

How a Star is Formed

Read about how a star is formed and then answer the questions below.

Stars are giant balls of gas. Clouds of dust and gas swirl through the universe. Sometimes, this dust and gas collects in one area. As more dust and gas collect, the mass becomes heavy. It starts to swirl and becomes hot. This can take thousands of years.

The center of the cloud gets hot enough that it gives off light that we can see, so it looks like a star. This takes about a million years to happen if the star is about the same mass or weight as our sun.

As the cloud of dust and gas gets hotter and hotter, the gas and dust either falls into the middle or gets blown back into the universe. Then, it starts a process called nuclear fusion. This means that the hydrogen gas turns into helium. Helium is the fuel (like food for a star) that a star needs to shine. It takes about 20 million years for a star to be formed!

(From: <https://www.scholastic.com/teachers/articles/teaching-content/all-about-stars/>)

1. What is a star? _____

2. After the dust and gas become hot, what happened after about a million years?

3. What is nuclear fusion? _____

4. Describe how a star is formed in your own words. _____
