**HAMPTON EXTENDED PROJECT**

**LEVEL 4 LOG**

This Log should be completed **as you progress through the project**. It is important that you give **as much detail as possible,** so feel free to **expand** the sections below and write in more space than is provided!

The sections in this logbook are all compulsory; they represent the minimum information needed to track your project journey. However, you should also feel free to add in anything else that you see is relevant which you see shows the journey of your project. This might include, for example, a detailed timetable of work you have completed, your evaluation of sources, your presentation slides, etc.

**Name and form: Robert Ng U6CHR**

**Supervisor: Mr Clark**

**Title: The Modern Usages of Liquid Crystals**

**Pupil signature and date of completion (can be typed):**

**RHN 10/10/24**

**Supervisor initials, signature and date of completion (can be typed):**

**Pupil’s A Levels: Computer Science, Physics, Maths, Further Maths**

**TO BE COMPLETED BY PUPIL:**

**INITIAL PROJECT PLAN**

***Near the very start of the HELP process, hold a meeting with your supervisor (remember, you are responsible for contacting your supervisor and setting up the meeting). Use the page below to help you structure your meeting and fill it in as soon as possible after the meeting.***

* Date of “initial project planning” meeting with your supervisor

16/05/24

* Working title of project

The Modern Usage of Liquid Crystals

* Initial thoughts and plans

(Sources of information? Structure? Planned outcome? Problems and difficulties that may arise and how you will overcome them? Targets for completion of various stages of development?)

Online resources, articles and other free books online

Aim for most work to be completed over the Summer Holiday

Conclusion over what usage in modern day liquid crystals are implemented not decided but series of options made.

* Paraphrase your Supervisor’s thoughts and advice

Interesting topic should try to find a main topic to focus on (regarding the modern application of liquid crystals) rather than multiple broad topics.

* Your plan going forward

Begin project, perhaps change title, as progresses settle on a focused main topic for the project

**TO BE COMPLETED BY PUPIL:**

**MID-PROJECT REVIEW**

***Once you have got your project underway, undertaken some research, and started to plan your writing, hold a meeting with your supervisor. You may have decided to narrow the area of research and change your title slightly… that’s all part of the project process!***

***Use the page below to help you structure your meeting and fill it in as soon as possible after the meeting.***

* Date of “mid project review” meeting with your supervisor

05/07/24

* Final title of project

The Modern Usages of Liquid Crystals

* Outline your progress since your initial meeting with your supervisor, including any obstacles you have overcome

Please be as detailed as possible.

Hashed out the final format of the project to be done and specific topics that I want to research into. Made progress into the document itself and lots of sources found.

* Steps you need to take to complete the project

Please be as detailed as possible.

Expand and complete the history sections of the project. Perhaps start on the application section being the aim of the project and come back to the physics related parts. Start preparing citing of sources used for project

* Paraphrase your supervisor’s comments and advice

Interesting project with good progress made so far.

* Your plan going forward

Please be as detailed as possible

As stated above, begin researching and writing on the application of liquid crystals and start thinking about developing my own thoughts and opinions.

**TO BE COMPLETED BY PUPIL:**

**END OF PROJECT REVIEW**

***Once you have done a first draft of your project, hold a meeting with your supervisor.***

***Use the page below to help you structure your meeting and fill it in as soon as possible after the meeting.***

***Make sure you also discuss your planned presentation.***

* Outline your progress since your Mid-Project Review, including any obstacles you have overcome

Please be as detailed as possible

My own opinion of the applications of liquid crystals and their future possibilities developed and written. History section has been briefly described to further show the history behind them. Physics section has been explored in depth and deep understanding gained from it.

* Paraphrase your Supervisor’s comments on your progress

A very interesting topic looks forward to reading into the document in completion. Make sure all citing is completed and in particular where any Wikipedia citing has been used, look for where Wikipedia is citing from.

***(Don’t forget to discuss your plans for your presentation – see next page)***

**TO BE COMPLETED BY PUPIL:**

**PRESENTATION PLAN**

***All Level 4 HELP pupils must do a 10-minute presentation of their project to their peers.***

***Please ask your supervisor to fill in the presentation feedback page on the next page.***

* Planned nature of presentation

Give details of planned audience, timing, format, handouts, etc. Please be as detailed as possible.

Live presentation given to audience (likely my computer science class). No handouts required but will be doing live sketching and drawings on a whiteboard to help convey and explain ideas. Few notes on slides but lots of images and bullet-points that I can explored in depth in the presentation.

* Paraphrase your Supervisor’s comments and advice

Ensure all (main) sections that I want to discuss are within the document or lead to said topic at some point. Go through and see if I want to rearrange ordering of any slides regarding the sequence to be presented on the day.

***Remind your supervisor that they should fill in the next page when you do your presentation.***

**TO BE COMPLETED BY SUPERVISOR:**

**PRESENTATION FEEDBACK**

* Composition of audience
* Format of presentation
* Audibility
* Pace, fluency, tone and energy
* Eye contact, body language and gesture
* Questions asked by audience
* Supervisor’s signature (can be typed):

**TO BE COMPLETED BY PUPIL:**

**PROJECT REFLECTION**

* Outline in detail what you have gained from completing the project.

Consider skills you have gained or improved; the successes and failures in your planning and management of the project; what you would do differently were you to do the project again; and advice you would give to others who were considering completing a project.

My research and writing skills have developed hugely from this project. I also found the project from the document to the presentation extremely fun and interesting as what started as admittedly a chance to put something on my personal statement to something I’ve found lots of interest in. I also feel that it has really developed my interest in STEM recently and has allowed me to enjoy the many different topics in maths, physics and computer science that we don’t go through on syllabus. I think setting up a better time scaling or plan would have helped greatly as it became more rushed towards the end of the project, and I believe I could have explored topics in further detail which I would have liked to do. Also, something I realised much too late was that as well as researching my topic from various articles, websites and videos, contacting those familiar in the area would have been quite helpful and very interesting to develop deeper understanding of my topic and answer questions that I was confused about at the time. I’d suggest to others to make a concise plan from the start and set deadlines for sections, so they’re more easily met.

**TO BE COMPLETED BY SUPERVISOR:**

**PROJECT MARK SHEET**

***Note to supervisor:***

Level 4 projects are marked out of 100 marks.

For each assessment objective (AO) below, firstly decide which band’s descriptor most closely fits the work, before deciding where within the band it should be placed. Use both the pupil’s project and the logbook to arrive at your marks.

Once marked, please forward this project and logbook to JFL for moderation (either a paper copy in his pigeon hole or an email to [j.flanagan@hamptonschool.org.uk](mailto:j.flanagan@hamptonschool.org.uk)). Please do not tell your pupil their marks until you are notified that the moderation process is complete.

**AO1: Project Management (15) Mark:**

|  |  |  |
| --- | --- | --- |
| **Band** | **Descriptor** | **Mark**  **/15** |
| 10-15 marks | * The hand in deadline has been met. **(This is crucial to achieve this band).** * The pupil has consistently held all required meetings with supervisor. * The pupil has produced a clear plan for their project, modifying it if necessary as the project progressed. |  |
| 5-9 marks | * The hand in deadline has been missed. * One or two pupil-supervisor meetings have not happened. * There is a plan for the project but it could have been clearer in places. |
| 0-4 marks | * The hand in deadline has significantly slipped (>1 week) * Most pupil-supervisor meetings have not happened. * There was little to no plan for the project |
| **Brief comment from supervisor on AO1** | | |

**AO2: Academic Rigour: Knowledge and Understanding (25) Mark:**

|  |  |  |
| --- | --- | --- |
| **Band** | **Descriptor** | **Mark**  **/25** |
| 18-25 marks | * The work demonstrates an exceptionally deep understanding of the topic, well beyond A level standard. * The title of the project has been well chosen (and refined if necessary) to achieve an excellent depth of discussion. |  |
| 10-18 marks | * The work demonstrates a very good knowledge of the topic, of at least A level standard. * There was perhaps scope to amend the project title to achieve a greater depth of discussion. |
| 0-9 marks | * The project has demonstrated A Level knowledge of the subject. * The project did not fully relate to its title. * The contents of the project felt rushed in places. |
| **Brief comment from supervisor on AO2** | | |

**AO3 Academic Rigour: Resources, Evaluation and Analysis (25) Mark:**

|  |  |  |
| --- | --- | --- |
| **Band** | **Descriptor** | **Mark**  **/25** |
| 18-25 marks | * The work draws upon a wide range of sources, which the pupil references appropriately for an academic piece of work. *(If, due to the nature of the topic, there are limited sources to draw upon, the author must ensure that this is explained to the reader, and the work must be is sufficiently different to the sources).* * There has been critical analysis and application of the sources used, with clear links to appropriate theories and concepts. * There is originality evident in the project. For example, for a scientific project, this might include examining multiple theories and analysing/applying them in an original way. For a humanities project, there might be effective use of arguments and counterarguments to persuade the reader of a particular viewpoint. |  |
| 10-18 marks | * The work draws upon a range of sources. * Referencing is evident but could be improved upon. * There is a reasonable amount of originality in the project. |
| 0-9 marks | * The work draws upon a very limited number of sources, and there would have been clear scope to use more. * There is little referencing. * Much of information presented is quite generic and not well critiqued. |
| **Brief comment from supervisor on AO3** | | |

**AO4: Project Reflection and Review (15) Mark:**

|  |  |  |
| --- | --- | --- |
| **Band** | **Descriptor** | **Mark**  **/15** |
| 10-15 marks | * The pupil has written a thoughtful and detailed reflection on: * Skills they have gained or improved; * Successes and failures in planning and management of the project; * What they would do differently if they were to do the project again * Advice they would give to others who were considering completing a project. |  |
| 5-9 marks | * The pupil has written a reflection covering most of the points above, but it could have been deeper in places. |
| 0-4 marks | * There is little to no evidence of reflecting on the project. |
| **Brief comment from supervisor on AO4** | | |

**AO5: Presentation (20) Mark:**

|  |  |  |
| --- | --- | --- |
| **Band** | **Descriptor** | **Mark**  **/20** |
| 15-20 marks | * The presentation was suitable and understandable to the audience. * Any visual aids (e.g. slides), if used, were well designed and not too cluttered. * Communication skills were excellent (audibility, engagement, eye contact) and avoided simply reading the text from the slides. (Whilst notes are permitted, they did not adversely affect the flow of the presentation). * The presenter kept to time (10 minutes is ideal) * The presenter answered questions well from the audience. |  |
| 9-14 marks | * The presentation was mostly suitable to the audience but at times presented information which was either too detailed or not relevant to the audience. * There was an over-reliance on notes or reading off slides. * The presentation went significantly over time (e.g. >15 minutes) |
| 0-8 marks | * There was either no presentation or a poor effort. |
| **Brief comment from supervisor on AO5** | | |

**Supervisor’s Concluding Comment and Total Mark /100**

|  |  |
| --- | --- |
| **Total Mark / 100** | **Comment** |
|  |  |

**Supervisor’s signature and date:**

*(Can be typed)*