SCIENCE 10
11.P: Nuclear Power Project (p. 324)

**Learning Objectives**:

* Students will be able to apply their knowledge of the science and the benefits and drawbacks of nuclear power to write an informed opinion about its usage.

**The Project**:

You will create a small piece of persuasive writing designed to answer the following question:

“Should British Columbia convert all of its electricity generation to nuclear power plants?”

This is a complicated question that you may feel very strongly about, or you might only partly agree or disagree with. You will need to consider the science of nuclear power as well as the impact it can have on the area where it is built.

**Instructions**:

*To complete the project, you must do the following:*

1. Research the topic.

* To have an informed opinion, you must thoroughly understand nuclear power.
	+ Research the **science behind nuclear power**. You should use your own knowledge, information from the textbook, or information from outside sources like books and the internet. This section is supposed to be **neutral**. You might consider the following questions:
		- What is nuclear power?
		- What is the science behind it?
		- How does it generate energy?
		- What kinds of reactions take place?
		- What kinds of isotopes are used and why?

Compile your research into **2 well-written paragraphs** (4-5 sentences each). Record it on a **neatly written or typed paper** along with Parts 2 and 3. Make sure to also include your **name**, the **date** the project is due, and your **block**!

**Include any sources that you use** (books, websites, etc.) by writing down their titles, dates, and authors below the paragraph!

2. Figure out how you feel about the topic and make an argument.

Pick your own position on the question.

* Research your opinion and back it up with evidence. You need to not only have an opinion, but have an **informed opinion**.
	+ You might consider the following questions to guide your research:
		- How does the public feel about nuclear power?
		- How much more energy would it produce?
		- Would it be cheaper or more expensive?
		- How much of B.C.’s electricity is already made by nuclear power?
		- Is nuclear energy safe?
		- How efficient is nuclear power compared to other sources?
		- How much waste does nuclear power produce compared to other sources?

Record your argument and your research supporting your position into **2 well-written paragraphs** (4-5 sentences each) on the same paper as Parts 1 and 3. Again, **include any sources you use**!

3. Come up with an introduction and conclusion.

* Now that you have written most of your project, you can add an **introduction** and **conclusion** to really make it stand out to the reader.
	+ In the introduction, you want to grab attention and put forward your main points. To get that attention, you might consider:
		- Appealing to emotion.
		- Some convincing statistics.
		- Using an analogy.
	+ In the conclusion, you want to wrap up your project by restating the main points and ending with a powerful thought. You might consider the same techniques that you used in the introduction to leave your reader thinking about your piece.

Include an **introduction paragraph** (4-5 sentences) and a **concluding paragraph** (4-5 sentences) on the same paper as Parts 1 and 2.

4. Order your essay like so.

Introduction

Research on Nuclear Power (2 paragraphs)

Argument For or Against (2 paragraphs)

Conclusion

*You may choose a different order, but make sure that it enhances the readability and quality!*

**Due Date**: Friday, 15 April

**Marking Checklist**:

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| --- | --- |
| Content(10 points) | Research describing nuclear power including its science *[Part 1]* (4)Clearly taken a position *[Part 2]* (1)Strong argument for or against with supporting evidence *[Part 2]* (4)Sources listed for Parts 1 and 2 (1) |
| Presentation(10 points) | Essay is organized logically *[Part 4]* (2)Introduction is strong and grabs attention *[Part 3]* (3)Conclusion is powerful and leaves reader thinking *[Part 3]* (3)Essay is typed or written neatly in pen (2) |

Total: 20 points