Name _____

How Does Carbon Get into the Ground and Become Fossil Fuels

Short Answer Key

1. The three types of fossil fuels mentioned are coal, oil, and natural gas. They differ in terms of formation based on temperature and pressure conditions. Coal forms under relatively low temperatures and pressures, oil forms under specific conditions including underground reservoirs, and natural gas forms under high heat and pressure.
2. Diagenesis is the process that transforms peat into fossil fuels. It involves heat and pressure over millions of years, leading to chemical changes that convert peat into coal, oil, or natural gas.
3. It is important to find cleaner and more sustainable sources of energy because burning fossil fuels releases carbon dioxide into the atmosphere, contributing to climate change and environmental degradation. Cleaner energy sources can help reduce these impacts and ensure a more sustainable future.
4. Marine microorganisms play a role in the formation of natural gas by settling on the ocean floor. Over time, their remains turn into natural gas reservoirs, which are typically found underground.
5. Burning fossil fuels releases carbon dioxide (CO_2), a greenhouse gas that traps heat in the Earth's atmosphere, leading to global warming and climate change. This intensifies the greenhouse effect, causing extreme weather, rising sea levels, and other environmental impacts.