

ORANGE HIGH SCHOOL

ASSESSMENT TASK NOTIFICATION

Subject	Science: 2-Page Scientific Article
Year	9
Weighting	30%
Teachers	Ms Huggett, Mr Routh, Mr Kennard, Ms Townsend, Mrs Griffen, Ms Constant and Ms Paul
Head Teacher	Mr Shea
Due Date	Specific day to given by classroom teachers (Term 1 Week 8A)

Assessment Outline

You will need to produce a double page spread article for a science magazine for school students. Your audience will be students in the year groups between Years 8 to 10 (upper Stage 4 and Stage 5 students in high school).

In your article spread you must:

- a) Research at least TWO physics concepts, this can be from the list below or concepts that you're interested in.(Use the concept building worksheet supplied by your teacher in Week 5)
- b) Explain the science behind the concepts (look at the main themes/ideas behind the concept)
- c) Demonstrate an understanding of the concept by:
 - \rightarrow Using pictures to help visualise the ideas,
 - \rightarrow Label any diagrams, graphs or tables you use,

 \rightarrow Have at least 4 paragraphs to demonstrate your knowledge of the themes/ideas (use the PEEL sheet from Week 6 and 7, as a guide for this)

- → Your explanations of the themes/ideas in each concept should flow and link to together
- \rightarrow Have clear headings and sub-headings over the two pages
- ➔ Application section of your concept. How could your concepts benefit humans in the future?
- d) Submit a bibliography to acknowledge where you collected your information from, as per the bibliography scaffold attached.

 \rightarrow Make your science article interesting and descriptive, think about the structure how to make the concepts easy to understand, the article should look good too.

Non-completion of Task:

If you know you are going to be away on the day that the task is due, you must make alternative arrangements with your classroom teacher. If you are away on the day of the examination, you must catch up with your classroom teacher on the first day you return to make alternate arrangements to catch up on this task.

Failure to follow the above procedures may result in a zero award.

Outcomes Assessed

SC5- 7WS Process and analyse data and information from secondary sources
SC5- 8WS Produce plausible explanations and solutions to identified problems
SC5- 9WS Present science ideas using appropriate text and representations
SC5-10PW Applies models, theories and laws to explain situations involving energy, force and motion
SC5-11PW Explains how scientific understanding about energy conservation, transfers and transformations is applied in systems

Steps to follow to complete this task

<u>Planning:</u>

- 1. Choose your target audience (year group to read the article spread).
- 2. Choose at least **TWO** concepts to research (more to possibly increase your marks). If you're unsure, please check your chosen concept with your teacher.

Possible physics concepts:

- A. Circuits and Ohms Law
- B. Lightning
- C. Static electricity
- D. Conservation of energy
- E. Energy transfers and transformations
- F. A concept you're interested in. GET THIS APPROVED BY YOUR TEACHER.
- 3. For each concept break down the main themes/ideas, by using the concept building worksheet supplied by your teacher in Week 4 or 5.



- 4. Research your chosen concepts, and write a brief description about each, include images where possible (make sure you reference where you found your images).
- 5. Continue your research, include maps (if needed), pictures, and graphs showing relevant data or graphics. **DO NOT COPY AND PASTE THE INFORMATION**.
- As you conduct your research, you must acknowledge all sources of where you collect your information from, this will be handed in as a list on a separate sheet of paper. USE THE SCAFFOLD PROVIDED.
- 7. Think about how your concepts be beneficial to humans in the future, include these thoughts in your article.
- 8. Think about your design, what would your layout look like?

Presenting (making the double-page article spread):

- 1. Your magazine article must be in the form of printable digital product (eg, publisher or word).
- 2. On the **DUE** date you must hand in a printed copy to your teacher of your article and your <u>bibliography</u>. It would be a good idea to also email it to your teacher, so they can see the coloured version of the magazine spread.
- 3. Use visual images to make your double spread appealing to your target audience.
- 4. Use scientific terminology, eg, wires, electricity, sustainability or transformation and explain what these terms mean based on your target audience.
- 5. Below is an example of a double spread article featured in a Science magazine (Double Helix). this gives you an idea of how it could look.
- 6. Include your bibliography, as per the scaffold attached.

Example of a magazine article:



Bibliography Scaffold:

BOOKS				
Author(s)	Date of publication in brackets	Title of book in italics	Name of publisher	
Example:				
Keay, J.	(2000).	The Great Arc.	Harper Collins.	
WEBSITES				
Author	Date published if available	Title of Article	Title of website in italics	From URL
	If no date available write (n.d.)			
Example:		Citing Websites.	In Study Guides and Strategies.	http://www.studygs.net/citation.htm.
	(n.d.)			
MAGAZINES				
Author	Date	Title of Article	Name of Magazine	Volume, issue, pages
<u>Example:</u> Tumulty, K	(2006, April).	Should they stay or should they go?	Time	167(15), 3-40.
PERSONAL CONVERSATIONS AND EMAILS				
Person's name	Date	How you know them	Nature of communication	
<u>Example:</u> Mr B. Rock	12/7/16	Geologist and uncle	email	
VIDEOS, DVDS, TV SHOWS ETC				
Producer and writer / director or for youtube the person who uploaded video	Date	Title and type of resource	Country and company producing video / or the URL	
<u>Example:</u> Fothergill, A. (producer), Attenborough, D. (narrator).	(2005)	The Blue Planet – Coral Seas [DVD]	UK, BBC.	

Marking Rubric: Scientific Article (Due: Term 1 Week 8A)

Student Name: _____

Class:_____

Course		Α	В	С	D	Ε	0	WS
Outcomes		5	4	3	2	1		Total
	Sections from assessment task	Has achieved a very high level of competence in the processes and skills and can apply these skills to new situations. (EXTENSIVE)	A high level of competence in the processes and skills. In addition, the student is able to apply these skills to most situations. (THOROUGH)	An adequate level of competence in the processes and skills. (SOUND)	A limited level of competence in the processes and skills. (BASIC)	Very limited competence in some of the processes and skills. (ELEMENTARY)	Not attempted	
Processing Information SC4- 7WS	Number of concepts	3 More than 2 Physics related concepts presented	X	2 2 Physics related concepts presented	X	1 Less than 2 Physics related concepts presented	0	WS7
Process and analyse data from secondary sources	Use of visuals	3 Extensive use of visuals to enhance meaning. Including only relevant pictures, tables, graphs etc	X	2 Good use of visuals to enhance meaning. Including mostly relevant pictures, tables, graphs etc	X	l Basic use of visuals to enhance meaning. A relevant picture, table or graph	0	/6
Explanation of concepts SC4- 8WS Produce plausible solutions to identified problems	Science behind concept 1	5 Exemplary explanation given + Demonstrated a deep understanding of the concept + Excellent description of the science behind the concept. + Explanation of how the concept can be beneficial to humans in the future	4 Detailed explanation given + Demonstrated a deep understanding of the concept + Detailed description of the science behind the concept.	3 Good explanation given + Demonstrated a good understanding of the concept + Good description of the science behind the concept.	2 Simple explanation given + Demonstrated a sound understanding of the concept + Simple description of the science behind the concept.	1 Simple explanation given + Demonstrated a basic understanding of the concept	0	WS8
	Science behind concept 2	5 Exemplary explanation given + Demonstrated a deep understanding of the concept + Excellent description of the science behind the concept. + Explanation of how the concept can be beneficial to humans in the future	4 Detailed explanation given + Demonstrated a deep understanding of the concept + Detailed description of the science behind the concept.	3 Good explanation given + Demonstrated a good understanding of the concept + Good description of the science behind the concept.	2 Simple explanation given + Demonstrated a sound understanding of the concept + Simple description of the science behind the concept.	1 Simple explanation given + Demonstrated a basic understanding of the concept	0	
	Science behind concept 3	5 Exemplary explanation given + Demonstrated a deep understanding of the concept + Excellent description of the science behind the concept. + Explanation of how the concept can be beneficial to humans in the future	4 Detailed explanation given + Demonstrated a deep understanding of the concept + Detailed description of the science behind the concept.	3 Good explanation given + Demonstrated a good understanding of the concept + Good description of the science behind the concept.	2 Simple explanation given + Demonstrated a sound understanding of the concept + Simple description of the science behind the concept.	1 Simple explanation given + Demonstrated a basic understanding of the concept		/15

Presentation SC5- 9WS Present science ideas using appropriate text and representation	Design Literacy/ Use of PEEL + Scientific terminology	5 Clear headings and sub-headings + Magazine layout visually appealing and appropriate + Looks great and lots of detail present 5 Strong use of scientific terminology + Detailed use of Point. Evidence.Explain.Link (PEEL) for paragraph structure + Sentence structure correct (punctuation, capital letters etc) + No spelling errors	4 Clear headings and sub-headings + Magazine layout visually appealing and appropriate + Looks good and some detail is present 4 Strong use of scientific terminology + Detailed use of Point. Evidence.Explain.Link (PEEL) for paragraph structure + Good sentence structure correct (punctuation, capital letters etc) + 3 or less spelling errors	3 Clear headings and sub-headings + Magazine layout is somewhat visually appealing and appropriate + Looks good and some detail is present 3 Good use of scientific terminology + Satisfactory use of Point. Evidence.Explain.Link (PEEL) for paragraph structure + Good sentence structure correct (punctuation, capital letters etc) + 4 - 6 spelling errors	2 Headings and sub- headings are present + Magazine layout is appropriate 2 Some use of scientific terminology + Attempted to use Point. Evidence.Explain.Link (PEEL) for paragraph structure + basic sentence structure correct (punctuation, capital letters etc) +	1 Magazine layout is appropriate 1 2 or less scientific terms + basic sentence structure correct (punctuation, capital letters etc) + More than 10 spelling errors	0	WS9
	Bibliography + Audience addressed	4 Extremely detailed bibliography, follows the scaffold + Accurately addresses the Year 8 – 10 age group	X	3 Detailed bibliography, follows the scaffold + Accurately addresses the Year 8 - 10 age group	7 -8 spelling errors 2 Satisfactory bibliography	1 Bibliography present with only one reference		/14

Result	Grade	Α	В	С	D	Е	
	Total	35 - 32	31 - 25	24 - 12	11 - 5	4 - 0	

Comments: