THE CHEMICAL NATURE OF RNA DIFFERS FROM THAT OF DNA .Note that: the sequence in the RNA transcript is the same as that in the coding strand, except that the U of the transcript replaces the T of the gene the initiating nucleotide of RNAs contain a triphosphate (ie, pppA-above). However, given the proper complementary base sequence with opposite polarity, the single strand of RNA is capable of folding back on itself like a hairpin and thus acquiring double-stranded characteristics: G pairing with C, and A pairing with U. The RNA transcript with a 5' to 3' is complementary to the template strand with its 3' to 5' polarity. Since the RNA molecule is a single strand complementary to only one of the two strands of a gene, its guanine content does not necessarily equal its cytosine content, nor does its adenine content necessarily equal its uracil content. In RNA, the sugar moiety to which the phosphates and purine and pyrimidine bases are attached is ribose rather than the 2'-deoxyribose of DNA. UNIVERS -MANSOURA SAMSUNG The pyrimidine components of RNA can differ from those of DNA. terminal 5