

Name _____

RNA: The Messenger of Life

Open-Ended Response Answer Key

1. Answers may vary. Example: "RNA interference (RNAi) could be used to treat cancer by targeting and silencing genes that promote tumor growth, thereby slowing down or stopping the progression of the disease."
2. It's important for scientists to study the different types of RNA to understand their diverse functions in the cell and how they contribute to various biological processes.
3. Understanding RNA could help scientists develop new treatments for genetic disorders by targeting and correcting specific gene mutations or regulating gene expression to alleviate symptoms.
4. Answers may vary. Example: "As a scientist studying RNA, I would want to explore how different types of RNA interact with each other and with other molecules in the cell, as well as how RNA-based technologies could be further developed for medical applications."

