

TRANSCRIPTION: the formation of mRNA on DNA

Name _____

Per. _____

Check off each task as you complete it.

1. In diagram 1 below, which shows a strand of mRNA forming on a strand of DNA, label which strand is DNA and which is RNA.
2. You can tell which strand is which because DNA contains the sugar _____ and the base _____, but the RNA contains the sugar _____ and the base _____.
3. Complete the labeling of the bases in diagram 1. If crayons are available, color adenine red, thymine blue, cytosine green, guanine yellow, and uracil brown.
4. In diagram 2, draw the strand of mRNA that will form on the horizontal strand of DNA.
5. The transcription of RNA from DNA happens in the _____ of the cell.

Diagram 1:

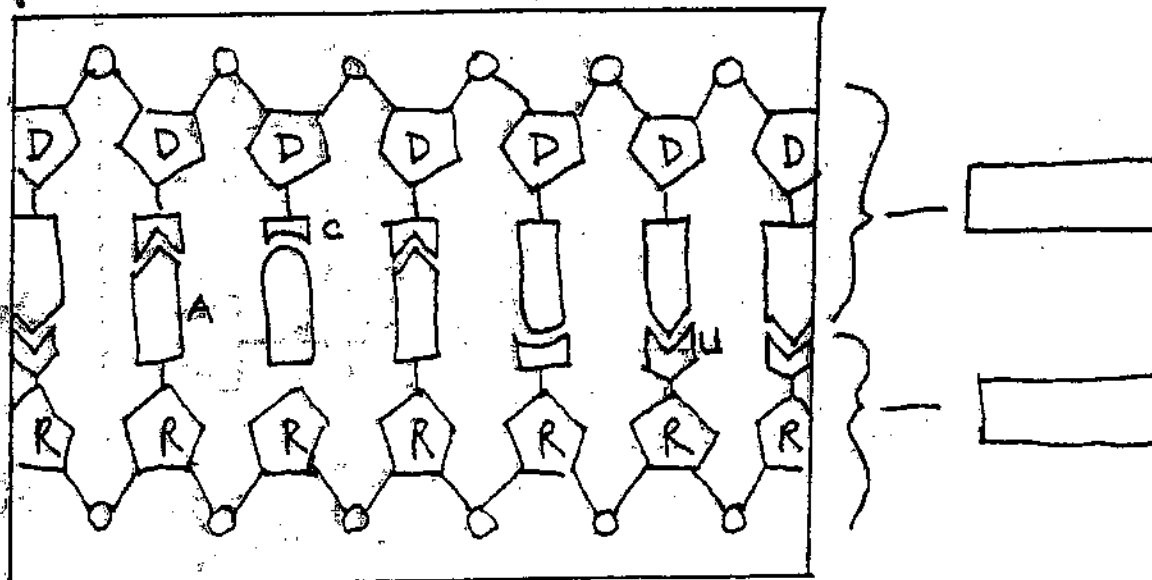
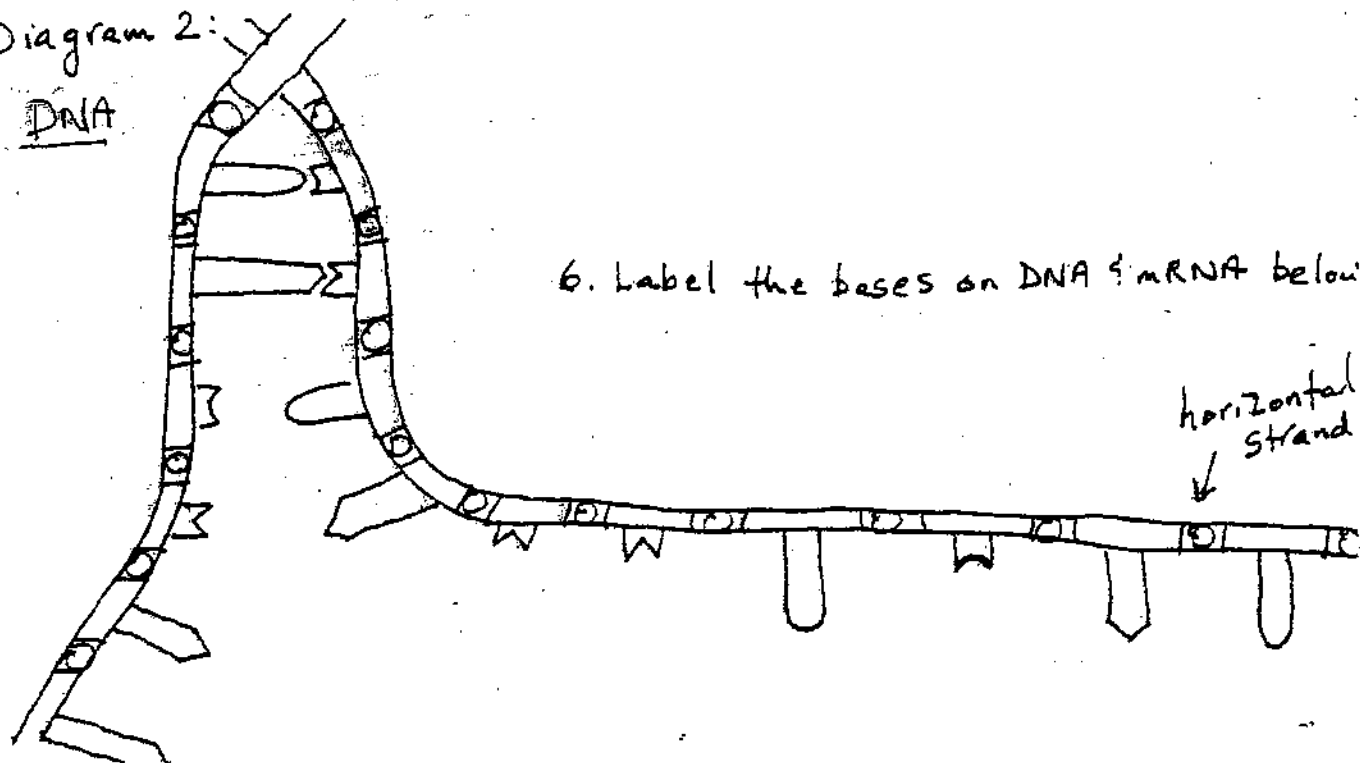


Diagram 2:

DNA



III. TRANSLATION : THE FORMATION OF A PROTEIN

1. In diagram 1, color the messenger RNA blue, the transfer RNA black and amino acids red.
2. An amino acid chain has been started. In diagram 2, find the transfer RNA's that will match the next 4 places and draw them in the correct position on the strand of messenger RNA.
3. In diagram 3, find the amino acids that will fit each of the transfer RNA's and draw them in the correct position in diagram 1.
4. The chain of amino acids being formed is called a _____.
5. The formation of a protein happens in the _____ of a cell.

