

Wauchope High School

Knowledge conquers all



Year 7 Science: Australian Scientist Research Booklet



Dr Lisa Alexander

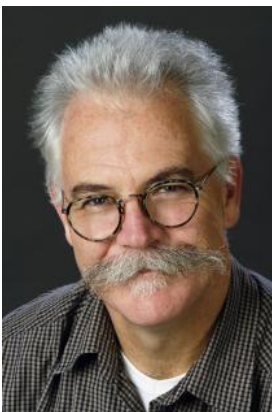


Dr Fry

Name: _____

Class: _____

Teacher: _____



Dr Alan McKay Sim



Professor Matthew
England

THE INFORMATION PROCESS

<p>Defining</p> <p>1</p> 	<p>What do I really want to find out?</p> <p><i>Steps in the process</i></p> <ul style="list-style-type: none"> • What is my purpose? • Why do I need to find this out? • What are the key words and ideas of the task? • What do I need to do?
<p>Locating</p> <p>2</p> 	<p>Where can I find the information I need?</p> <p><i>Steps in the process</i></p> <ul style="list-style-type: none"> • What do I already know • What do I still need to find out? • What sources and equipment can I use?
<p>Selecting</p> <p>3</p> 	<p>What information do I really need to use?</p> <p><i>Steps in the process</i></p> <ul style="list-style-type: none"> • What information can I leave out? • How relevant is the information I have found? • How credible is the information I have found? • How will I record the information I need?
<p>Organising</p> <p>4</p> 	<p>How can I use this information</p> <p><i>Steps in the process</i></p> <ul style="list-style-type: none"> • Have I enough information for my purpose? • Do I need to use all this information? • How can I best combine information from different sources?
<p>Presenting</p> <p>5</p> 	<p>How can I present this information?</p> <p><i>Steps in the process</i></p> <ul style="list-style-type: none"> • What will I do with this information? • With whom will I share this information?
<p>Assessing</p> <p>6</p> 	<p>What did I learn from this?</p> <p><i>Steps in the process</i></p> <ul style="list-style-type: none"> • Did I fulfil my purpose? • How did I go - with each step of the information process? • How did I go - presenting the information? • Where do I go from here?

Your Task:

Write an information report.

You will need to include 3 or 4 paragraphs.

The main idea of each of the paragraphs is:

1. What is science – an overview of your understanding of what science is.
2. Australians in science – an overview of your knowledge of what one Australian scientist has contributed to society.

3. *Extension paragraph – early finishers, high achievers and go getters.*

You have some choice! Three options to choose from to complete an extra paragraph for the possibility of full marks:

- a. *A paragraph explaining the value of studying science. **OR***
- b. *A paragraph explaining in more detail the field of science your scientist works in. **OR***
- c. *A paragraph explaining which aspects of science you are interested in.*

4. Conclusion – the value of Australian scientists to the world.

To complete the task you will need to:

- Collect information.
- Draft your report.
- Have someone proof read it – a peer as well as an adult.
- Complete a final draft to hand in.
- **Most of the work will be completed in class.**

What is Science?

Dictionary Definition _____

Existing knowledge _____

Ideas from video _____

Australian Innovation

Existing knowledge _____

Ideas from video _____

Organising your rough notes - report preparation

Paragraph	Facts/opinions/generalisations	Supporting evidence
1		
2		

Organising your rough notes - report preparation

<p>3</p>		
<p>4 Select points you want to recap from your previous paragraphs.</p>		

Information Report Scaffold

Australian Science

Report Writing: Sandwich graphic organiser

Paragraph 1: Discussion and information about what science is.

Paragraph 2:

Discussion and information about an Australian scientist and their contribution to society.

Paragraph 3: (Personal choice & Optional)

Either

- Explain in detail the value of studying science. **OR**
- Explain in more detail the field of study of an Australian Scientist **OR**
- Describe what interest you about science.

Paragraph 4:

Concluding statement about the benefits of science, and the work of your particular scientist to society.

TEEEEC Paragraphs

- Topic Sentence: A sentences that is the key point you wish to make in the paragraph.
- Expand/ Elaborate: this sentence elaborates on your topic sentence, providing your reader with further understanding of the key point.
- Example /Evidence: A statistic, direct quote, or other form of information that supports the paragraph's purpose.
- Explain /Evaluate: A sentence that makes the relationship between things evident. How why/.
- Connecting Sentence: A sentence that links back to your topic sentence and, wherever possible, includes a link to following paragraph.

Question: Write a scientific report explaining the importance of science and Australian scientists to society.

1

Paragraph Main Idea: Introduce what is science.

Topic Sentence	
Expand	
Example	
Explain	
Connecting Sentence	

2

Paragraph Main Idea: Explain the contribution to society of an Australian scientist.

Topic Sentence	
Expand	
Example	
Explain	
Connecting Sentence	

3

Paragraph Main Idea: Extension - write your choice here

Topic Sentence	
Expand	

Example	
Explain	
Connecting Sentence	

4

Paragraph Main Idea: My final thoughts on why science is important to society.

Topic Sentence	
Expand	
Example	
Explain	
Concluding Sentence	

Read the following rubric carefully to see what you need for full marks. Aim for the shaded column!

Outcomes assessed	Above Expectations		At Expectation	Further Development		Substandard	Mark
	A	B	C	D	E	N	
	5		4 - 3	2 - 1		0	
SC4-1VA You will: Research/evaluate the value of the scientist's work & their contribution to science.	Detailed discussion of science, science in Australia with a clear concluding paragraph about the importance of Australian scientists. Statements and opinions supported with examples.		Satisfactory discussion of science, science in Australia with a clear concluding paragraph about the importance of Australian scientists.	Limited discussion of science, science in Australia with a clear concluding paragraph about the importance of Australian scientists.		Discussion disorganised and/or irrelevant.	/5
WS7.1 a You will: Identify relevant / important information from primary & secondary sources.	Relevant factual information gained from the articles & videos. Generalisations and opinions made from information collected with support examples provided.		Relevant information from articles & videos. May have missed some key points. Generalisations and opinions made from information collected.	Limited information. Has not identified the article's main points.		Information incorrect or irrelevant.	/5
WS7.1 d You will: Use a range of sources including digital.	Goes beyond resources provided by teacher. Shows a wide range of reliable sources.		Uses resources provided by the teacher. Uses a variety – print AND digital.	Uses only resources provided by the teacher. Uses only one type – print OR digital.		Has not used relevant information.	/5
WS9 b & d You will: Take care to a write report which uses appropriate language and format.	4 paragraphs. Exemplary structured sentences. Paragraphs have topic and linking sentences.		<i>4 marks 4 paragraphs</i> <i>3 marks 3 paragraphs</i> Sentences structured. Attempts to use topic and linking sentences. Goes beyond scaffold	Fewer than 2 paragraphs. Sentence structure basic. Topic and linking sentences not present. Relies heavily on scaffold sentences.		No clear paragraphs. Sentences poorly structured. Has not used scaffold.	/5
	Full marks!					Total	/20

Australian Inventions Video

Invention	Year	Inventor
Black Box	1954	
Wine Cask	1965	
Notepad	1902	
IVF	1984	
Box Kite	1893	
Ultrasound Scan	1961	
Differential Gears	1987	
Cochlea Implant	1979	
Electronic Drill	1889	
Multi focal contact lens	1992	
Liquid vapour refrigeration	1855	
Solar hot water	1953	
First feature film	1906	
Car Radio	1924	
Cervical cancer vaccine	1990	

Lesson	Lesson Intention & Success Criteria
1	<p>Learning intention: To establish what you understand about science and how Australian scientists contribute to society.</p> <p>Success criteria: A written paragraph which explains your understanding.</p>
2	<p>Learning intention: To understand what the requirements of the task are. To have begun to process some research material.</p> <p>Success criteria: Annotated task and annotated reading passage.</p>
3	<p>Learning intentions: to be able to articulate and defend your opinion about the value of Australian scientists to society.</p> <p>Success criteria: Note making sheet which contains facts, opinions and/or generalisations which are supported from the text you have read and the video you have watched.</p>
4	<p>Learning Intention: To be able to write a structured paragraph which has a topic sentence, supporting sentences and a connecting or concluding sentence.</p> <p>Success criteria: At least 2 completed sentences. One modelled one independent.</p>
5	<p>Learning intentions:</p> <p>To be able to articulate a concluding statement based on the evidence provided.</p> <p>To be able to recognise what learning is required to complete best possible report.</p> <p>Success Criteria: Completed final paragraph. Evidence of editing in response to feedback (self, peer, adult)</p>