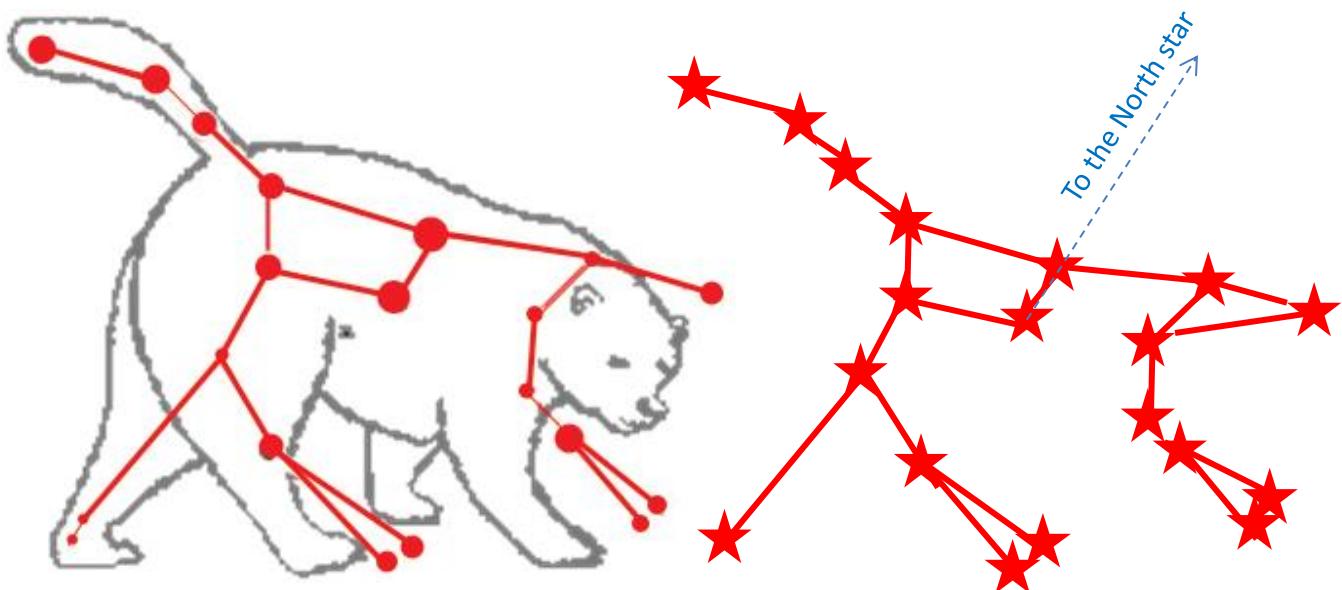
The University of Manchester  
Jodrell Bank Observatory

# Jodrell Bank Discovery Centre

## Constellation spotting guide

This document has been created to help you find 11 of the brightest constellations in the sky. Some of them can be viewed all year round, whereas some of them depend on the season. All can be seen from the UK.

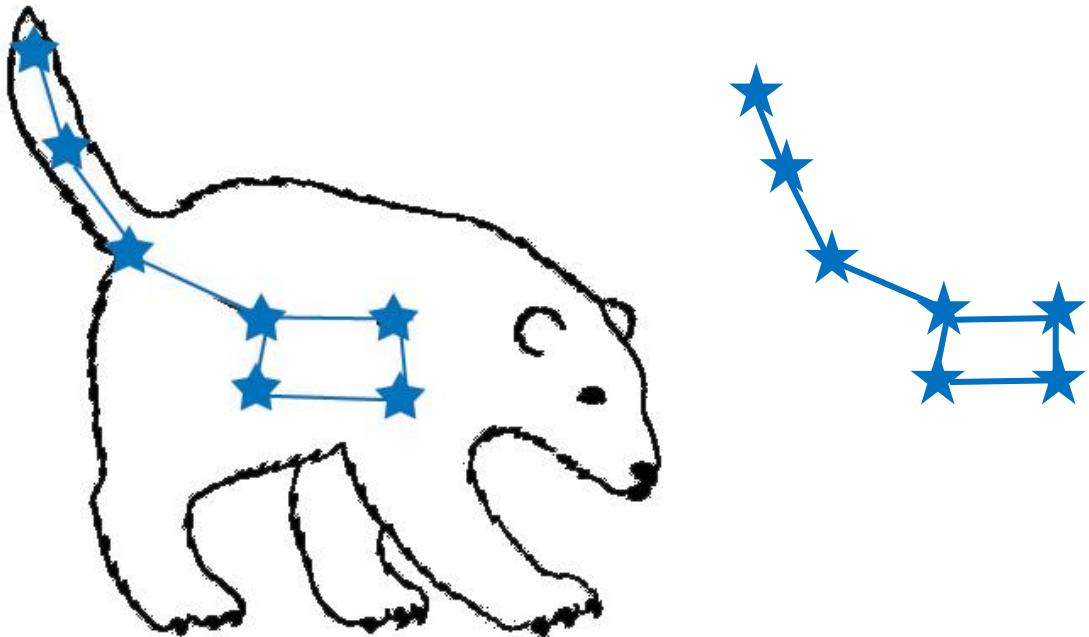
# Ursa Major - the Great Bear



**When and where to find it:** Ursa Major is visible all year round from the UK. It appears in the northern part of the sky and contains the famous pattern known as the Plough or Big Dipper. Two of the stars of the Plough are known as 'pointers' as they point the way to the North Star, Polaris.

**Mythology:** In Greek mythology, the Great Bear is Callisto, with whom Zeus fell in love. Zeus' wife Hera turned Callisto into a bear in her jealousy. Callisto narrowly escaped being shot by her son, Arcas, who came across her whilst out hunting in a forest. Zeus transformed Arcas into a bear and then transported the two bears to the heavens.

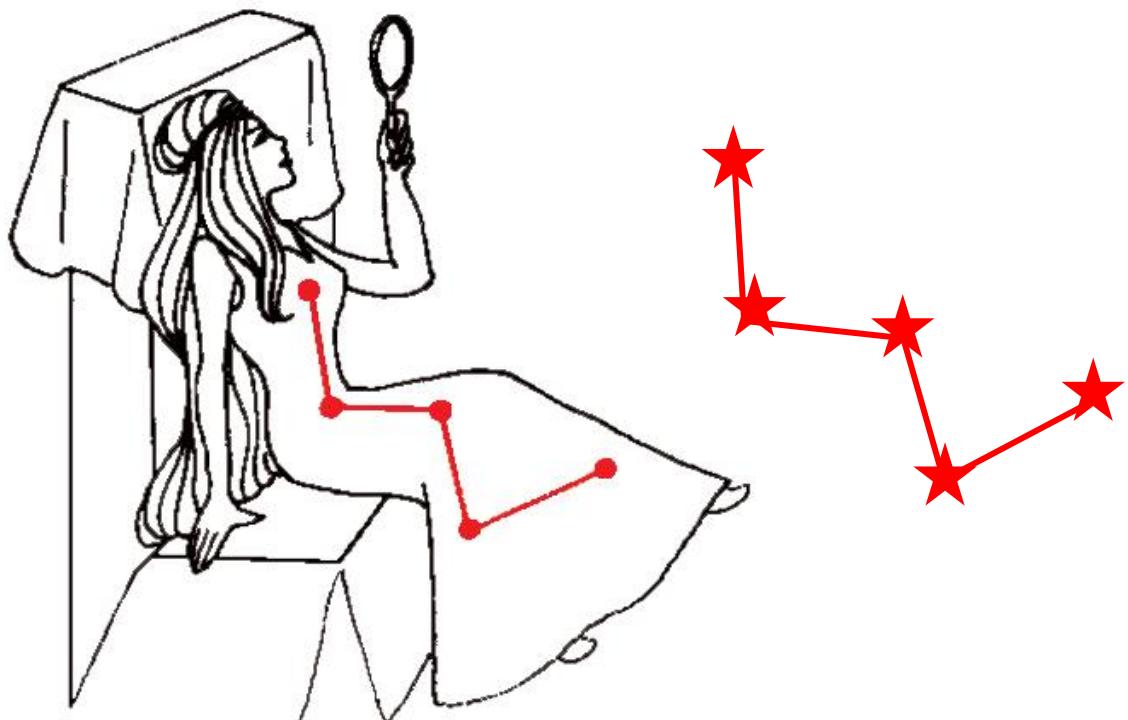
# Ursa Minor - the Little Bear



**When and where to find it:** Ursa Minor is visible all year round from the UK. The tip of its tail is Polaris (the 'North Star') which lies nearly directly 'above' the earth's North Pole. As the Earth spins Polaris does not seem to move in the sky and so it can be used for navigation- it is always in the same place and so 'points' the way North.

**Mythology:** In Greek mythology, the little bear is Arcas, son of Callisto, who was transformed by Hera into a bear (the 'Great Bear'). When Arcas was 15, he was out hunting in the forest when he came across a bear – his mother who had been transformed. He could not recognize her in her strange shape, and was preparing to shoot her when Zeus prevented him. Zeus transformed Arcas into a bear and the two were taken up into the sky.

# Cassiopeia - the Queen



**When and where to find it:** Cassiopeia is visible all year round from the UK. It lies in the northern part of the night sky.

**Mythology:** Queen Cassiopeia was the vain wife of King Cepheus and mother of Andromeda. Cassiopeia boasted that she was fairer than the Nereids, the sea nymphs noted for their beauty. Poseidon, god of the sea, sent the sea monster Cetus to punish the Queen for offending the sea-nymphs. She offered Andromeda as a sacrifice to the monster but luckily Andromeda was rescued by the hero Perseus.

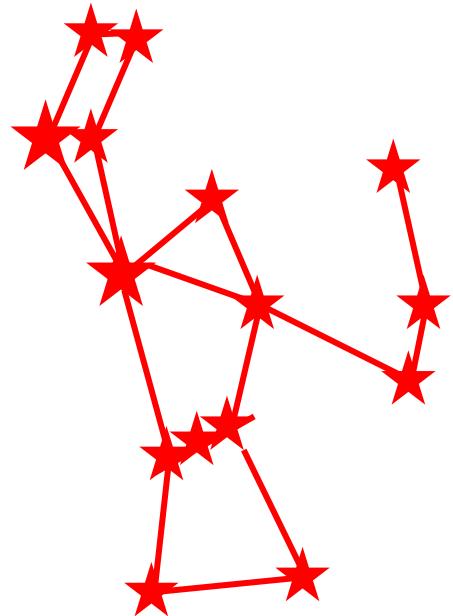
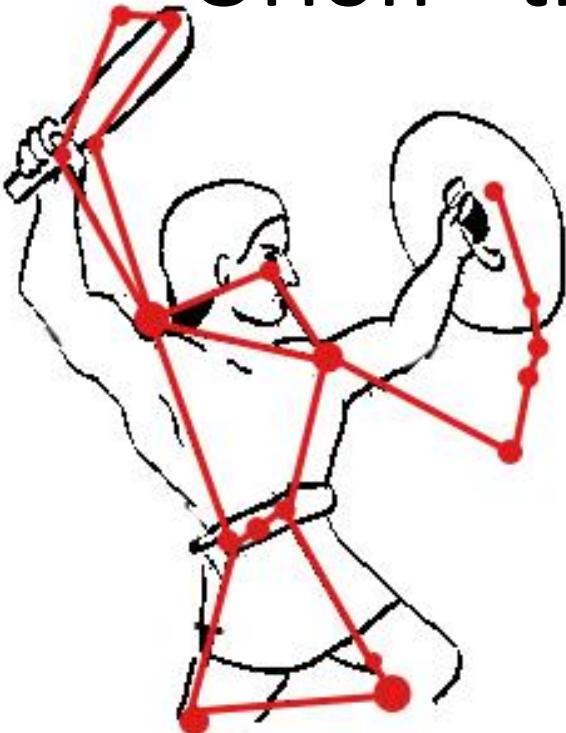
# Taurus- the Bull



**When and where to find it:** Taurus is a winter and spring constellation for the UK. Its brightest star, Aldebaran, marks the red bull's eye (on the left as we view it). Within the constellation (to the right of the V-shape) lies the star cluster the Pleiades or 'Seven Sisters'.

**Mythology:** According to Greek stories, Taurus was one of the disguises of Zeus, King of the Gods. He changed himself into a beautiful white Bull to woo the princess Europa. He persuaded her to climb onto his back and then he swam across the Mediterranean Sea, taking Europa all the way to the Island of Crete. Zeus and Europa became the parents of Minos, the legendary king of Crete.

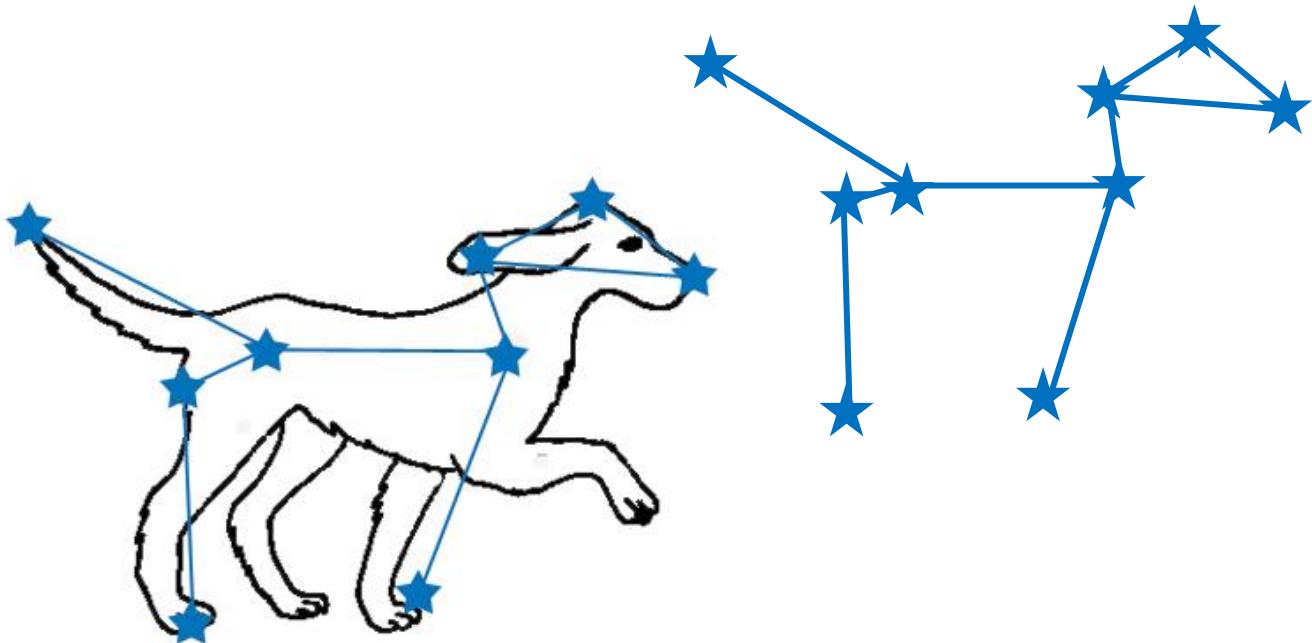
# Orion - the Hunter



**When and where to find it:** Orion is a winter/spring constellation for the UK. The three stars across the middle are easy to spot and known as ‘Orion’s Belt’. The star at Orion’s left shoulder is a red supergiant star called Betelgeuse, the star at his right knee is a blue supergiant called Rigel.

**Mythology:** In Greek mythology Orion was a mighty hunter and he features in many tales. One story tells of his love for the Seven Sisters (the stars of the Pleiades which he seems to pursue across the sky), another tells of his ability to walk on water. There are different stories of his death – in one tells of his boast that he could kill any creature alive. The Earth is said to have opened up and out came a scorpion which stung and killed him. Zeus is said to have put Orion and the Scorpion on opposite sides of the sky.

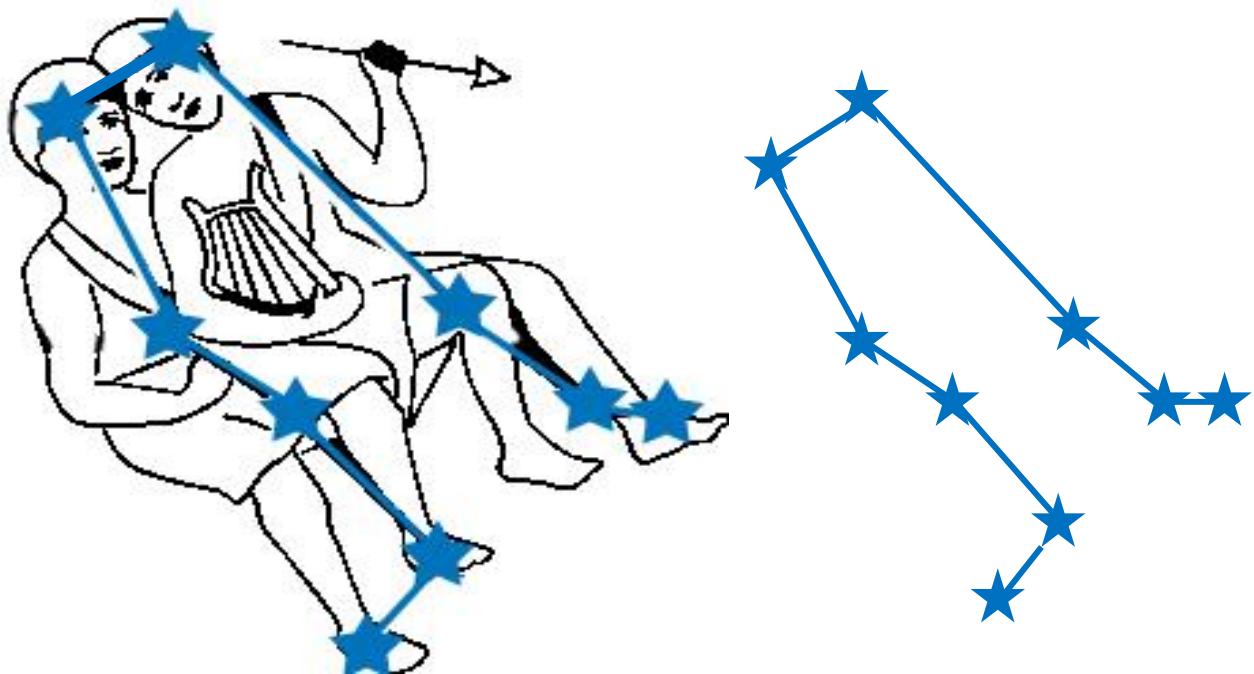
# Canis Major - the Great Dog



**When and where to find it:** For the UK, Canis Major is a winter and spring star pattern, appearing low in the south. Its brightest star, Sirius (the dog's 'nose'), is the brightest star in our night sky. Sirius is a white star, its name means 'scorching'. It is sometimes called the 'Dog star'.

**Mythology:** Canis Major is the largest of Orion's two hunting dogs and is chasing Lepus, the hare, which is just in front of him.

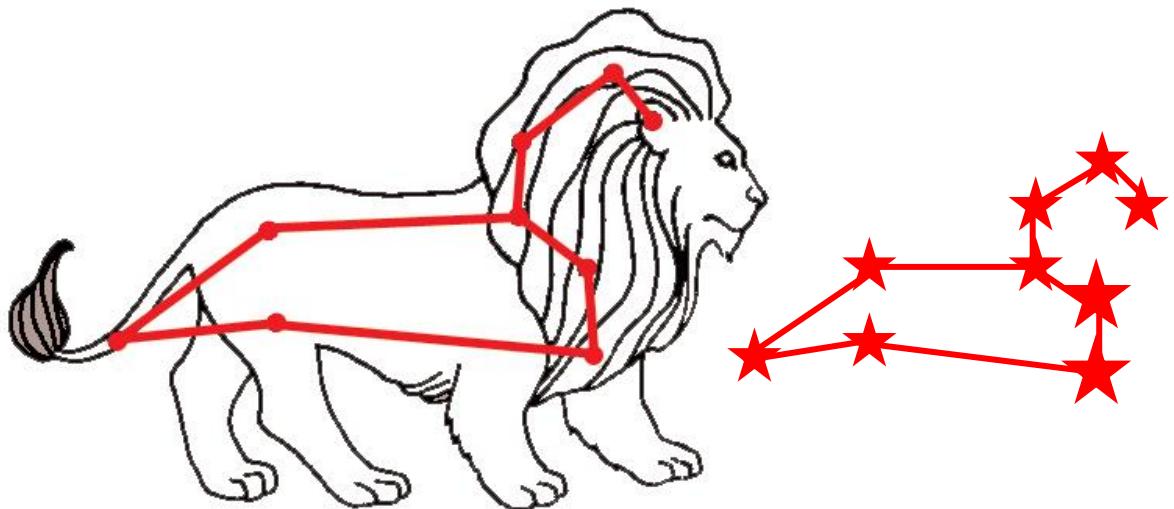
# Gemini twins



**When and where to find it:** Gemini is a winter and spring constellation for the UK. Its two brightest stars are Castor and Pollux – the twins' heads. Castor is a white binary star (two stars in orbit around each other), Pollux is an orange star.

**Mythology:** The pattern represents the twins, Castor and Pollux who were brothers of Helen of Troy. Pollux was immortal and famous for his strength whilst Castor was mortal and famous for his skill with horses. They both travelled on the ship the Argo with Jason in search of the Golden Fleece. When Castor died, his brother is said to have been so sad that Zeus reunited them in the heavens.

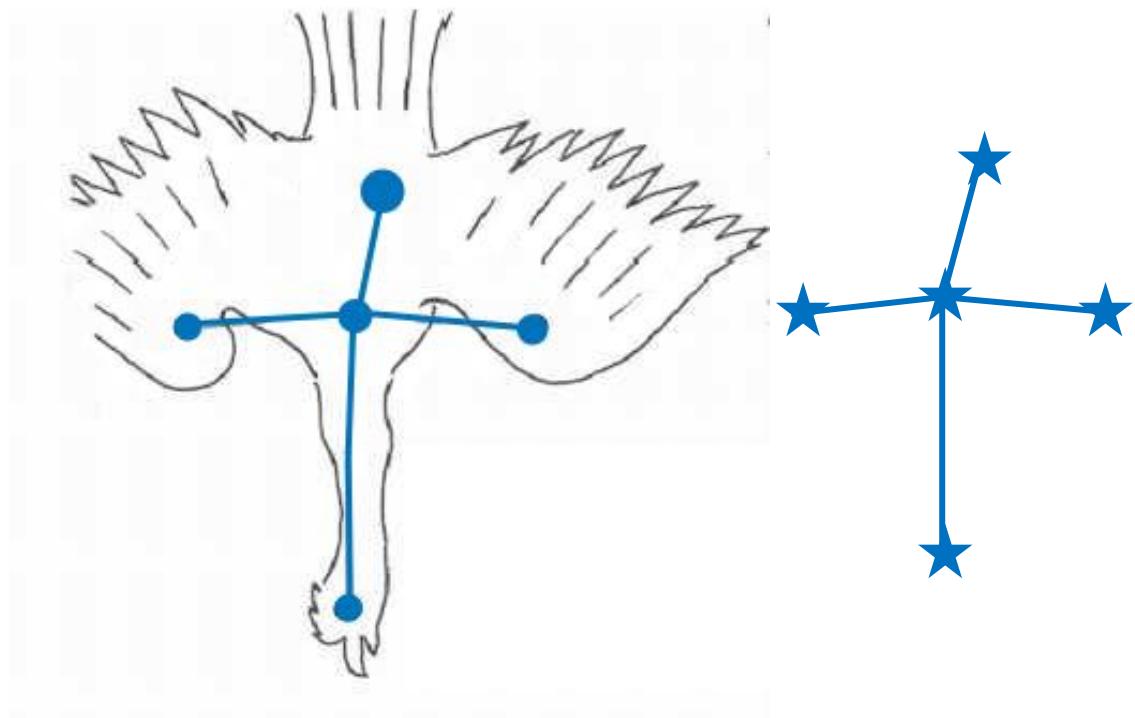
# Leo - the Lion



**When and where to find it:** Leo is a constellation of the zodiac and a spring star pattern for the UK. Its brightest star is Regulus (meaning 'little king'), a blue-white star. The lion's head is easiest to spot as it forms a sickle shape or backwards question mark (Regulus makes the dot of the question mark).

**Mythology:** Many cultures see this as a lion. The Greeks see this as the famous creature that terrorized the people of Nemea and had a hide that could not be punctured by iron, bronze or stone. It was finally killed by Heracles ('Hercules' from Roman mythology) who broke all his weapons fighting it. It was placed in the heavens by Zeus.

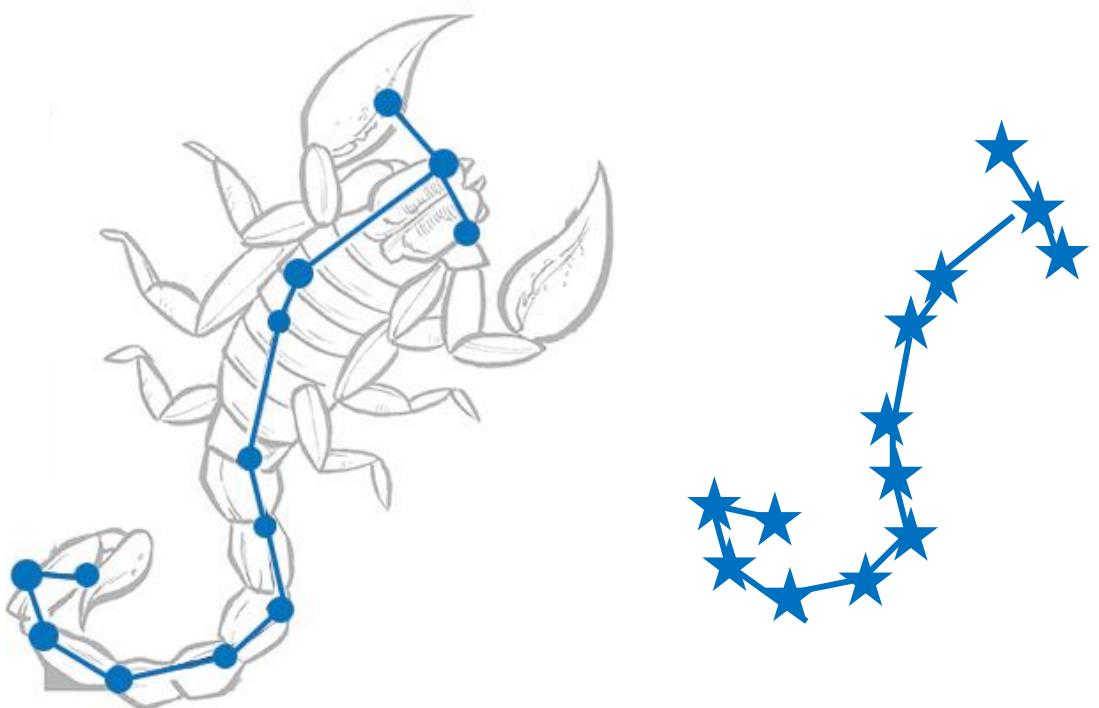
# Cygnus - the Swan



**When and where to find it:** Cygnus is a summer constellation for the UK and sometimes known as the 'Northern Cross'. The tail star, Deneb, forms one of the three points of the asterism (star pattern) the 'Summer Triangle'. The two other points of the triangle are Vega (in Lyra) and Altair (in Aquila).

**Mythology:** In Greek mythology Cygnus is Zeus in one of his many disguises. In the Chinese love story of Qixi, the bright star Deneb marks the magpie bridge across the Milky Way, which allows the separated lovers Niu Lang – the Cowherd (Altair) and Zhi Nü – the Weaver Princess (Vega) to be reunited on one special night of the year in late summer.

# Scorpius – the Scorpion



**When and where to find it:** Scorpius is best seen in July and August in the UK, although it appears so low on the horizon that only the top half of the pattern can be seen. Its brightest star is Antares, a name which means 'rival of Mars' as this star glows red in the sky.

**Mythology:** Scorpius is seen as the creature sent to sting and kill Orion when he boasted to the gods that he had killed every wild creature on Crete. Orion and the scorpion were placed on opposite sides of the sky so they would never be above the horizon at the same time. According to South Pacific mythology, Scorpius is a giant fishhook used by the great god Maui to bring forth the islands from the sea. A giant fishhook is often worn round the neck by antipodeans.

# Pegasus – the Flying Horse



**When and where to find it:** Pegasus is a large constellation, visible during autumn for the UK. Its four leading stars are easy to recognize and often called ‘the Square of Pegasus’.

**Mythology:** In Greek mythology Pegasus was a magical, winged horse that sprang from the blood of the Gorgon Medusa when she was killed by the hero Perseus.