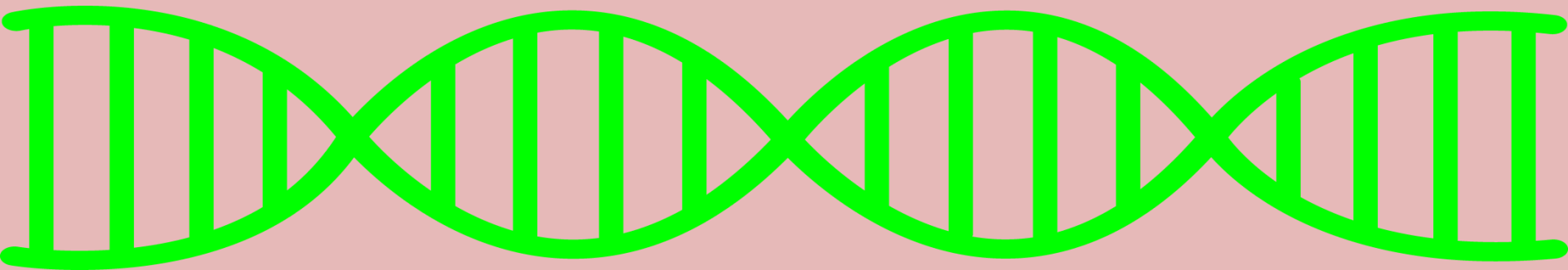


RNA



RNA is just as cool as DNA!!!

What is RNA?

- **Ribonucleic Acid**
- **Makes copies of DNA instructions to site of protein production**
- **DNA is the master blueprint, RNA are the portable copies.**



3 Types of RNA

1. mRNA

- **Messenger RNA**
- Carries instructions from the DNA to the ribosomes, where protein production occurs.
- mRNA is made from a DNA strand, in a process called “transcription”.



3 Types of RNA (cont.)

2. rRNA

- **Ribosomal RNA**
- **Makes the Ribosome**
 - Along with proteins

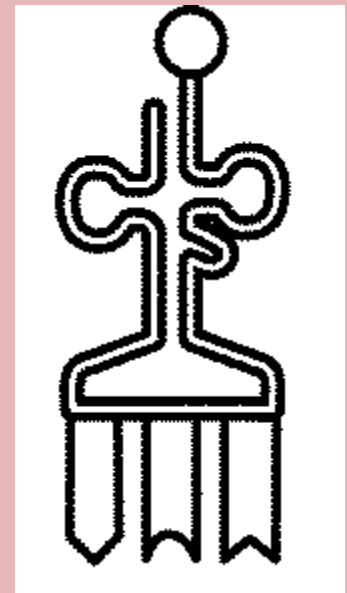
rRNA



3 Types of RNA (cont.)

3. tRNA

- **Transfer RNA**
- Transfers amino acids to the ribosome where “translation” occurs, and matches amino acids to the mRNA strand.



Types of Nitrogen Bases

Purines –

have two rings
in their structure

– Adenine

– Guanine

Pyrimidines –

have one ring in
their structure

– Uracil No “T” in RNA!

– Cytosine



DNA vs. RNA

DNA

- Sugar: deoxyribose
- Double stranded
- Nitrogen bases:
A C G **T**
- “Master
Blueprint”

RNA

- Sugar: ribose
- Single stranded
- Nitrogen bases:
A C G **U**
- “Blueprint
Copies”