Certainly! **Nuclear fission** is a man-made process that replicates the same energy that powers the sun. It occurs when two or more atoms are fused into one larger atom, generating a massive amount of energy as heat. [Scientists study nuclear fission with the goal of creating limitless, carbon-free energy without the nuclear waste produced by current reactors1](https://www.cnn.com/us/live-news/nuclear-fusion-reaction-us-announcement-12-13-22/index.html)[2](https://www.energy.gov/ne/articles/fission-and-fusion-what-difference)[3](https://www.bbc.com/news/science-environment-63950962).

Here are **five free learning resources** where you can delve deeper into the science of nuclear fission:

1. [**Labster Virtual Labs: Fission**](https://www.labster.com/simulations/fission): Explore a virtual lab and learn about nuclear fission, radioactive decay, and the secrets of sustainable energy sources[4](https://www.labster.com/simulations/fission).
2. [**Department of Energy: Fission and Fusion**](https://www.energy.gov/ne/articles/fission-and-fusion-what-difference): Understand the difference between fission and fusion, and how fission reactions in nuclear power reactors produce energy[2](https://www.energy.gov/ne/articles/fission-and-fusion-what-difference).
3. [**BBC News: Breakthrough in Nuclear Fusion Energy**](https://www.bbc.com/news/science-environment-63950962): Stay updated on recent breakthroughs in nuclear fusion research[3](https://www.bbc.com/news/science-environment-63950962).
4. [**Stanford University Understand Energy: Nuclear Fission**](https://understand-energy.stanford.edu/energy-resources/nuclear-energy/nuclear-fission): Dive into a lecture on nuclear fission and its role as an energy system[5](https://understand-energy.stanford.edu/energy-resources/nuclear-energy/nuclear-fission).
5. [**AI Singapore Student Outreach Programme**](https://www.tech.gov.sg/media/technews/new-year-new-tech-skills): Explore AI literacy and proficiency, including aspects related to nuclear energy[6](https://www.tech.gov.sg/media/technews/new-year-new-tech-skills).

Happy learning! 🌟