Sheet#2

p.3 : -we have 2 hydrogen bonds between A and T and 3 H-bonds between C and G
-Renaturation the opposite of Denaturation and by hybridization we mean an association between 2 complementary strands (DNA with RNA for example(
p.6 DNA is a template that is Transcriped into RNA (Not translated(
p.7 primase places a complementary ssRNA

sheet # 4

extra note: miRNA is dsRNA used to mark the RNA for the RNases (knocking down the gene(p.6 regarding the third paragraph –NOTE- one gene gives 1 hnRNA but alternative splicing at the level of hnRNA might give rise for more than 1 mature RNA (mRNA (

p.7 –first line- the polymerase –not the promoter- is moving very fast

sheet#7 -correction by the writer-

page 9, in the note box, about gene methylation:

When the deletion occurs in the paternal chromosome, then gene 2 is methylated i.e. switched off, so it won't be expressed, only gene 1 and 3 are expressed,,, Prader-Willi syndrome.

When the deletion occurs in the maternal chromosome, then gene 1 is methylated i.e. switched off, so it won't be expressed, only gene 2 and 3 are expressed,,, Angelman syndrome.

Sheet#8

Extra note:

CGRP is produced in the brain for taste sensation

There is something called suboptimal poly A signal –poly A signal is the termination signal in the transcription- here one A base was replaced by U for example and if the RNA polymerase has the ability to read each poly A signal – the optimal one- it might miss this suboptimal signal and the result is 1 hnRNA producing many mRNA

Sheet#10 p.3 "in coding region the oncogen PRODUCT is an enzyme"

sheet#13 denaturation occurs before the blotting

ونحن على مشارف انتهاء السنة الملحمية بتمنالكم التوفيق جميعا وسامحونا correction team