<u>Upton Heath Primary School</u> <u>'Virtual' Astronomy Club</u>

Some things to observe in the evening skies December 2020 - January 2021

The Moon:

To view craters (with a small telescope or binoculars) best time is around **first quarter Moon** which will be about the **21st December** and 20th January (around 6.00pm and later) looking South.

The Planets:

Despite all that is going on the planets have put on a great show over the last few months and continue to do so. Throughout December **Jupiter and Saturn** continue to be visible but now VERY low to the SouthWest at dusk (about 5.00pm) and on the 17th are close to a very thin crescent Moon.

However on and around the **21**st **December** both planets will appear to almost touch as they line up in the sky. Astronomers call this a conjunction. You will need a clear SW horizon and CLEAR SKIES! Not to be missed.

On the other hand **Mars** remains high in the sky in the early evenings drifting from SE to SW as we go through December and into January. On the 23rd December it is close to a nearly first quarter Moon. Mars will not be this bright again for another fifteen years!

A few **constellations** to learn and recognise: (see the Skymap)

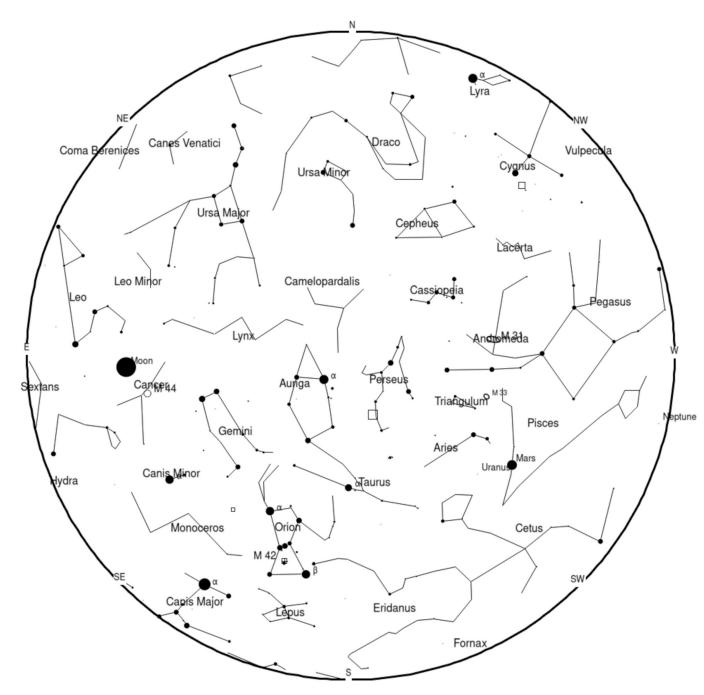
This session is a wonderful time for enjoying the magnificent constellation of **ORION** (The Hunter). He is supposed to be using a bow and arrow with a sword hanging from his belt. Four bright stars show his shoulders and feet. Three bright stars also show his belt and below his belt a line of dimmer stars show his sword hanging down.

His top left (east) shoulder is the orangy star BETELGEUSE. This is a RED-GIANT star which is expanding and nearing the end of its life (in a few million years!?). Perhaps the best part to observe with binoculars and a small telescope is the sword. Here you can see what looks like a fuzzy cloud and this is 'The Great Nebula' in Orion where new stars are being formed.

Just to the upper right (west) of Orion is the constellation of **TAURUS** (The Bull). From the skymap you can imagine the head of a bull with its two long horns pointing away to the left (East). The brightest star in Taurus is the orange looking ALDEBARAN, it is sometimes called 'the eye of the bull'. In fact Aldebaran is another RED-GIANT star.

The smudge just to the upper-right (west) of Taurus on the skymap represents a lovely cluster of stars known as THE **PLEIADES** (or the Seven Sisters). Good eyesight should enable you to count at least 5 stars but light pollution sometimes makes this difficult. In binoculars, or a small telescope, it is an amazing sight.

Clear Skies! Chris (Brankin) - UHPS Volunteer



Skymap:

December '20 - January '21

Map shows sky at 10.00pm on January 1st but should be OK for most of the evening in December and January when it is dark enough!

Note that the map will drift westwards during the night and from one night to the next.

Hold the map with 'S' at the bottom when looking South and rotate with 'N' at the bottom when looking North etc.