

HWA CHONG INSTITUTION (HIGH SCHOOL) PROJECTS COMPETITION

CATEGORY 3 : INVENTIONS JUDGING RUBRICS

Oral Presentation

CRITERIA	PRODUCT OF INVENTION (80%)					SCORE		
	1-2	3-4	5-6	7-8	9-10	P	S	F
PURPOSE OF INVENTION	Purpose for invention is not stated or irrelevant.	Purpose for invention is stated briefly with no explanation.	Purpose for invention is stated briefly with little explanation.	Purpose for invention is stated with some explanation.	Purpose for invention is clearly stated and explained with great details.	✓	✓	✓
APPROPRIATENESS OF INVENTION	Invention is inappropriate for the purpose.	Product serves its purposes to a small extent but there is no potential for further development.	Product serves its purposes to a small extent and has little potential for further development.	Product serves its purpose to a large extent and has potential for further development.	Product serves its purposes very well and there is potential of commercialising the product.	✓	✓	✓
ORIGINALITY AND CREATIVITY OF INVENTION	Same product already in existence.	Product uses other people's ideas and there is little evidence of original thinking.	Product uses other people's ideas and there is some evidence of original thinking.	Product shows some original thought. Ideas are relatively insightful.	Product shows a large amount of original thought. Ideas are creative and inventive.	✓	✓	✓
INFORMATION GATHERING	Fails to gather information, or obtains it inappropriate sources. No connection made between information gathered and the invention.	Gathers information from limited sources. Little connection made between information gathered and the invention.	Gathers some information from various sources. Some connection made between information gathered and the invention.	Gathers sufficient resources and information from various sources. Sufficient connection made between information gathered and the invention.	Gathers a broad spectrum of resources and information. Good connection made between information gathered and the invention.	✓	✓	✓
CONSTRUCTION OF PROTOTYPE	Product is not constructed.	Inappropriate materials were selected and contributed to a product that is unable to function.	Appropriate materials were selected for construction. Product is constructed and is able to function.	Appropriate materials were selected and/or modified for construction. Product is well constructed and is able to function well.	Appropriate materials were selected and/or creatively modified for construction. Product is very well constructed and functions extraordinarily well.		✓	✓
CONSTRUCTION KNOWLEDGE	Shows inaccurate understanding of principles underlying the construction of product.	Shows little understanding of principles underlying the construction of product.	Shows limited understanding of principles underlying the construction of product..	Shows sufficient understanding of principles underlying the construction of product..	Shows accurate and thorough understanding of principles underlying the construction of product..		✓	✓
MODIFICATION/ TESTING	No evidence of troubleshooting , testing and refinements of prototype.	Little evidence of troubleshooting, testing and refinements of prototype.	Some evidence of troubleshooting, testing and refinements of prototype.	Clear evidence of troubleshooting, testing and refinements of prototype.	Clear evidence of troubleshooting, testing and refinements of prototype based on data collection and scientific principles.			✓
EVALUTION OF INVENTION	No or inappropriate evaluation of invention. Not able to explain limitations and areas of improvement.	Little evaluation of invention. Able to explain limitations and areas of improvement clearly with little details.	Some evaluation of invention. Able to explain limitations and areas of improvement clearly with some details.	Sufficient evaluation of invention. Able to explain limitations and areas of improvement clearly with sufficient details.	Critical evaluation of invention. Able to explain limitations and areas of improvement clearly with great details.			✓

INVENTOR'S LOG (5%)						SCORE		
CRITERIA	1	2	3	4	5	P	S	F
CONTENT AND ORGANISATION OF CONTENT	Few entries are made but entries are not dated or very difficult to read. It provides very little detail about several aspects of the invention stages.	Several entries are made and few of the entries are dated and legible. It provides little detail about the invention stages	Several entries are made and some of the entries are dated and legible. It provides some detail about the invention stages.	Several entries are made and most of the entries are dated and neatly entered. It provides a record of the invention stages with details.	Several entries made and all are dated and neatly. It provides a record of the invention stages with great details.	✓	✓	✓

PRESENTATION SKILLS (15%)						SCORE		
CRITERIA	1	2	3	4	5	P	S	F
DELIVERY	Unclear speech, read directly from notes or screen all the time, irritating speech pattern, does not capture audience attention. Only one member presents.	Speak clearly in standard English some of the time, read from notes or screen most of the time, able to hold audience attention some of the time. Not all members present.	Speak clearly in standard English most of the time, read from notes or screen some of the time, able to hold audience attention most of the time. Not all members present.	Speak clearly in standard English most of the time, only read from notes or screen occasionally, able to hold audience attention. All members present.	Speak clearly and distinctly in standard English all the time, does not read from notes or screen, able to capture audience attention and provokes participation. All members present.	✓	✓	✓
ORGANISATION OF CONTENT	Content is confusing. Illogical flow of ideas. Difficult for audience to follow. Does not utilise any visual aids and props effectively.	Content is somewhat organised. Audience is able to follow through little of the ideas presented. Little use of visual aids and props. Visual aids and props do not illustrate ideas well.	Content is organised. Audience is able to follow through some of the ideas presented Visual aids are used. Visual aids and props do illustrate ideas..	Content is well organised. Audience is able to follow through most of the ideas presented. Effective use of visual aids and props to illustrate ideas clearly.	Content is well organised. Logical flow of ideas. Ideas are clearly conveyed to the audience. Creative and effective use of visual aids and props to illustrate ideas clearly.	✓	✓	✓
RESPONSE TO QUESTIONS	Unable to response relevantly to any of the questions.	Able to response to some of the questions. Answers are relevant but contain little elaboration of ideas.	Able to response to all the questions. Answers are relevant but contain some elaboration of ideas.	Able to answer response to all the questions. Answers are relevant and elaborated on.	Able to response to all the questions. Answers are relevant, well thought out and elaborated on.	✓	✓	✓