**GENERAL HUMAN BIOLOGY – YEAR 11**

**TASK 7: DNA model**

**Weighting 5%**

**NAME:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ MARK: \_\_\_\_\_ / 24 = \_\_\_\_\_ %**

This assessment has been broken into multiple sections. To gain full marks, all sections must be completed and in the correct order.

**Part A – Creating a Method (due before practical) (8 marks)**

You are to design a method for creating a model of DNA. You will need to justify why you have chosen the specific materials. Make sure your method is specific and as detailed as possible to include the function of DNA and its components.

Note: A list of possible materials will be given to you.

**Part B – Model Practical (double lesson) (6 marks)**

You will swap methods (from Part A) with another student to create a model of DNA.

**Part C – Analysis (single lesson) (8 marks)**

After completing the method, you will analyse the quality of the method you used AND your own by referring to the model created by your partner by making specific suggestions.

**Part A – Research and Method (8 marks)**

**Method:**

Using the template on the following page create your method including an equipment list. (A printed copy is acceptable)

Below is a list of materials you may use in your model.

* Pipe cleaners
* Matchsticks
* Popsicle sticks
* Coloured paper
* String
* Plasticine
  + If you require other equipment (within reason) you can request it **before** the day you complete the assessment.

**Note:** You must include a justification of your materials eg. Straw is used for a blood vessel due to the flexibility so it can be manipulated easily into correct shape.

**2 marks- submission on due date with materials required**

**2 marks- justification of equipment**

**4 marks- method- see rubric**

**Part B – Model Practical (6 marks)**

* Collect your task sheet
* Make a Model following the instructions

|  |  |
| --- | --- |
| **Equipment list** | **Justification** |
| **Method** | |
| **Labelled Diagram** | |

**Part C- Analysis (8 marks)**

Evaluate the method you following using the prompts below (4 marks)

* Was it clear? Explain why/why not.
* Was the equipment suitable?
  + If not, what should have been used instead?
  + If yes, explain why

Collect the model made using your method, analyse the model using the prompts below

(4 marks)

* Compare the model to the labelled diagram, does it match?
  + Explain why/why not
* How could you improve your method