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## Activities in elongation in DNA replication

- Formation of deoxyribonucleotide trimonophosphate
- Formation of RNA primer
- Formation of leading strand
- Formation of lagging strand

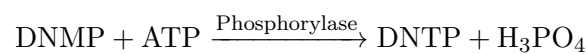
## Source of nucleotides in elongation in DNA replication

Nucleoplasm

## Phosphorylation in DNA replication

Conversion of deoxyribonucleotide monophosphate into deoxyribonucleotide trimonophosphate

## Expression of reaction of conversion of deoxyribonucleotide monophosphate



## Products used as nucleotides in elongation in DNA replication

- Deoxyribonucleotide trimonophosphate
- Phosphoric acid

## Reactants in conversion of deoxyribonucleotide monophosphate

- Deoxyribonucleotide monophosphate
- ATP
- Phosphorylase

## Enzyme needed for the synthesis of RNA primer in DNA replication

- Phosphorylase

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### **Function of RNA primer in DNA replication**

- Stepping stone for replication

### **Location of formation of RNA primer at DNA replication**

- Origin of replication

### **Enzymes functioning as catalyst in DNA replication**

- DNA polymerase

### **Direction of formation of complementary strand in DNA replication**

5' - 3'

### **Leading strand in DNA replication**

Strand having continuous addition of nucleotides

### **Okazaki fragments in DNA replication**

Fragment of nucleotides in 3' - 5' strand

### **Enzyme needed for joining Okazaki fragments**

Ligase

### **Lagging strand in DNA replication**

Strand having discontinuous addition of nucleotides

### **Function of phosphorylase in DNA replication**

Conversion of deoxyribonucleotide monophosphate to deoxyribonucleotide triphosphate

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### **Function of DNA polymerase**

Catalyse elongation

### **Function of ligase in DNA replication**

Join okazaki frgements