

## Science Investigation Judging Rubric

		Beginning	Developing	Achieved	Excelled
Scientific Process (40%)	Abstract provided			1	2
	Realistic aims and clear hypothesis			1	2
	Introduction including reference to relevant scientific literature	1	2	3	4
	Methods including controls and replication	2	4	6	8
	Results – data representation	2	4	6	8
	Discussion including anomalies, errors explanation and suggestions for further research	2	4	6	8
	Reasonable conclusions from data			1	2
	Communication – accuracy, thoroughness, and clarity	1	2	3	4
	Complete Risk Assessment			1	2
Ingenuity (40%)	Choice of topic (originality of topic or original approach to solving a familiar problem)	5	10	15	20
	Inventive approach to collecting data or application of research findings	4	8	12	16
	Appropriate acknowledgement of assistance	1	2	3	4
Value (20%)	Addresses an issue of scientific significance	4	6	8	10
	Contribution to a body of knowledge	4	6	8	10
				Total:	/100

## Engineering Judging Rubric

		Beginning	Developing	Achieved	Excelled
Scientific Process (40%)	Abstract provided			1	2
	Realistic aims			1	2
	Introduction including reference to relevant scientific literature	1	2	3	4
	Method, Part 1 – description of the innovation design and explanation of how it functions including appropriate diagrams	2	4	6	8
	Method, Part 2 – experiment design to collect accurate data using controls and replication	1		3	4
	Results – data representation	1	2	3	4
	Discussion gives thoughtful and insightful analysis into the meaning of the results including anomalies, errors explanation and suggestions for further research	2	4	6	8
	Design evaluation and reasonable conclusions from data	1	2	3	4
	Communication – accuracy, thoroughness, and clarity			1	2
	Complete Risk Assessment			1	2
Ingenuity (40%)	Choice of a problem to solve (complexity, significance, relevance)	2	4	6	8
	Choice of innovative design to solve the problem (originality, creativity, imagination, resourcefulness)	3	6	9	12
	Design functionality (effectiveness, ease of use, meeting its engineering goals)	5	10	15	20
Value (20%)	Explanation of practical application for human and/or commercial benefits.	5	10	15	20
				Total:	/100