Name _____

Albert Einstein: Unraveling the Mysteries of the Universe

Open-Ended Response Questions

1. Albert Einstein's unconventional thinking and reluctance to conform to traditional schooling methods often clashed with his teachers. How did his early experiences shape his later scientific contributions?

2. Einstein's theory of relativity challenged classical mechanics and introduced new concepts about space, time, and motion. How do these concepts differ from the classical view, and what implications do they have for our understanding of the universe?

3. Explain the significance of Einstein's equation $E=mc^2$, both in terms of its mathematical representation and its implications for the relationship between energy and matter.

4. Einstein's theory of general relativity introduced the concept that gravity is the curvature of space and time. How did this theory change the way we understand gravity, and what experimental evidence supported its validity?