Discovering the structure of DNA

Who would have thought that science could produce such a story of intrigue and characters! Like all major scientific discoveries, the discovery of the structure of DNA by James Watson and Francis Crick in 1953 was a result of years of work from a great number of scientists. Not only is the story one of great scientific interest but is one of great human interest and controversy

Your task

This task will see you research the individuals or groups of scientists whose work contributed to the discovery; there are six.

* Griffiths
* Avery *et al*
* Hershey and Chase
* Chargaff
* Wilkins and Franklin
* Watson and Crick

The internet will be the main source of your research but you could also use textbooks or other books written about the topic.

You will need to include the following pieces of information:

* Who the scientist(s) is, where they worked and when.
* The aims of the experiments.
* What the experiments were, including a diagram.
* What the conclusions were.
* Other interesting information that you have gathered that lends interest to the story

Presenting

Present summarised findings in your jotter or as a poster.

 This is for your own understanding and should therefore use words you understand.

 **The research**

<http://www.s-cool.co.uk/> A revision site for A level Biology that summarises the experiments

<http://osulibrary.oregonstate.edu/specialcollections/coll/pauling/dna/index.html>

<http://www.nature.com/scitable> and follow: A level >biology>DNA and the Genetic Code

[**http://www.dnai.org/a/index.html**](http://www.dnai.org/a/index.html)Follow ‘Finding the structure’ on the menu

Not all of the sites give information about all of the scientists but they are a good place to start.

Also type into your search engine the name of your scientist followed by ‘DNA’, to refine your search, and you will discover many more sources of information.

5 Top tips for your research

1. As you know, the internet is a big place and it’s quite easy to find yourself looking at non-relevant material or even off on a tangent in the topic area you are studying. **Keep focused on the task**, stopping yourself every so often to ask yourself whether what you are looking at is relevant. Use the 80% rule, which means looking at material completely related for 80% of the time – if you find yourself wandering onto something interesting that is a bit off topic then keep it to 20% of the time (6 minutes in every half hour).
2. **Give yourself a time limit**.
3. Plan to **stop at regular intervals to discuss** what you have found either with your group or a partner. This will re-focus your work.
4. Information on the internet may not be reviewed and hence might not be accurate. Check the information from several sources to **build a more accurate picture**. Sites from academic institutions, like Universities, will have an interest in accurate teaching of the subject and so are generally more reliable.
5. **DO NOT copy and paste** from the internet, this is plagiarism! Instead make notes and diagrams and add to them from other sources.