

Name :

Date :

RNA STRUCTURE & FUNCTION PRACTICE

Welcome to your RNA adventure! In this worksheet, you'll explore the structure and functions of RNA. Read each question carefully and answer using your knowledge and critical thinking. Don't forget to have fun while decoding the molecules of life!

A. RNA Basics – Fill in the Blanks

Complete the following sentences with the correct terms

RNA stands for _____.

Unlike DNA, RNA contains the sugar _____.

The nitrogenous base uracil in RNA replaces _____ found in DNA.

RNA is usually _____ stranded.

The three main types of RNA are _____, _____, and _____.

B. True or False – Decode the Truth

Write **T** for True or **F** for False next to each statement:

mRNA stands for "messenger RNA" and carries the genetic code from DNA.

tRNA brings amino acids to the ribosome during translation.

rRNA is found in the cytoplasm and copies DNA into RNA.

RNA can act as enzymes called ribozymes.

All types of RNA are directly involved in protein synthesis.

C. Short Answer – Think Deeply

Answer the following questions in 1–2 sentences

Why is RNA essential for protein synthesis?

How is mRNA created in the cell?

What might happen if tRNA malfunctions?