Amoeba Sisters Video Recap: DNA vs RNA and Protein Synthesis

Whose Show Is This?

Directions: DNA shouldn't get all the credit! For this page, you will need to watch the video clip "Why RNA is Just as Cool as DNA." Label the two cartoons below. For the following comments, write a "D" inside the speech bubble if for DNA, "R" inside the speech bubble if for RNA, or "BOTH" if the statement applies to both.

1. I am single stranded.

2. I am found only in the nucleus of eukaryote cells (exception during mitosis when nucleus is temporarily disassembled).

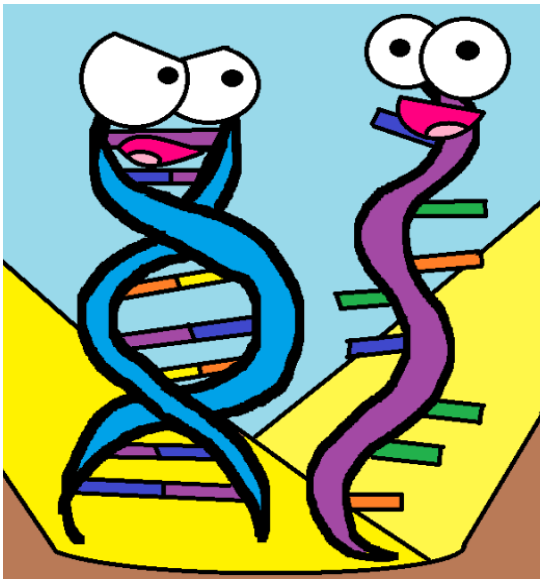
3. I am a nucleic acid.

4. I am arranged as a double helix or "twisted ladder."

5. I have the sugar ribose.

6. I have the sugar deoxyribose.

7. I include the bases Guanine, Cytosine, and Adenine.



8. In eukaryote cells, I travel out of the nucleus to a ribosome.

9. I have the base Thymine.

10. I have the base Uracil.

There are 3 types of RNA. Fill in any missing information in the chart below:

Type: mRNA	**11. Type: _____**	**12. Type: _____**
13. Stands for:	Stands for: Transfer RNA-- transfers message.	**14. Stands for:**

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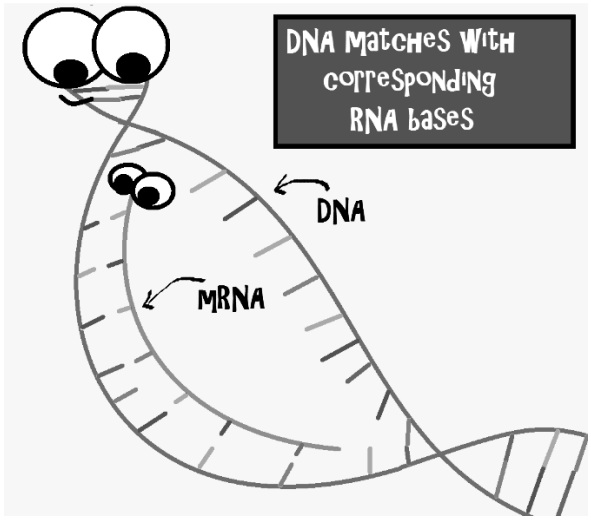
Protein Synthesis Summary

Directions: Fill in any missing information in the summary chart below after watching "Protein Synthesis and the Lean, Mean Ribosome Machines."

Name of Process:	Where is this process located (assuming eukaryote cell)?	Is DNA directly involved in process?	Which types of RNA are involved?	End Result and Purpose
Transcription 	**15.**	**16.**	mRNA only	**17.**
Translation 	**18.**	No, as DNA remains in the nucleus and this process is not in the nucleus.	**19.**	**20.**