Name _____

RNA: The Messenger of Life

Short Answer Key

1. RNA plays a crucial role in protein synthesis by carrying the genetic code from DNA to the ribosomes, where proteins are assembled.
2. Three types of RNA involved in protein synthesis are messenger RNA (mRNA), which carries the genetic code; transfer RNA (tRNA), which brings amino acids to the ribosomes; and ribosomal RNA (rRNA), which is a component of the ribosomes.
3. RNA interference (RNAi) contributes to the field of medicine by silencing specific genes associated with diseases, offering potential treatments for conditions like cancer or viral infections.
4. One key difference between RNA and DNA is that RNA contains ribose sugar, while DNA contains deoxyribose sugar.
5. Studying RNA is important for understanding life processes because it provides insights into how genetic information is translated into proteins and how genes are regulated.