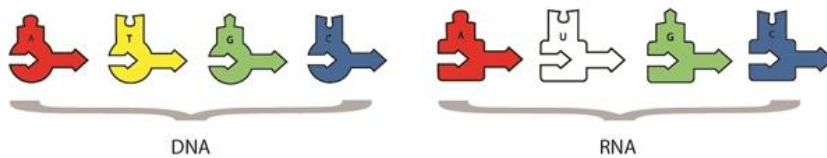


Transcription Answer Sheet

1. How many possible triplet codes can be generated from these four base letters?
2. Given that there are more possible combinations for amino acids than amino acids themselves, what does this imply about the number of codes for each amino acid?
3. Why can't DNA leave the nucleus?



4. Compare the foam DNA and mRNA pieces. Identify any similarities and differences in the bases that comprise each nucleic acid.

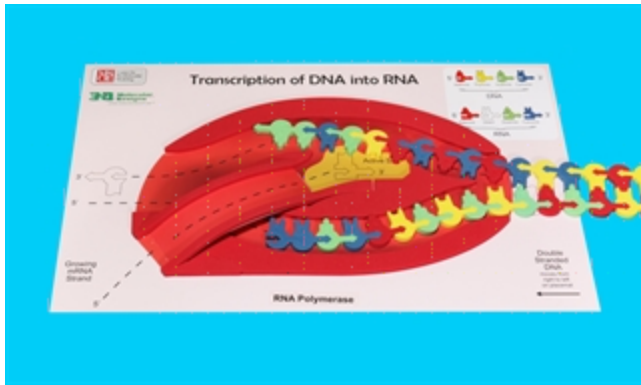
6. Complete the following chart by matching the correct RNA complementary base to the DNA base:

DNA Base	RNA Base
T	
G	
A	
C	
A	

7. Fill in the correct base pairs in the template strand below and build the DNA template strand. Keep in mind that DNA is synthesized from its 5'→3' end.



8. Recalling the lesson on DNA structure, identify the type of bond that holds the two strands of DNA together.



10. Label the DNA **template strand** and **non-template strand** in the photo left.

12. What 3'→ 5' DNA code functions as the start signal or initiation codon?

13. What is the mRNA complementary codon?

14. Using your mRNA model, record the correct sequence of mRNA base pairs:

5' _____ 3'