

Explore

Certainly! In a nutshell, **polymers** are a diverse group of naturally occurring and synthetic substances composed of large macromolecules formed from repeating chains of smaller molecules or **monomers**. [These long-chain chemicals exhibit a wide range of properties and play a crucial role in various aspects of life and modern human activities1](https://www.xometry.com/resources/materials/what-is-polymer/).

Here are **five free reference links** where you can learn more about polymers:

1. **Introduction to Polymers (OpenLearn)**: This course explores the use of polymers, their properties, and how molecular structure influences their behavior in products. [You’ll gain insights into manufacturing techniques and polymerization](https://www.xometry.com/resources/materials/what-is-polymer/)[2](https://www.open.edu/openlearn/science-maths-technology/chemistry/introduction-polymers/content-section-0). [Learn more](https://www.open.edu/openlearn/science-maths-technology/chemistry/introduction-polymers/content-section-0)
2. **MIT News**: Read about a new lightweight material stronger than steel, which is based on polymers. [It explains how polymers consist of chains of building blocks called monomers and can be shaped into three-dimensional objects](https://www.xometry.com/resources/materials/what-is-polymer/)[3](https://news.mit.edu/2022/polymer-lightweight-material-2d-0202). [Read more](https://news.mit.edu/2022/polymer-lightweight-material-2d-0202)
3. [**ThoughtCo**: Get a concise definition of polymers as chemical compounds with long repeating chains of molecules bonded together](https://www.xometry.com/resources/materials/what-is-polymer/)[4](https://www.thoughtco.com/what-is-a-polymer-820536). [Explore](https://www.thoughtco.com/what-is-a-polymer-820536)
4. [**Britannica**: Learn about natural and synthetic polymers, including their role in living organisms and materials like proteins, cellulose, and nucleic acids](https://www.xometry.com/resources/materials/what-is-polymer/)[5](https://www.britannica.com/science/polymer). [Discover](https://www.britannica.com/science/polymer)
5. [**PolyPediaOnline**: Access over 30 free polymer clay tutorials covering various aspects of polymer clay crafting and techniques](https://www.xometry.com/resources/materials/what-is-polymer/)[6](http://www.polypediaonline.com/). [Explore Tutorials](http://www.polypediaonline.com/)

Happy learning! 🌟