

Explain how the principles of science relate to cybersecurity.

Most of cybersecurity is built on the principles of science. Just like science, cybersecurity requires observation and experiments. It also demands evidence, testing, failure, and iteration until the problem at hand is resolved. This is precisely what the principles of science rely on. There are also many scientific principles that directly relate to cybersecurity. One such principle is Relativism, which implies that all things are interconnected. This connection is evident in the cyber field through change. When there is a technical shift in the cyber field, it triggers changes elsewhere. Similar to the principles of relativism, Empiricism and Ethical Neutrality also directly relate to cybersecurity. Empiricism means scientists can only study behavior that is perceptible to the senses, preventing the use of mere opinions in solving cybercrime. Ethical Neutrality ensures that everyone adheres to ethical standards in their cyber research. In conclusion, these are just a few of the many reasons why the principles of science directly relate to cybersecurity.