**Year 7 Science Research Project**

**Due Date**: \_\_\_\_\_\_\_\_\_

The Nobel Prize is the most famous award for pioneering discoveries and research in Science.

**Your task is to research a Nobel Prize winning scientist, record your sources and to present your findings, in the form of a poster. You may choose anyone who has won a Nobel Prize for Physics, Chemistry or Physiology/Medicine. The whole project should take 2 hours of your own time.**

First read **all** of the instructions before doing anything else. Complete the starter activity (Part 1) then choose your scientist. You should research information about this scientist’s life and work so that you can then produce a poster about your scientist displaying details of his / her discovery, invention, research or contribution to the advancement of Science knowledge.

**Part 1: Getting started with research.**

Go to <http://www.nobelprize.org> and look for information on The Nobel Prize and then answer these questions using this webpage:

|  |  |
| --- | --- |
| 1. Who is the Nobel Prize named after?
 |  |
| 1. What are the three Sciences that a prize is awarded for?
 |  |
| 1. What is the person who is awarded the prize called?
 |  |
| 1. How many women have won Nobel prizes in Sciences?
 |  |
| 1. Who won the 2018 prize for Chemistry?
 |  |
| 1. What was their discovery?
 |  |
| 1. Who is the only person to have won a Nobel Prize for both Chemistry and Physics?
 |  |
| 1. ?
 |  |
| 1. Which Scientist won a Nobel Prize for Chemistry and the Nobel Prize for Peace?
 |  |
| 1. Who was the first British person to win a Nobel Prize for Science?
 |  |

**Total marks for Part 1 = /10**

**Part 2 Research**

In Part 2 you need to decide on a Nobel Prize winning scientist to study and tell us the most interesting things you have found out about them and their work.

Mrs Garnett’s list of weblinks below may be very useful here – do not try to read them all though!

<http://www.nobelprize.org/>

<http://www.bbc.co.uk/archive/scientists/>

<http://www.rsc.org/learn-chemistry/resource/listing?searchtext=nobel+prize>

<https://www.societyofbiology.org/component/search/?searchword=nobel%20prize&searchphrase=all&Itemid=708>

**Reference and fact sheet (Page 3**): Use the reference and fact sheet to record as much useful information about your scientist as you can. Each interesting and relevant fact is worth one mark. There is a maximum number of five marks available for facts and 5 marks for referencing, one mark for each **complete** reference.

**Word of Warning**

There is no reason to rely on Wikipedia nor the Nobel Prize website to complete this homework project. This project is designed to give you the tools so that you do not have to rely on these two websites. Projects which appear to be based on these websites, or where the diagrams and content are just reorganised **may score zero or not be marked at all**. The project is about **you** conducting **your own** research. Remember to use a variety of sources.

**Possible fact finding questions**

|  |  |  |  |
| --- | --- | --- | --- |
| Date of birth? | Which language did they speak? | What other jobs did she/he have? | Did it rely on something else being discovered first? |
| Place of birth? | Which university did she/he study at? | What was his/her discovery? | What other important discoveries did they make? |
| Won the Nobel Prize for? | Which main subjects did she/he study? | Was it discovered by accident or on purpose? |  |

**Reference sheet**

**An example of each reference has been done for you, you can add further rows if you need them.**

**References: Books**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Author/s or Editor/s** | **Year of Publication** | **Title** | **Publisher** | **Facts from this source** |
| Arthur Beiser | 1987 | Concepts of Modern Physics (4th edition) | McGraw-Hill |  |
|  |  |  |  |  |
|  |  |  |  |  |

**References: Websites**

|  |  |  |  |
| --- | --- | --- | --- |
| **Author/Publishing Organisation** | **Website URL** | **Date visited** | **Facts from this source** |
| Nobel Prize | <http://www.nobelprize.org/nobel_prizes/physics/laureates/1932/heisenberg-facts.html> | Accessed 18.10.19 |  |
|  |  |  |  |
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Max marks /10

There is maximum number of 10 marks available for section 2. Completing Part 2 Research properly will mean you then have plenty of information to help you produce a detailed and interesting poster in Part 3.

**Part 3: Your Poster**

Now that you know all about your scientist, it is your job to act as their public relations agent (like their manager) and design a poster that best displays the most important information you have gathered.

The aim of the poster is to:

**Persuade someone making a list of the top ten Nobel Prize winners that your scientist should be on it**

We recommend using a computer to produce your poster as it is easier to change than one drawn by hand. Some computer time in lessons will be made available if necessary to help here. If you prefer to produce a hand-drawn poster this is acceptable, so long as it meets the marking guidelines (see ‘Helpful hints’ section).

Your poster must include a picture of the scientist and/or a picture of the invention / discovery.

It must balance being really exciting to look at but also display important information clearly and accurately!

Try using different colours, font styles and font sizes but do not be too outrageous – keep it clear.

Good posters have a few key pieces of information and not too many words on them.

**Total marks for Part 3 Poster = 20.**

**Helpful Hints**

Remember – make sure the websites you refer to are reliable, that they are regularly updated, is it based on facts or is it just an opinion?

**Poster Marking**

**These are the points that your poster will be used to mark your poster. Use it as a checklist to make sure you have included everything:**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Not attempted** | **Partially attempted** | **Well attempted** |
| **Section** | **Description** | **0** | **1** | **2** |
| **Diagrams & images** | Relevance – are they suitable? |  |  |  |
| Clarity – layout, quality of images etc. |  |  |  |
| **Scientific facts** | Facts about your scientist |  |  |  |
| Reason(s) why they are famous |  |  |  |
| Facts about their discovery |  |  |  |
| Reason(s) why it is useful |  |  |  |
| Relevance of facts |  |  |  |
| Use of correct terminology (words) |  |  |  |
| **Persuasiveness** | Why is their work valuable/important |  |  |  |
| How well did your poster convince your marker |  |  |  |
| **Handed in on time?** |  |
| **Total ( /20)** |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Section** | **Title** | **Maximum mark** | **Your mark** |
| Part 1 | Starter activity questions | 10 |  |
| Part 2 | Background research | Facts  | 5 |  |
| Complete references | 5 |  |
| Part 3 | Poster display | 20 |  |
| **Total** | **40** |  |

**Overall mark**

**Once you have had your project marked, please complete the feedback form on Firefly. This will be set for you as a task.**