

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Human Biology ATAR

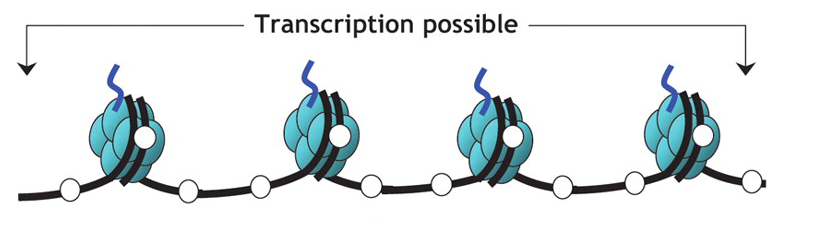
Task 10 Validation – DNA

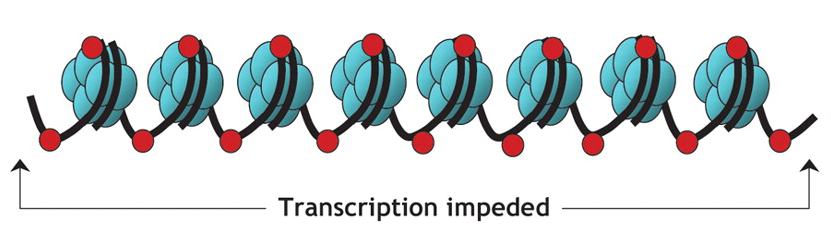
Weight 10%

1. a) Explain what is meant by gene expression. (2 marks)  
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b) How does gene expression relate to a cell in a salivary gland? (2 marks)  
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1. Explain how the epigenome allows the first section of DNA to be transcribed but not the second. (4 marks)



  
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1. Seventeen-year-old identical twins, Adam and Michael, are both considered to be tall individuals: Adam is 192 cm and Michael is 188 cm. Explain how the different heights of Adam and Michael can be attributed to epigenetics. (3 marks)  
     
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2. Using an example explain how the discovery of epigenetic factors has transformed the way we think about characteristics that can be passed from one generation to another. (4 marks)

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