







## Bird Watching in Space

Have you ever looked up at the sky and seen imaginary figures in the clouds? Astronomers do this too, only our clouds are called nebulae and they lie far out in space. Unlike the clouds on Earth which are made of water, nebulae are made up of gas and dust. Astronomer's saw the shape of a bird's head in the swirls of this cloud and named it the Seagull nebula.

Gas and dust are cold, so they don't glow with light bright enough for our eyes to see – the hotter an object is, the brighter it shines. This works the other way too. If you've ever touched a light bulb that has been switched on for a while, you'll know it gets very hot! The nebula in this picture is glowing red because of a very hot star at its centre, you can see it here as the 'seagull's eye'. The heat from this star has warmed up the surrounding gas, making it glow visibly.

There's a blue haze across the picture too, can you see it? This is dust that has been lit up by hot, young stars inside the nebula. The starlight bounces off the grains of dust making them visible, similar to pointing a torch to some of your toys in a dark room: you can see them because the light from your torch bounces off your toys and hits your eyes.

This picture shows just a small part of the nebula. The entire cloud spreads its wings over a huge stretch of space, and looks just like a bird in flight! Take a look at it here.

## COOL FACT!

The star at the centre of this picture (the "seagulls eye") has a companion star. The two stars orbit each other, we called them binary stars

awareness