# Night Sky Worksheet

Here are some fun facts about the night sky and what you can see in the Northern Hemisphere!

Challenge – use this information to complete the bingo worksheet; were you able to find your zodiac sign?

Tip: Use the app 'sky view' point phone to the sky that will name the planets and constellations you see.

### Fun Facts

- There are 88 constellations in total
- Orion is the most commonly seen it shows a hunter from Greek mythology (giant human who Zeus placed among the stars, along with the scorpion that killed him, constellation for Scorpios)
- Ursa Major and Minor depict two bears large and small
- Within Ursa major is the big dipper which leads the way to the north star.
- Draco in Northern Hemisphere depicts a dragon
- Pegasus from Greek mythology shows a flying horse
- Zodiac signs come from stars, used by ancient cultures to know the time of year
- Constellations were used to keep track of the calendar
- Constellation is Latin for 'set in the stars'
- Biggest is Hydra = 3.16% of the sky
- Smallest is Crux = 0.17% of the sky
- Planets can be seen from the sky
- Most seen planets are Mercury, Mars, Venus, Jupiter and Saturn.

# What can I see in the UK?

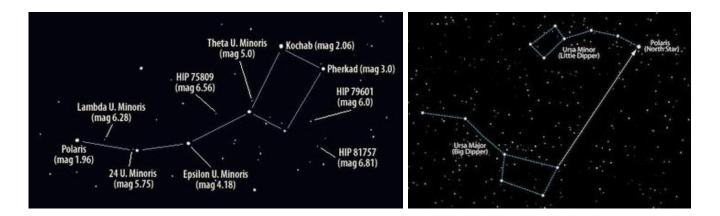
### <u>Ursa Major</u>

- Ursa Major is Latin for "greater bear"
- It is the 3<sup>rd</sup> largest constellation
- How to find it?
  - Look right above the horizon
  - Identified by its 7 brightest stars called the Plough (or big sipper) due to its shape



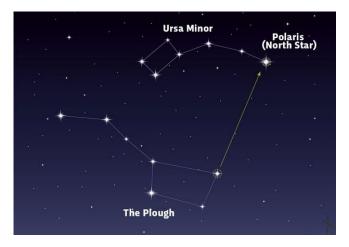
### <u>Ursa Minor</u>

- Ursa Minor is Latin for "lesser bear"
- Also identified by the Plough but smaller (or little dipper)
- Important in Navigation contains the Polaris that indicates North
- How to find it?
  - Look right above the horizon
  - Plough shaped (smaller than the Ursa Major)
  - o Contains the Polaris the brightest star in the constellation



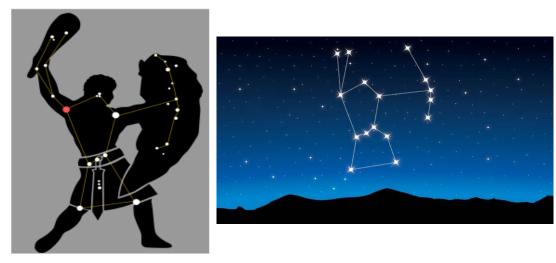
# The North Star (Polaris)

- Brightest star in the Ursa Minor constellation
- 48<sup>th</sup> brightest star in the night sky
- Positioned above the North Pole, indicates the North
- Used for navigation
- How to find it?
  - o Last star on the handle of the Ursa Minor
  - Find the Ursa Major and follow an imaginary line coming from the two outer stars in the Plough (shown in the diagram below)



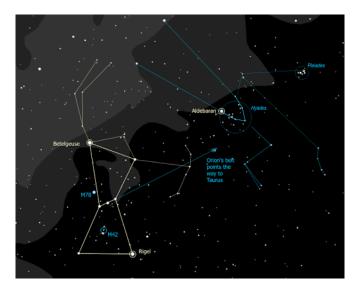
# <u>Orion</u>

- Visible in the North Hemisphere in the Winter
- Portrays Orion, a hunter from Greek mythology
- How to find it?
  - Characterised by 3 bright stars in a row Orion's belt



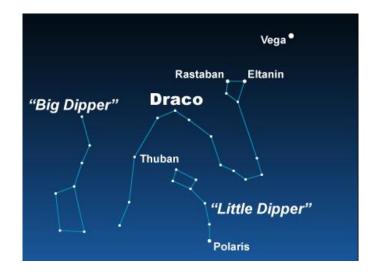
### <u>Taurus</u>

- Name means "bull"
- One of the biggest constellations
- Part of the Zodiac constellations
- How to find it?
  - $\circ~$  Find Orion's belt
  - Follow the 3 stars that pointing east that will lead to the centre of the Taurus constellation



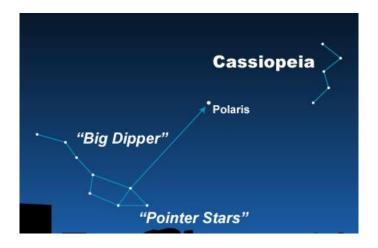
# <u>Draco</u>

- Draco is Latin for dragon
- Can be seen all year in the Northern Hemisphere
- How to find it?
  - Find the Plough in the Ursa Major and the Polaris
  - Draco's tail starts between the Polaris and the Plough
  - Characterised by 14 bright stars



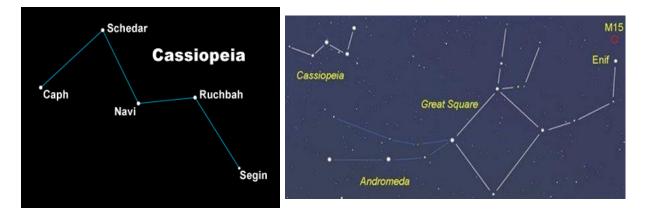
# <u>Cassiopeia</u>

- Named after Queen Cassiopeia in Greek mythology
- Characterised by a W or M shape made of 5 bright stars
- Visible all year in Northern Hemisphere
- How to find it?
  - Look for a W or M shape



#### <u>Pegasus</u>

- Named after the winged horse Pegasus in Greek mythology
- Seen in the Summer and Autumn in the Northern Hemisphere
- How to find it?
  - Draw a line from any star in the handle of the Plough going through the Polaris and you'll find a W or M shaped constellation – Cassiopeia
  - Draw a new line from the Polaris going through the *Caph* star in Cassiopeia and you will find the great square in the Pegasus constellation



Mars

- Named after the Roman god of war, Mars
- It is thought that Mars used to have water in the liquid form
- Has the solar system's largest volcano, Olympus Mons, with a maximum height of 16 miles
- How to find it?
  - Mars will appear as a very bright red dot in the sky

