**TOPIC: IF I COULD INVENT SOMETHING NEW**

If I could invent something new, I would create a solar-powered refrigerator. This innovation would be a game-changer for rural communities without access to electricity, where food preservation is a significant challenge. Ironically, these rural areas produce most of the food consumed in urban centers, but due to lack of storage facilities, a substantial amount of food goes to waste. According to the World Bank, Nigeria loses and wastes 40% of its total food production annually, accounting for 31% of the country's land use and 5% of its greenhouse gas emissions.

My solar refrigerator would harness Nigeria's abundant sunlight to provide a sustainable solution for food preservation. To bring this invention to life, I would need the expertise of electrical and electronic engineers, as well as the financial and moral support of my parents. We would source some equipment locally to boost rural economies, while others would be obtained from commercial centers like Lagos or Port Harcourt. The necessary components would include inverters, solar panels, and compressors.

The technology behind my invention is straightforward: sunlight would be converted into electricity through solar panels, which would then power the refrigerator via an inbuilt inverter. However, I acknowledge that this innovation has some limitations, such as reliance on sunlight, which may not be available during rain or periods of low solar irradiance. To mitigate this, users could check weather forecasts and charge their solar panels accordingly.

Regarding the cost, while it may be a challenge for low-income individuals, I plan to make the solar refrigerator affordable. I would sell it for approximately ₦180,000, making it accessible to those in need of this innovation. By inventing this solar refrigerator, I aim to make a positive impact on rural communities, reduce food waste, and contribute to a more sustainable future.

**NAME:** ADANLAWO TREASURE

**SCHOOL:** SPRINGTIDE INTERNATIONAL SCHOOL

**CLASS:** JSS 1