

SPACE<sup>®</sup> awareness



## Light from the Darkness

Things are not always what they seem, especially in space. The emptiest patches of sky are often where the most exciting secrets are hidden. This beautiful new image shows a glowing cloud of cosmic dust (called a nebula) sitting boldly against a backdrop of shining stars. To the naked eye, thick clouds like these appear empty and dark, but some are actually home to the brightest nebulae and hottest young stars in the Universe!

Stars are made of gas, so it is no surprise that they are born inside thick gassy clouds. But the clouds that give birth to stars also block our view of them growing within. However, luckily for us, as the stars get hotter and brighter they burn away the gas surrounding them, and appear in all their glory for us to see.

The cluster of bright young stars sitting right at the centre of this new picture is a perfect example of this. Their brilliant blue light can be seen shining clearly, instead of getting lost inside the dark swirls of gas all around them. The two brightest stars in this picture can actually be seen easily on a clear night with just a pair of binoculars. These are two very young stars, they're are less than on million years old — in star terms they wouldn't even be toddlers yet!

## COOL FACT!

Regions of star birth, like this one, can be enormous! For example, the Tarantula Nebula – which you can see here, if you managed to cheat physics and travel at the speed of light, it would take 650 years to cross it!\*\_\_\_\_\_\_

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