**N5 Biology CB3 Homework**

1. Write the missing words from the paragraph below

*The building block of all organisms are \_[a]\_\_ . The \_[b]\_\_ of the cell acts as the control centre to co-ordinate the \_\_[c]\_\_\_ activities. It contains many thread-like structures called \_\_\_[d]\_\_ which are made of hundreds of smaller sections called \_\_[e]\_\_\_ . Each of these \_[f]\_\_\_ control specific characteristics, such as eye colour, and are made of a long chemical (arranged as a double helix) called \_\_[g]\_\_\_ . Each strand of \_\_\_[h]\_\_ is made of repeating units called \_\_[i]\_\_\_ . Proteins are made of repeating units called \_\_[j]\_\_ . The order of \_[k]\_\_\_\_ that make a protein is controlled by the order of \_\_[l]\_\_ on the DNA. [12]*

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1. The diagram shows a short section of DNA. The full section of DNA was found to contain 2500 bases, of which 30% were T.

**G**

**C**

**3**

**1**

**A**

**2**

(a) What bases would be found at position 1, 2 and 3?

(b) How many bases in the full section of DNA were A?

(c) What % of the bases in the full section were C?

[3]

1. The table shows the order of bases that correspond with different amino acids. What would be the order of amino acids for the following bases sequences:

|  |  |
| --- | --- |
| Base sequence | Amino Acid |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

(a)

(b)

(c)

(d)

[4]

4. Name the molecule that transfers a compliementary copy of the genetic code from the nucleus to the ribosme. [1]

[TOTAL = 20]