



Motto:
"Not for self but for
others"

Aspley State High School Science Department

Subject: Physics
Assessment Task 1
Extended Response Task
Context: Looking Good

Important dates:

Issued: 18/03/2009
Draft: 03/04/2009
Final: Wednesday 22/04/2009
(Draft and Checklist to accompany report)

Name: _____

Class: _____ **Teacher:** _____

Overall Result		
KCU	IP	E&C

1. THE TASK:

Your task is to apply your knowledge of Physics to the application of treating common vision problem/s associated with geometric optics.

You are to research and report on:

- the nature of the condition/s,
- different methods of treating the condition/s and
- compare success rates for these methods.

You should concentrate on highlighting the "Physics" involved in the treatment process and whether there are short/long term consequences or possibility of a cure.

Your report should be between 800 – 1000 words in length.

2. TIMELINE:

See the above schedule of important dates for the timelines identified for this investigation.

3. JOURNAL AND CHECKLIST:

Journal: You will use the supplied notebook to record in one place your thoughts and notes about everything from selection of a topic through to completion of your investigation. It is a no-frills, on-the-spot recording of the essentials of your work. It need only be intelligible to you but it may be used to verify the authenticity of your work.

Feedback Checklist: You will be offered feedback on your draft report (once only) should you choose to avail yourself of it. It is not compulsory. Feedback will be in the form of a *feedback checklist*.

You will need to submit your journal, the draft checklist and your draft report along with your final report. The Journal, and Feedback checklist and draft will not be assessed but is your way of providing evidence that *you engaged in the research process* and that the report is *your own work*.

4. PROCESS

The essential element for success is to be aware that this is a largely independent task; while there will be some ideas or suggestions on how to approach the issue from your teacher or other collaborators, it is up to each student to plan his/her own unique approach to their investigation.

This is a significant piece of assessment for our work this year – make sure you give enough quality evidence to achieve the rating you deserve.

A combination of independent study, research, and organization will be essential for success. You will need to start work in your own time immediately to ensure that you are ready to complete your research in the time available.

Year 11 Physics – Extended Response Task Marking Criteria – Assessment Instrument 1 2009.

General Objective		Standards					Result
		A	B	C	D	E	
Knowledge and Conceptual Understanding	KCU1 <i>Recall and interpret concepts, theories and principles of Physics</i>	The student is able to recognise and interpret complex and challenging concepts theories and principles in the research task.	The student is able to recognise and interpret complex or challenging concepts theories and principles in the research task.	The student is able to recognise and interpret concepts theories and principles in the research task.	The student is able to recognise and interpret simple ideas and theories in the research task.	The student is able to recognise isolated ideas and theories in the research task.	
	KCU2 <i>Describe and explain processes and phenomena of Physics</i>	The student is able to compare and explain the complexity of the physics phenomena in the research task.	The student is able to compare and explain the physics phenomena in the research task.	The student is able to explain the simple physics phenomena in the research task.	The student is able to describe the simple physics phenomena in the research task.	The student is able to recognise simple physics phenomena in the research task	
Investigative Processes	IP1 <i>Conduct and appraise Physics research</i>	The student has demonstrated the ability to formulate significant questions that inform the effective and efficient management of the research task.	The student has demonstrated the ability to formulate questions to inform the management of the research task.	The student has demonstrated the ability to formulate questions to inform the management of the research task.	The student has demonstrated the ability to formulate questions for the research task	The student has undertaken basic steps towards the research task	
	IP3 <i>Use primary and secondary data</i>	The student is able to systematically analyse qualitative research to identify relationships and identify anomalies	The student is able to analyse qualitative research to identify relationships and anomalies.	The student is able to analyse research data to identify relationships.	The student is able to analyse research data to identify obvious relationships.	The student is able to provide research data.	
Evaluating and Concluding	EC1 <i>Determine, analyse and evaluate the interrelationships involved in applications of Physics</i>	The student demonstrates a high ability to analyse and interpret the simple and complex physics interrelationships evident using principles and theories and critically evaluate their implications	The student demonstrates an ability to analyse and interpret the simple and complex physics interrelationships evident using principles and theories and evaluate their implications	The student demonstrates a high ability to analyse and interpret the simple and complex physics interrelationships evident using principles and theories.	The student demonstrates an ability to identify the simple physics interrelationships.	The student identifies the obvious physics relationships	
	EC3 <i>Communicate information in a variety of ways</i>	The student is able to use discrimination in the selection and presentation of scientific ideas to make meaning accessible to an intended audience. All sources are correctly acknowledged through references and a bibliography.	The student is able to select and present scientific ideas to make meaning accessible to an intended audience Sources are correctly acknowledged through references and a bibliography.	The student is able to select and present scientific ideas to make meaning accessible. Sources are acknowledged through references and a bibliography.	The student is able to present scientific ideas to make meaning. References and/or a bibliography is provided.	The student is able to present scientific ideas.	

Physics – Extended Response Task
Draft Report - Feedback Checklist
Assessment Task 1 2009.

Name: _____

Note: this feedback checklist should also be submitted with your final report.

Aspect	Areas that might need improvement (marked by a ✓)	
1. Task	Awareness of the purpose of task.	
2. Subject matter and cohesion	You need to provide more detail in the following sections:	
	Theory – Identifying major theory points to discuss	
	Theory – Theory points elaborated and explained	
	Only include the most important and relevant information from your library research	
	You need to provide evidence or a reference for your comment or claims.	
	Nature –	
	Treatment –	
	Success rates –	
	Bibliography - is not included.	
	- insufficient number of sources	
	- referencing style not consistent or contains errors	
	The arrangement of material could be difficult for your audience to follow	
	Theory section needs clearly defined paragraphs based on issues to be discussed, and each clearly introduced to show an understanding of them	
	Theory needs to flow from issue to issue. Not just a list of points.	
4. Language	Vocabulary needs improvement - a greater level of sophistication	
	The words highlighted need to be replaced with more precise or scientific terms.	
5. Sentences	Break up some of the longer sentences.	
	Sentences show a lack of variety in form and length.	
	Be consistent using active/passive voice and tense.	
	Some sentences should be separated; use a full stop or semicolon, not always a comma.	
6. Tech.features	Apostrophes, capitals, commas, grammar .	
7. Paragraphs	Do not consistently contain a topic sentence (usually at beginning).	
	Do not consistently contain a concluding sentence.	
	Improvement required in linking ideas and paragraphs.	
8. Spelling	Spelling errors need correction – a few are circled.	
10. Length	Too long/too short	
11. Presentation	Choose formatting that makes your report easy to follow	
	Layout and neatness need improvement	

Teacher's comments:

Teacher's signature: _____

Date: _____