National TRITECH RUBRIC 2020

Project title:	Category:	Project no.	Grade:
Name of participant/s:	Name of Judge:	Mark: [100]	

SECTION A: JOURNAL and LITERATURE STUDY	Max mark	Project mark
Abstract: 1 paragraph, clearly written, that summarises the project and appears on the outside of the journal. Logical and clear 2/2 Present 1/2, Absent 0/2	0 - 2	
Background knowledge: Clear evidence that a literature study was undertaken and is shown through **written or verbal knowledge.** **Learners score 3/3 if:** Significant amount of background information**.** **Learners score 2/3 if:** Limited knowledge of background information. **Learners score 0/3 if:** No literature study was undertaken.	0 - 3	
Scientific progress: The journal clearly shows the student's **progression** through the research steps in logical order, for example: in either/or the problem, background information, aim, question, hypothesis, method, results (in rough table and/or graph format) and conclusion. **Learners score 5/5 if:** the **scientific cycle** is clearly evident and repeated with improvements along the way. **Learners score 2/5 if:** only parts of the scientific cycle are shown. **Learners score 0/5 if:** no evidence of research is shown / information is irrelevant or incomplete.	0 - 5	
Rough workings: The journal shows the collection and collation of data by the student. It shows the workings of the student. Notes, ideas, mistakes shown. **Learners score 5/5 if:** Clear evidence of notes, ideas, changes, data and method(s)**.** **Must n**ot be a copy of the final presentation. **Learners score 2/5 if:** Some records but not relevant, or incomplete. **Learners score 0/5 if:** Journal is absent or a duplication of project/board. **Hint:** Rough notes are not necessarily neat.	0 - 5	
Total:	**(15)**	

SECTION B: VISUAL PRESENTATION (of research)	Possible mark	Project mark
Overall Appearance: Project is neat, eye-catching and creative. Correct, scientific, no spelling mistakes, with appropriate headings. Board: Anyone would be able to see what the project is all about in 2 minutes at a distance of 2 m, without help. Power Point: Points shown on slide are short, clear and summarise the project. *Hint: It is always good to have a physical printout of the power point presentation for pre-judging purposes.*	0 - 3	
Topic/Design/Computer program: Something new within the participant's frame of reference. Not just a duplication of something that already exists. (e.g. existing experiments, computer processes, scientific processes, existing technology or computer technology)	0 - 3	
Problem is a real problem for a specific community (or group of people) and is well defined.	0 - 3	
Background knowledge: The student **summarises** the academic background available on the topic.	0 - 2	
Aim: State clearly what you intend to do to solve the problem. The variables impacting on the study should be mentioned.	0 - 2	
Investigative question is meaningful and well researched: The question is clear, short and "testable".	0 - 3	
Hypothesis: **Learners score 2/2 if:** The hypothesis is clearly stated including mention of the variables. **Learners score 1/2 if:** Hypothesis is not clear.	0 - 2	
Method is complete, appropriate and well thought out and explains point by point how the hypothesis was tested. **Learners score 5/5 if:** Steps of the method are clear and in logical order. **Learners score 3/5 if:** Steps of the process are less clear or not in order. **Learners score 1/5 if:** Process is incomplete, only a few steps are done. **Learners score 0/5 if:** The presentation is only a literature study.	0 - 5	
Results: **Variables, control (See below for IT, Technology and Engineering)** **Learners score 5/5 if:** Variables identified and control is applicable and can be explained. Sample size and sample selection is appropriate to the complexity of the study and can be explained.	0 - 5	P.T.O

		Possible mark	Project mark
Results cont:	**Learners score 2/5 if:** One or two variables are absent. Sampling size and sample selection are not considered. **For IT, Technology, Statistics and Engineering where Controls and Variables are not available, a <u>CLEAR</u> outline of improvements made to the design/ programme etc. during the course of the project must be given and discussed. Clear 5/5, Unclear 2/5, None 0/5**		
	Tables and graphs. Clear, meaningful, relevant and applicable to research/testing done. Clearly labelled (can be on board, in power point presentation or journal).	0 - 5	
	Meaningful **interpretations** / deductions are made from the results.	0 - 2	
Conclusion is meaningful and is connected to the aim and hypothesis.		0 - 5	
Bibliography and recognition: **Learners score 5/5 if:** Acceptable format is used (author, date, title, and source) for 5 or more literature searches **AND** acknowledgements are listed separately. **Learners score 2/5 if:** Little research is done and there is only 1 or 2 references. **Learners score 0/5 if:** Only Google is listed or there is no evidence of a literature search and no acknowledgements are listed.		0 - 5	
Total:		**(45)**	

SECTION C: ORAL PRESENTATION OF PROJECT	Possible mark	Project mark
Introduction: Immediately creates interest in her/his project.	0 - 2	
Project comes out of learner's field of experience: It is clear that the project comes out of the learner's field of experience.	0 - 2	
Enthusiasm: Learner is energetic, clearly excited and in control of the presentation.	0 - 2	
Presentation of the project: A lot of effort is made in order to explain in a clear, comprehensive and logical manner. <u>Single project</u>: It is clearly the learner's own work. <u>Group project</u>: All members have put in the effort and it is their own work.	0 - 3	
Self-confidence and body language: Learners are full of confidence and comfortable with the topic/project.	0 - 2	
Scientific language: Scientific language is used fluently and learner shows insight into language. (No teenage slang may be used)	0 - 2	
Speech: Presentation is clear and is not read off. (May refer to notes.)	0 - 2	
Answering of questions: Listens to questions asked and answers meaningfully and intellectually OR admits to not knowing the answer but offers to research it.	0 - 2	
Improvement of and possible expansions of the Project. Meaningful suggestions on improvements of existing project (experiment / program or product)**.** Learner realises the **scientific short-comings**, can support and substantiate possible suggestions for expanding on the project.	0 - 4	
Time frame: Presentation of not more than 10 min.	0 - 2	
Ownership: Learners take 100% ownership of the project. They can explain all the methods/techniques used. Recognition given to help received.	0 - 2	
Total:	**(25)**	

SECTION D: IMPACT OF THE PROJECT AND USE OF TECHNOLOGY		Possible marks	Project mark
Community and/or environmental impact:	Learner has identified the relevant community and can explain the advantage the project has on the community and/or environment.	0 - 2	
	Project findings have been communicated to the community.	0 – 2	
	Benefits to or impact on the community and/or environment was tested (Statistics are given)	0 - 2	
	Proof of the positive changes that the project has had on the community and/or the environment where it has been put to use.	0 - 2	
Technology	Learner has identified the technology **available to the child** that was used for **research and testing.**	0 - 2	
	Technology was used in an exciting, creative and meaningful manner in the research.	0 - 3	
	Use of a variety of technological skills (if available).	0 - 2	
Total:		**(15)**	

Please give constructive and kind feedback to the participant.	Project total: [100]