

7.1 DNA Structure and Replication

DNA Structure

Outline how Franklin and Wilkins used X-ray crystallography to elucidate the structure of DNA

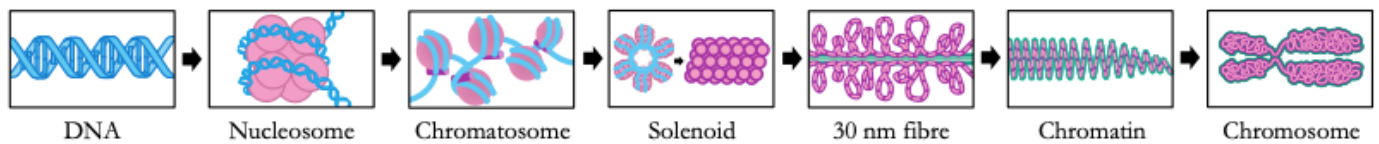
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Describe, with the aid of the diagram, the organisation of DNA into chromatin within eukaryotic cells



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Differentiate between euchromatin and heterochromatin

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Outline the structure of the nucleosome (and identify its functions)

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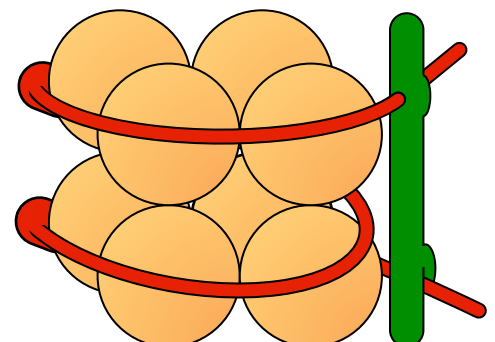
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List five examples of non-coding DNA

S

T

I

N

G



Explain the role of tandem repeats in DNA profiling

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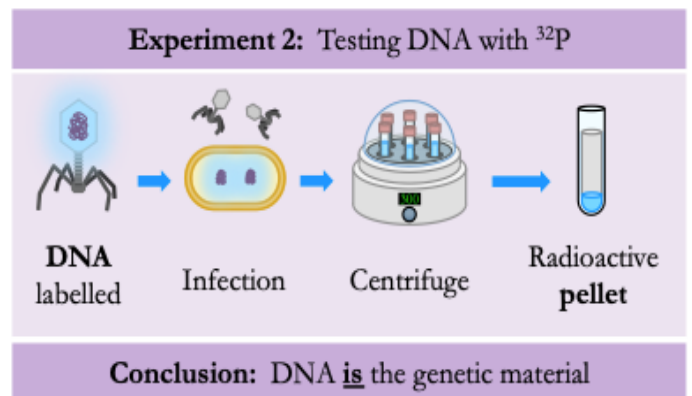
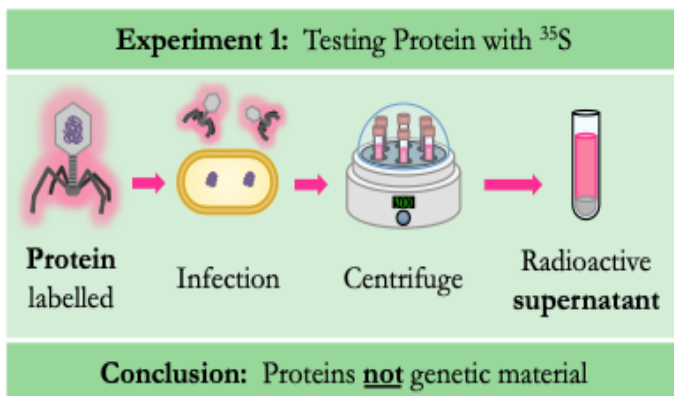
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Use the diagram below to outline the methodology and conclusions of the Hershey-Chase experiment



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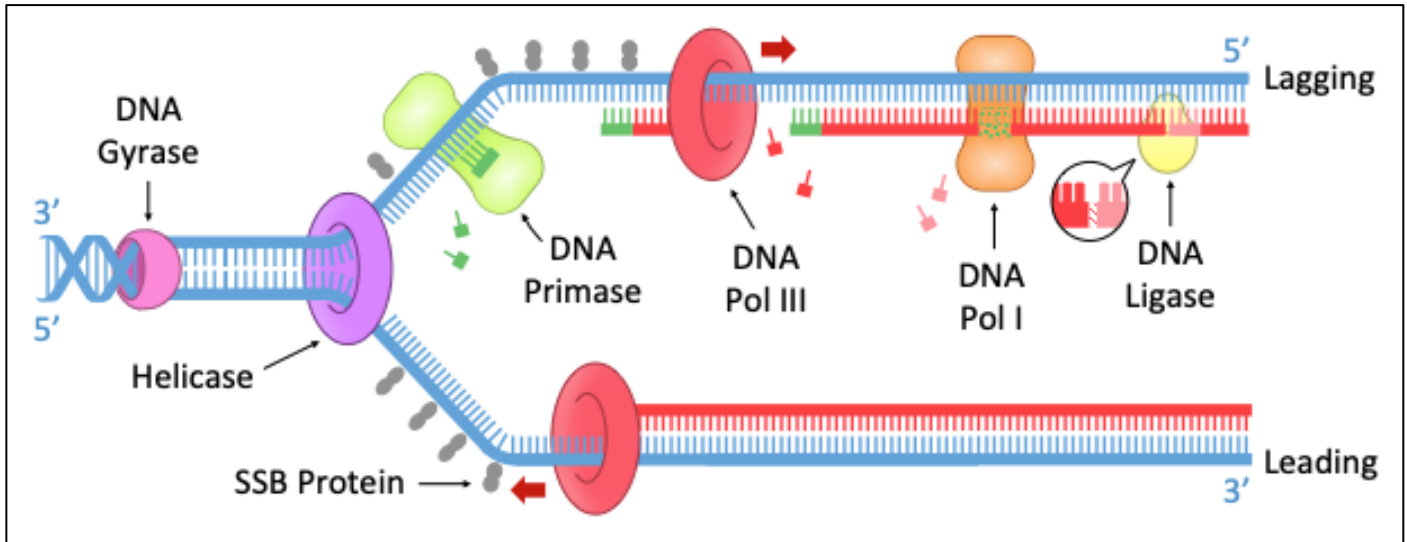
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DNA Replication

State the direction of DNA replication

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State, with the aid of the diagram, the role of the following components of the DNA replication process



Helicase:

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DNA Gyrase:

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SSB Proteins:

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DNA Primase:

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DNA Pol III:

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DNA Pol I:

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DNA Ligase:

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