

A STAR IS BORN (AGES 6-99+)

In this activity, we'll learn how baby stars come to life! Read the story below and connect the numbers to the images to solve the maze.

1) It all starts with a giant and quiet cloud made of gas and dust that is billions of times bigger than rain clouds in the sky. It is so big that if we could travel as fast as light, it would take us up to 600 years to cross it! This giant cloud has so much gas and dust that thousands of baby stars can be born from it.

2) When something disturbs this sleeping cloud, for example, the sound of a nearby star dying, the cloud awakens terrified and starts deflating. The gas and dust in the cloud gather together until it's all squeezed. This increases the temperature of the squeezed material. It's like when you get in the underground on a very busy day. All the people are packed together in the carriages and after a bit, you start feeling very hot. The giant cloud turns into smaller clouds that in turn, squeeze even more. Each of them will form a baby star.

3) As the gas keeps on piling up, the small clouds flatten, forming a pancake of gas and dust that is spinning. In the meantime, the gas in the centre of the cloud has formed a ball that gets more and more squeezed and keeps on getting hotter and hotter.

4) The ball at the centre of the pancake is about to become a baby star, but it needs more strength. So it keeps on eating more material from the gas and dust pancake. The ball becomes so hot that it starts burning! When this happens the star is born! After all, as Pumba rightly said to Timon and Simba, stars are giant balls of gas that are burning.

5) Sometimes there are leftovers in the gas and dust pancake, and in a similar way to the snowballs in cartoons that as they roll they grab more and more snow and become bigger, the leftovers form small clumps that keep on growing by grabbing more and more gas and dust. The difference is that these clumps grow bigger and bigger, forming planets and moons! The leftovers that don't grow much become asteroids and comets!

