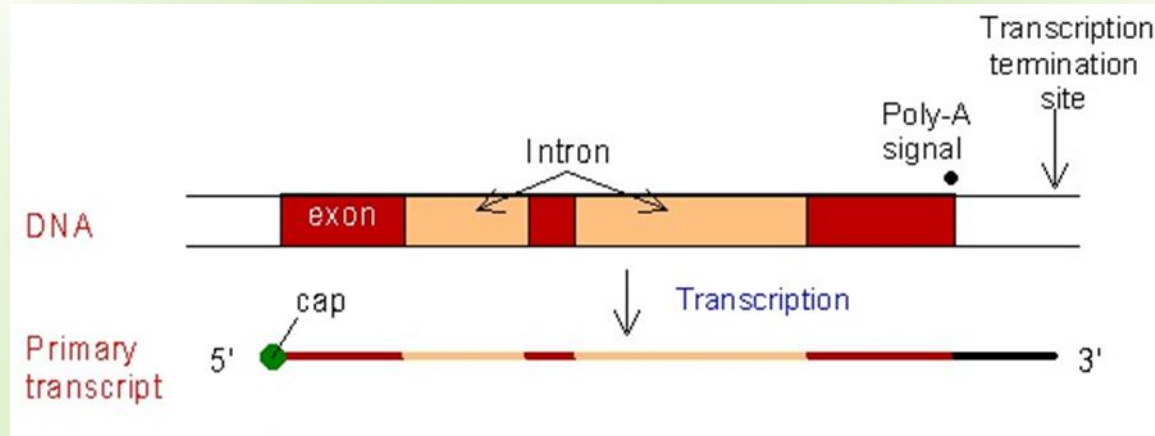


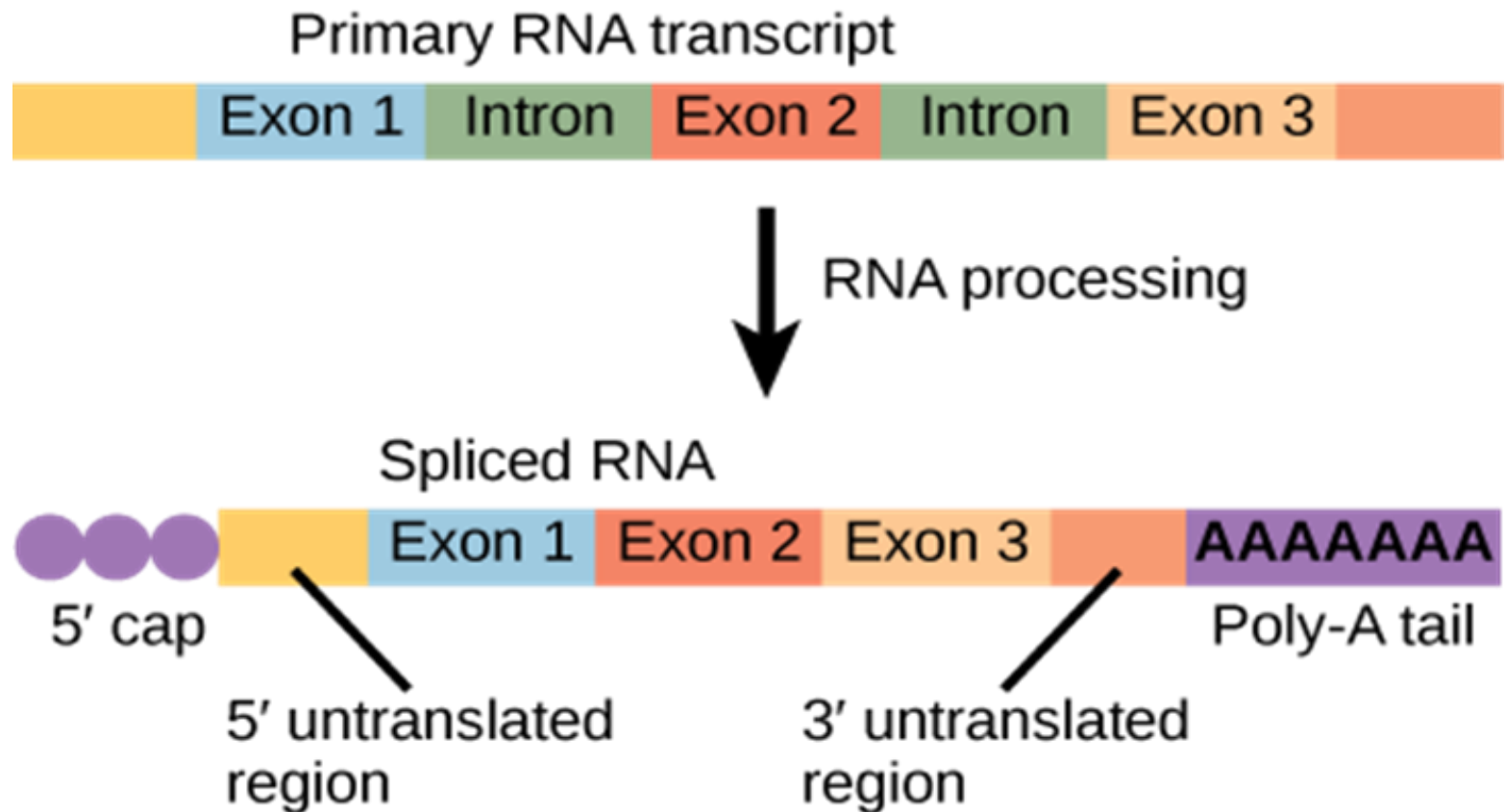
# RNA PROCESSING

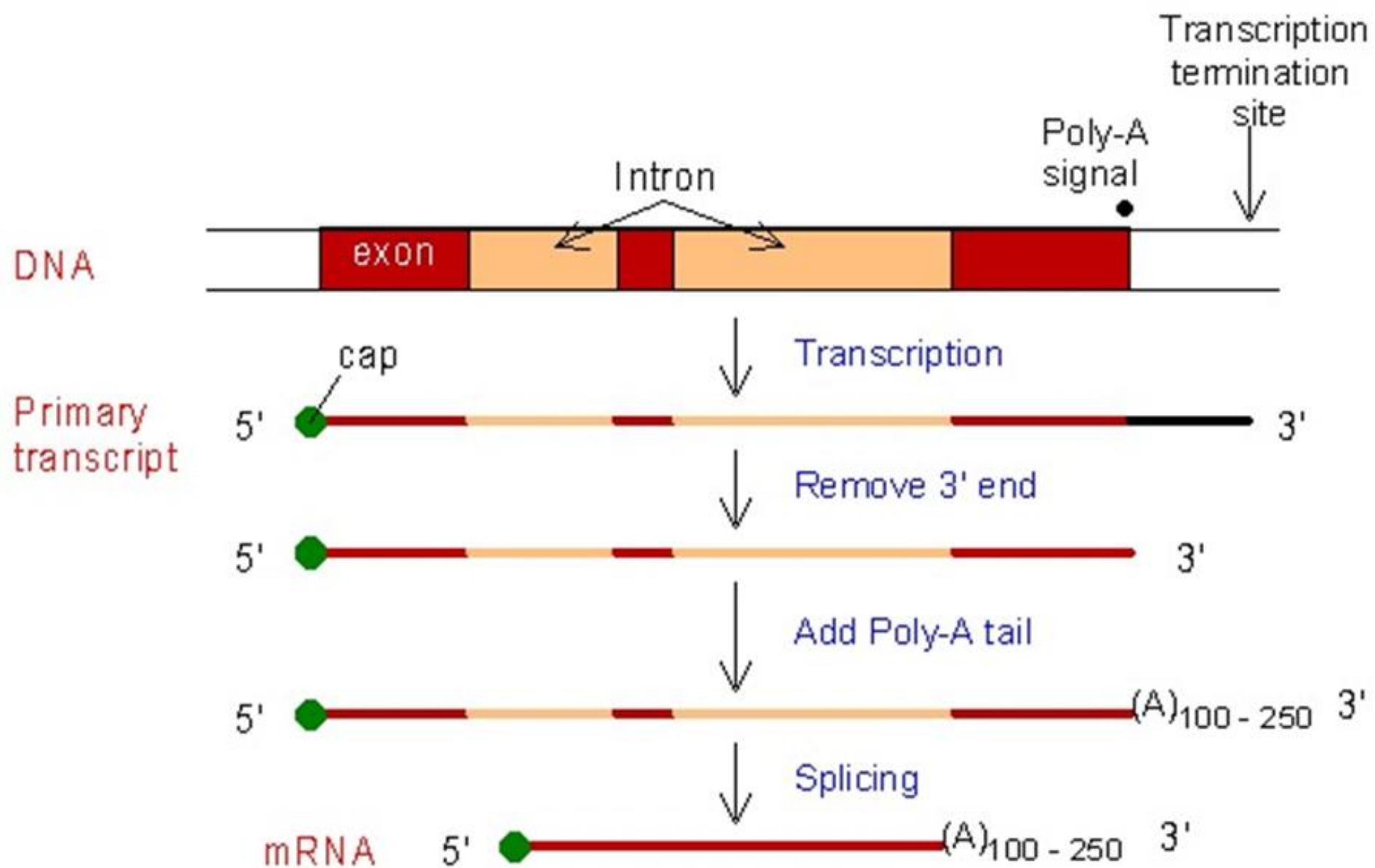


- ❖ Primary transcript ( hn RNA ) is a large molecule.
- ❖ Small percentage of his molecule enters cytoplasm for translation.
- ❖ hn RNA destined to produce mRNA undergo RNA processing.

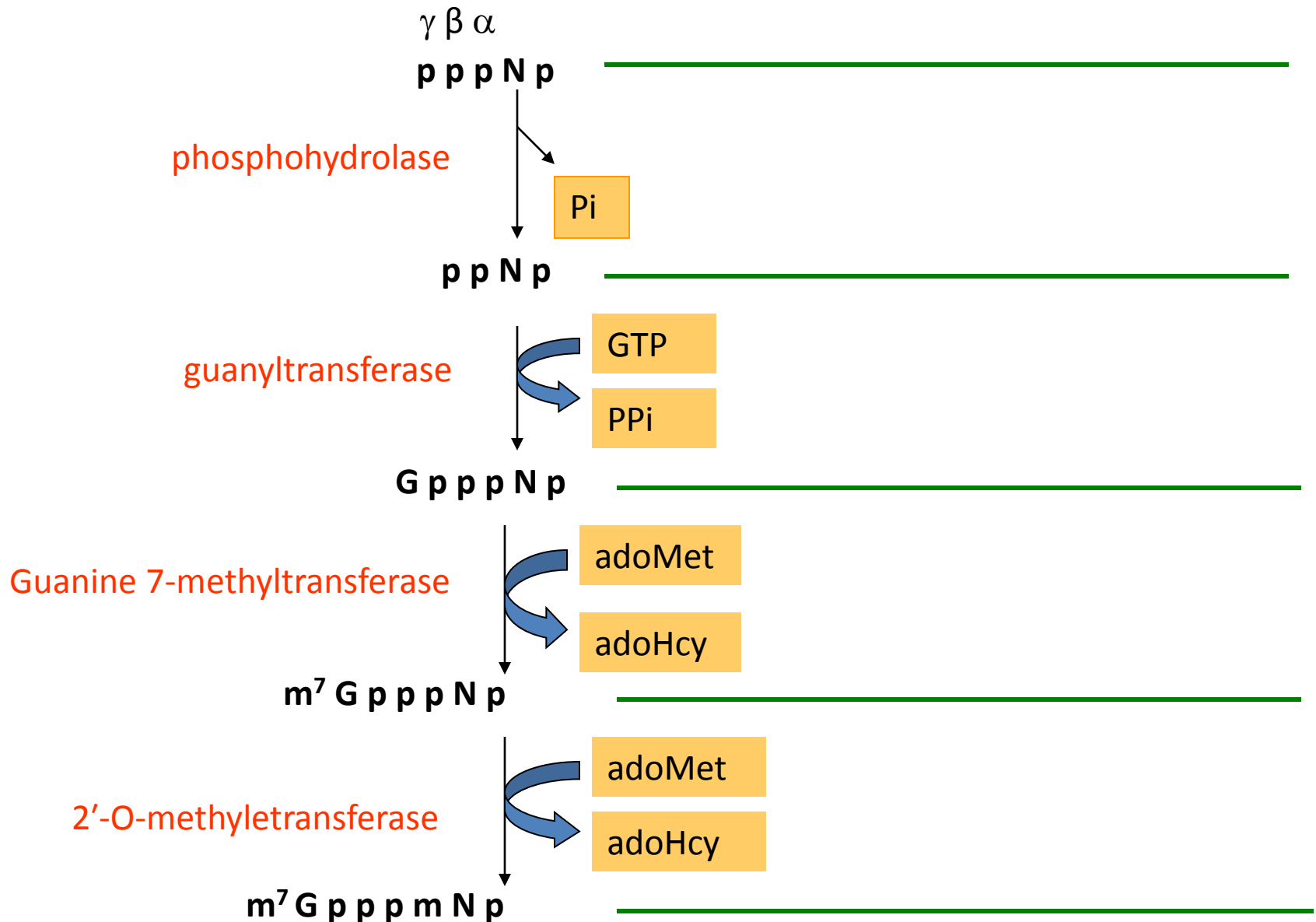
# Processing include :

- 1.Modification of 5' end by capping ( addition of 7-methyl Guanine ).
- 2.Modification of 3' end by polyA tail after enzymatic cleavage.
- 3.Splicing out of intron sequences.

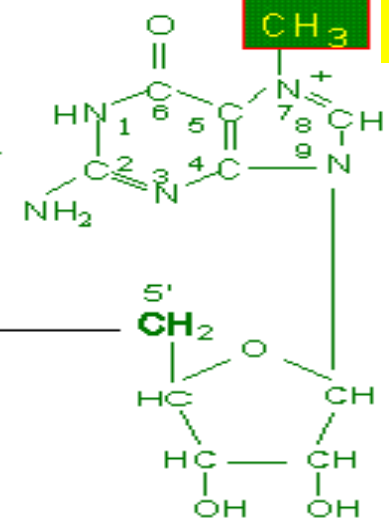
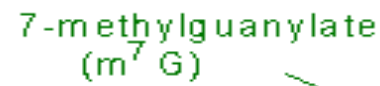


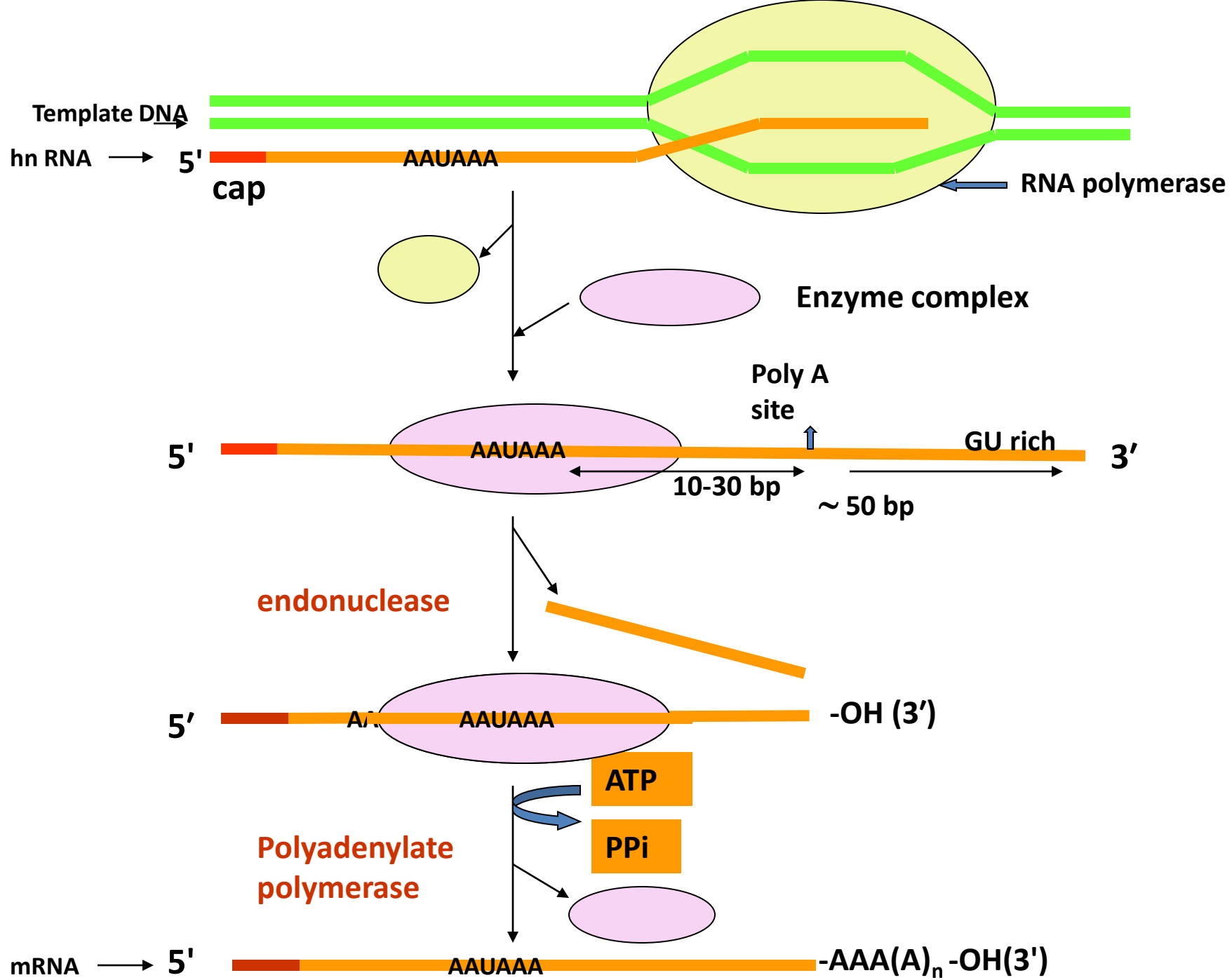


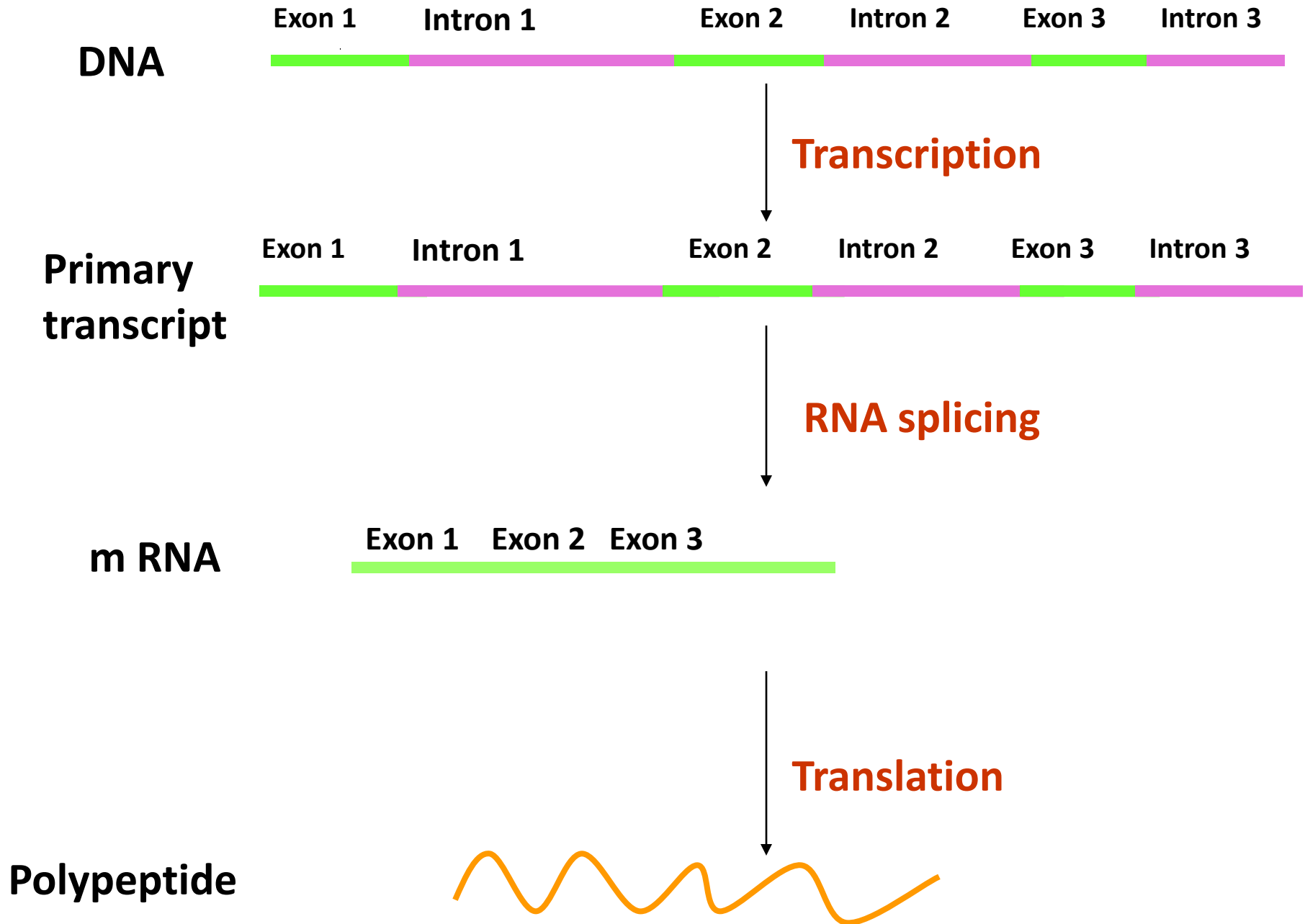
## 5' end of RNA with Triphosphate group



5' end of RNA with cap







# Intron types

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## Group I

## Group II

## Group III

## Group IV

### **Found in :**

some nuclear,  
mitochondrial,  
chloroplast  
genes coding  
for rRNA.

mitochondrial,  
chloroplast  
mRNA.

nuclear mRNA.

Certain  
tRNA

### **Requirements**

G-nucleoside/  
nucleotide

2'-OH gr. Of  
an A residue  
within intron  
itself

RNA protein  
complex;  
snRNA: U<sub>1</sub>, U<sub>2</sub>,  
U<sub>4</sub>, U<sub>5</sub> & U<sub>6</sub>.

ATP



