

Grade 5: Module 3B: Unit 3: Lesson 2 Conducting Research: Analyzing Text from the Qikiqtani Inuit Association (QIA)



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License. Exempt third-party content is indicated by the footer: © (name of copyright holder). Used by permission and not subject to Creative Commons license.



Conducting Research:

Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)	
I can explain how the author uses reasons and evidence to support particular points in a text. (RI.5.8) I can paraphrase information in notes. (W.5.8) I can draw evidence from informational texts to support analysis, reflection, and research. (W.5.9 b) I can determine the meaning of unknown words and phrases, choosing flexibly from a range of strategies. (L.5.4)	
Supporting Learning Targets	Ongoing Assessment
• I can analyze the meaning of key words and phrases, using a variety of strategies.	Vocabulary terms on index cards and Frayer Models
• I can support my research, analysis, and reflection on the Mary River Project by drawing upon evidence from the Qikiqtani Inuit Association's Web site.	• Point of View graphic organizer: Qikiqtani Web site
• I can paraphrase to explain the reasons and evidence given to support two different points of view about the Mary River Project on Baffin Island.	



Conducting Research:

In this lesson, students begin research on their case study of the proposed Mary River Project on the second students begin research on the second studentstudents begin research o	Agenda	Teaching Notes
 A. Reviewing Homework and Engaging the Reader (5 minutes) 2. Work Time A. Reading for Gist (10 minutes) B. Analyzing Vocabulary (15 minutes) C. Researching to Build Understanding: The Mary River Project (25 minutes) 3. Closing and Assessment A. Debrief and Review Learning Targets (5 minutes) C. Researching to Review Learning Targets (5 minutes) 3. Closing and Assessment A. Debrief and Review Learning Targets (5 minutes) C. Researching to Build Understanding: The Mary River Project (25 minutes) 	 minutes) 2. Work Time A. Reading for Gist (10 minutes) B. Analyzing Vocabulary (15 minutes) C. Researching to Build Understanding: The Mary River Project (25 minutes) 3. Closing and Assessment A. Debrief and Review Learning Targets (5 minutes) 4. Homework A. Reread "Excerpts from the Qikiqtani Inuit Association Web Site." 	 Students read an article from the Qikiqtani Inuit Association Web Site in order to begin building their knowledge about what the Mary River project is, foreseen benefits of the project, and key concerns the Inuit people have raised about the project (see the Unit 3 Overview, "Preparation and Materials" for more details). Because of the challenging nature of the text analyzed in this lesson, the text is introduced as a read-aloud. In advance: Review the text and key terms bolded within the text in order to support and provide clarification for students as needed. Create and post a new anchor chart titled: Developing an Opinion (see example in supporting materials).



Conducting Research:

Lesson Vocabulary	Materials
draw, evidence, support, analysis, reflection, research, context, reference, analyze, key, reasons, points of view; ore, unrealistic, operations, transportation/transport, feasibility, contamination, financial(ly)	 Document camera Map of Nunavut (from Lesson 1) Modified map of Nunavut (for display) Journals (begun in Unit 1, Lesson 1) "Excerpts from the Qikiqtani Inuit Association Web Site" (one per student) Index cards (seven per student) Modified Frayer Model (for display) Dictionary and thesaurus (one of each per student or group) Developing an Opinion anchor chart (new; teacher-created) Point of View task card (one per student) Sample Opinion, Prediction, Call to Action (one to display) Point of View graphic organizer: Qikiqtani Web site (sample answers, for teacher reference) Point of View chart (from Lesson 1; one per group) Lesson 2 Homework: Letter to a Partner task card (one per student)



Conducting Research:

Opening	Meeting Students' Needs
 A. Reviewing Homework and Engaging the Reader (5 minutes) Ask students to briefly consider and then turn to a nearby partner to share: 	• If any students mention they do not feel they made an appropriate
* "Based on what you read for homework, do you believe the independent reading text you chose in the previous lesson was a good choice for you? Explain."	independent text selection, consider allowing them to choose a different
• After 1 minute, invite a few students to share their thoughts whole group.	book during another time of the day.
• Then, use a document camera to display the map of Nunavut (from Lesson 1) and the modified map of Nunavut .	• When displaying the map, consider
Ask students what they notice about the two maps.	also showing students on a globe or
• Listen for students to identify that the maps are the same, except the modified map shows the approximate location of the Baffinland Iron Mine.	Internet mapping tool to show Nunavut's location in relation to
• Invite a student to point to where the mine is located on the map.	New York State.
• Explain to students that over the next several lessons, they will conduct research to learn about an iron mine proposal in Nunavut, specifically in the Inuit community of Baffin Island. They will analyze and reflect on different points of view about the project to form an opinion about whether or not the Inuit community should allow a mine to be built there.	



Conducting Research:

Work Time	Meeting Students' Needs
 Work Time A. Reading for Gist (10 minutes) Ask students to collect their journals and meet in their groups. Distribute the text "Excerpts from the Qikiqtani Inuit Association Web Site." Explain that for the first read, you are going to read the text aloud, pausing at several points to give students a chance to discuss the gist and annotate, or write their ideas in the margins. Tell the students that some of them may notice that several words are bolded. Let them know they can try to determine the meaning of these words using strategies they have practiced before, but they should not spend too much time on them at this point, as they will have an opportunity to more closely analyze these terms during Work Time B. Begin reading the text aloud. Use the document camera to help students follow along as you read. Pause after the second paragraph, ending with, " which lessens some of the risks associated with working in a location and severe climate." Ask students to consider and discuss the gist of the first two paragraphs. After 1 minute, cold call a few students to share their thinking whole class. Listen for: "Changes in the world market are making it possible to mine the iron at Mary River." After several students share out, ask students to record the gist of the first two paragraphs in the margin of the text. Continue reading aloud, stopping after the fourth paragraph, " there will be between 700 and 900 workers required for all 	 Meeting Students' Needs To support students who struggle to comprehend complex text, consider grouping them and sitting with them to guide their thinking when you invite groups to consider and discuss the gist of each section. Consider modeling how to record one or two of the gist statements in the margins of the text, under the document camera, to support visua learners.
 Continue reading aloud, stopping after the fourth paragraph, " there will be between 700 and 900 workers required for all project activities." Have students discuss the gist of the section in their small groups. After 1 minute, cold call several students to share possible gist statements whole class. Listen for ideas such as: – "The proposed project will employ a lot of people; it will be very large." Direct students to record a second gist statement in the margin of their texts. 	
 Finish reading the first page of text and pause to allow students to discuss the gist. After 1 minute, cold call several students to share possible gist statements whole class. Listen for responses such as: "They plan to build a train and a deep water port." Have students record the gist in the margin. After reading the second page of the text aloud, give students another minute to discuss the gist of the section. 	



Conducting Research:

Work Time (continued)	Meeting Students' Needs
Cold call a few students to share out whole class. Listen for ideas such as:	
 "Many Inuit have concerns about the project." 	
• Direct students to once again record a gist statement in the margin of the text.	
• Then, ask students to review all of the gist statements they recorded, consider them, and then discuss with group members:	
* "What do you think the author of this article is trying to help readers understand? Explain."	
• After 1 or 2 minutes, invite a few groups to share their thinking with the class. Listen for responses such as:	
- "I think the author is trying to help readers understand what the Mary River project is, how it will affect the area, and the concerns Inuit have about it, because the text describes what will be mined, the high demand for ore, the transportation that will be built, and concerns the Inuit people have about the project."	
• Ask students to record a brief statement at the bottom of their articles to explain what they think this article is mostly about.	
• Tell students that during the next part of Work Time, they will take a closer look at the key terms bolded in the text to help them further refine their understanding of the ideas presented in the article from the Qikiqtani Inuit Association Web site.	
 B. Analyzing Vocabulary (15 minutes) Explain that this text includes many challenging but important vocabulary terms. Focus students' attention on the terms that are bolded. Ask students to read the learning target aloud chorally: "I can analyze the meaning of key words and phrases, using a variety of strategies." Point out that this target is similar to ones students have worked with in previous units and modules. Then cold call a few students to share out strategies and/or resources they have used to determine the meaning of unfamiliar key terms. Distribute seven index cards to each student and display the modified Frayer Model. Provide the following directions: Record each highlighted vocabulary word from the text onto its own index card. Work with your group members to define each term. On the same side of the card that you recorded each word, record a definition or synonym for the term. Select one of the bolded terms to analyze further by creating and completing a modified Frayer Model on the back of the 	 For support students struggling to write the same volume as their peers, provide partially completed index cards. They will still go through the important steps of using resources to complete each side of their card. Consider displaying, neat, accessible and accurate Frayer Models on a Word Wall to support students' appropriate use of vocabulary as they speak and write about this topic throughout the unit.
3. Select one of the bolded terms to analyze further by creating and completing a modified Frayer Model on the back of the appropriate index card. Refer to the modified Frayer Model displayed in class.	



Conducting Research:

Work Time (continued)	Meeting Students' Needs
 Clarify directions as needed then ask students to begin working. Ensure that appropriate vocabulary resources are available (such as a dictionary and/or a thesaurus) and circulate to provide assistance as needed. 	• For students who struggle to express how determining the
• As you move throughout the room, point out common roots and affixes in terms such as <i>unrealistic</i> and <i>transportation</i> , and encourage students to refer to reference materials and context clues to distinguish between the multiple meanings of the term <i>operations</i> .	meaning of vocabulary helps them better understand the text, provide a pallet of choices to choose from
 After 10 minutes, cold call several students to share out a definition or synonym for each term. Encourage students to explain what strategy they used to determine the meaning of the word. Listen for: 	based on the most common responses.
– "Ore is a naturally occurring solid material from which metal or minerals can be extracted."	
– "Unrealistic means not realistic, not worth the effort and challenge."	
– "Operations are work or functions."	
– "Transport is to move from one place to another."	
– "Feasibility is the state of being done easily or conveniently."	
- "Contamination is pollution; it's something made impure by adding something harmful."	
– "Financial(ly) means relating to money or economics."	
• Praise students for their ability to use a variety of strategies to determine the meaning of unfamiliar terms.	
Ask students to consider and discuss:	
* "How does determining the meaning of these terms help you better understand the text?"	
• After 1 or 2 minutes, cold call a few students to share their thinking whole class. Student responses will vary, but listen for students to explain how a specific word helped them better understand an important point that was previously unclear.	
• Then, direct students to review and discuss the statements they recorded at the bottom of their articles during Work Time A and add to them or revise them, based on new understandings about key vocabulary. Invite a few students to share out what they changed and why, as time allows.	



Conducting Research:

Work Time (continued)	Meeting Students' Needs
 Nork Time (continued) C. Researching to Build Understanding: The Mary River Project (25 minutes) Explain that students will now use their deeper understanding of the text to work toward two more complex targets. Have students read the second and third learning targets aloud chorally: " T can support my research, analysis, and reflection on the Mary River Project by drawing upon evidence from the Qikiqtani Inuit Association's Web site." " T can paraphrase to explain the reasons and evidence given to support two different points of view about the Mary River Project on Baffin Island." D Traw students' attention to the familiar terms: draw, analysis, reflection, and research. Clarify terms if needed. Then, focus students on the terms reasons, evidence, and points of view. Refer students to the Developing an Opinion anchor chart and reveal definitions for these terms. Ask students to consider and discuss: "What is the difference between reasons and evidence?" "How are reasons and evidence used to support a point a view?" "Why is it important to include <i>clear reasons</i> and <i>credible evidence</i> in support of an opinion?" After 1 or 2 minutes, cold call a few students to share their responses whole class. Listen for: "Reasons explain why the author has a particular opinion/point of view; evidence includes facts, information, quotes from experts, statistics/data that help prove or back up the reasons and opinion." "Both reasons and evidence are used to support a point of view or an opinion." Provide clarification as needed to ensure students understand what an opinion is, and how reasons and evidence are used to support an opinion. Then refer to the learning targets. Invite a few students to use their understanding of the key terms to restate these targets in their own words. 	 Offer a sentence starter to provide all students access to the peer discussion. Examples: "Both reasons and evidence" or "Reasons can be used, whereas evidence is used" Offer a sentence starter for the nex peer discussion: "
	happen."
Review the task directions and all parts of the Points of View graphic organizer. Clarify as needed and ask students to begin.	
Give them 12–15 minutes to work with their group members to complete the first four steps of the Point of View task card.	



Conducting Research:

Work Time (continued)	Meeting Students' Needs
Circulate to provide support as needed. Consider pushing student thinking by asking questions such as:	
* "How might this project benefit the Inuit community?"	
* "How might this project have a negative impact on the Inuit community?"	
* "How do you think local Inuit community members feel about the project proposal? Explain your thinking."	
 Once most or all students complete Steps 1–4 of the task, refocus them whole class and point out the two boxes at the bottom of the graphic organizer, "My prediction" and "A call to action." 	
• Underline the words <i>prediction</i> and <i>action</i> . Explain the meaning of each term in the context of this graphic organizer:	
* "A prediction is something you tell your audience will happen if they support your opinion; a call to action is a way of asking to get involved in some way that will support your opinion."	
Display the Sample Opinion, Prediction, Call to Action.	
• Ask students to read the opinion and the example of a prediction aloud with you. Tell them to think about and then discuss:	
* "What do you notice about how the prediction supports the opinion?"	
* "How might the prediction convince readers to agree with the opinion?"	
After 1 or 2 minutes, invite a few students to share their thinking with the class. Listen for:	
- "I notice the prediction supports the opinion because it explains what will happen if we do not stop using fossil fuels."	
 "The prediction might convince readers to agree with the opinion because it tells them that we could one day run out of energy resources." 	
• Then, ask students to read the opinion and example of a call to action aloud with you. Ask students to consider and discuss:	
* "What does the call to action ask the reader to do?"	
* "How does the call to action support the opinion?"	
After 1 or 2 minutes, cold call a few students to share out whole group. Listen for suggestions such as:	
- "The call to action asks the reader to write a state representative to ask them to stop allowing the use of fossil fuels."	
- "It supports the opinion because it asks people to take action, to write to politicians in support of the author's opinion."	
• Provide additional examples or clarification about what a prediction and call to action are and how they support the opinion, as needed.	



Conducting Research:

Work Time (continued)	Meeting Students' Needs
 Ask students to independently refer to their notes and the text to think about and discuss in groups: "What prediction or call to action could I add to my graphic organizer to support my opinion and convince the reader to agree with my point of view?" 	
• Cold call several students to share their opinion, one supporting reason, one piece of evidence, and a prediction or call to action. Refer to Point of View graphic organizer: Qikiqtani Web site (sample answers, for teacher reference) for possible student ideas.	

Closing and Assessment	Meeting Students' Needs
 A. Debrief and Review Learning Targets (5 minutes) Review each of the learning targets and ask students to consider and discuss in groups: "How did the Point of View graphic organizer help you work toward these targets?" After 1 minute, cold call several students to share their thinking whole class. Remind students that as they learn more about the issue of mining in Nunavut, it is important to reflect on their initial opinions and add to or refine them based on new understandings from research and analysis. Ask groups to quickly refer to the "initial opinion" they recorded on the bottom of their Point of View charts, refer to their Point of View graphic organizers from today, and determine: 	• Offer a sentence starter to provide all students with access to the discussion questions: "The Point of View graphic organizer helped me meet [target] because" or "I do/do not still agree with the initial opinion because"
 * "Do you still agree with your initial opinion? Why or why not?" Direct student groups to place a check mark next to the initial opinion if they still agree with it, or to write a new opinion below it if they have changed their minds. (If any groups are not able to reach consensus, allow them to write a check mark next to the initial opinion and record a new opinion.) 	
• After 2 minutes, invite a few groups to share their thinking with the class. Answers will vary, but prompt students to support their initial or new opinion with reasons and evidence from today's reading.	
• Reread each target aloud once more, pausing to ask students to use a Thumb-O-Meter to demonstrate their level of mastery toward each target.	
• Distribute the Lesson 2 Homework: Letter to a Partner task card . Read the directions and provide clarification as needed.	



Conducting Research:

Homework	Meeting Students' Needs
Reread "Excerpts from the Qikiqtani Inuit Association Web Site."Complete the homework task card.	• Provide an audio version of the text, if available.
	 Allow students who struggle with independent work and/or writing to dictate their homework to someone at home to scribe.
	Consider providing a partially completed task card for students to fill in; ask them to complete only one Frayer Model.

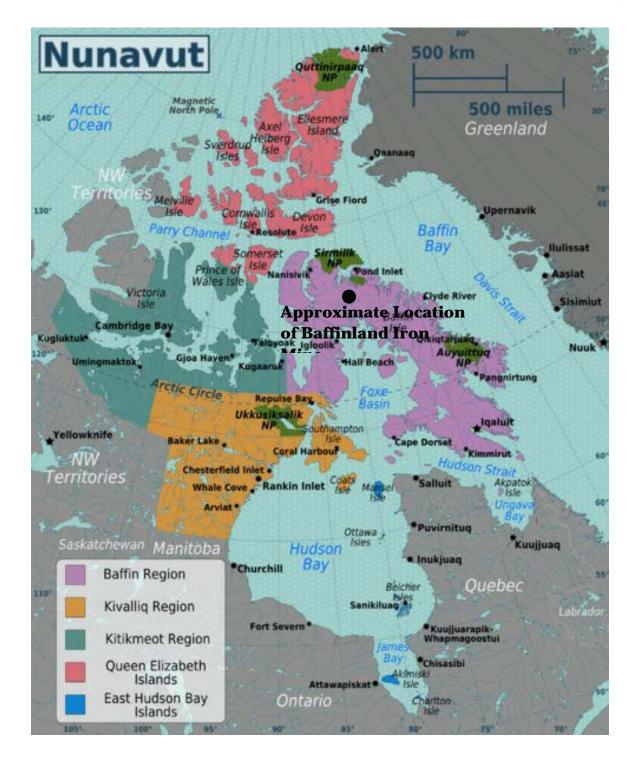


Grade 5: Module 3B: Unit 3: Lesson 2 Supporting Materials





Modified Map of Nunavut



Peter Fitzgerald, http://creativecommons.org/licenses/by-sa/3.0/deed.en



Excerpts from the Qikiqtani Inuit Association Web Site

Section 1:

What is the Mary River Project?

The area where the Mary River Project is located has long been known to Inuit as Nuluujaat ($\Box \Box \Box \Box$). The Mary River iron **ore** deposits were first discovered by mining prospectors in 1960s. Following their original discovery, tests conducted demonstrated that the iron ore was of very high quality. However, given the area and lack of transportation for a bulk commodity like iron, the cost of further exploration and development made it **unrealistic** to open a mine.

Many things have changed in recent years. There is a high world demand for iron ore, and the market price has significantly increased. New technologies are also available, making access to Arctic resources possible, which lessens some of the risks associated with working in a location and severe climate.

The current Project Proposal is focused on Deposit No. 1. Mining of Deposit No.1 is expected to produce approximately 18 million tons of iron each year with **operations** estimated to last for 21 years. In addition to operations, project construction is expected to last for four years.

During operation there will be permanent work camps at Mary River, Milne Inlet, and Steensby Inlet. During construction additional camps will be required along the rail line. At the peak of construction over 1,000 employees will be required. Later, during the operation of the mine there will be between 700 and 900 workers required for all project activities.

Plans are for a 150 km railway to be constructed from Mary River to Steensby Inlet. During operations there would be several train sets each carrying ore to the project port-site on a daily basis. The trains would consist of up to 110 ore cars. Trains would also be used to **transport** people, supplies, and fuel. Once transported to site, the ore would be stockpiled at Steensby Inlet.

BIMC's project plans call for an all-season deep water port and ship loading facility to be built at Steensby Inlet. Shipping will be year round with a ship passage approximately every day either in or out of the port. A fleet of ice-reinforced ships will be built specifically for this Project. These will be the largest ships ever to be seen in the area. Each vessel will be approximately 310 meters long.



Excerpts from the Qikiqtani Inuit Association Web Site

Impacts to Inuit, Communities and the Qikiqtani Region

The area that will be affected by the Project is large and diverse. The land and waters of the North Baffin Region support many resources. The waters of Eclipse Sound are key habitat for narwhal and the waters of Steensby Inlet provide important habitat for walrus, ringed seals, and other marine mammals. The land around Mary River is an important calving area and migration range for caribou. Arctic char is an important fish resource throughout the region.

Here is a summary of the key concerns that have been raised by Inuit and the QIA up to this point:

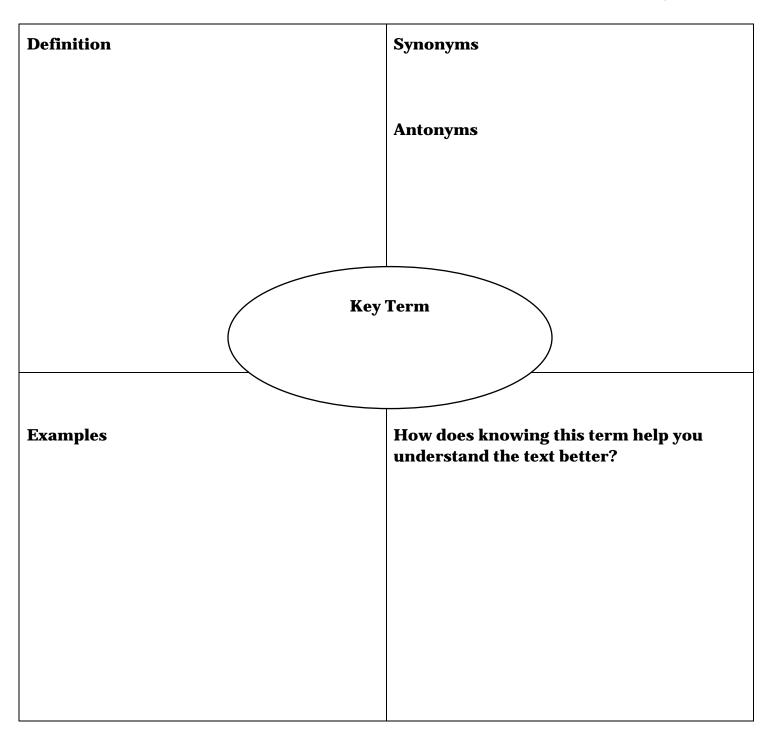
- The impact of the shipping route in Steensby Inlet on marine wildlife and traveling across the sea ice.
- The impacts of the rail line and rail traffic on caribou migrations and health.
- The potential for **contamination** of water from sewage and fuel spills throughout the area.
- Inuit need employment. In order to fully benefit from the jobs that will be created by the Project, Inuit will need training, education, and other forms of support.
- Archeological and other cultural sites must be protected.
- Inuit must benefit **financially** from the revenues of the Project.

These statements were supported by hundreds of pages of technical comments and submitted to NIRB, which can be accessed on NIRB's Web site.

"Mary River." Qikiqtani Inuit Association.Web. 30 June 2014.



Modified Frayer Model





Developing an Opinion Anchor Chart (Example, for Teacher Reference)

Developing an Opinion

Opinion

A personal belief, point of view, or judgment about something

Authors use clear reasons and **credible** evidence to support their opinion. If evidence is **credible**, it is considered trustworthy, reliable, or believable. If you want people to agree with your opinion, it is important to support your opinion with clear reasons and credible evidence.

Reasons

Why the author believes the opinion

Evidence

Information used to demonstrate accuracy or provide support for a reason and opinion

- Facts
- Information from the text
- Quotes from experts
- Statistics/data



Point of View Task Card

- 1. With group members, reread both excerpts to determine and record both points of view ("Some people think ... / Other people think ...").
- 2. With group members, skim the texts to locate and record at least two reasons and evidence in support of each point of view (four total) ("Reasons and evidence that support this point of view ..."). *Be sure to include at least one quote in support of each point of view (two total).
- 3. With group members, review the details recorded on your graphic organizer, as well as both texts, to write a 3-5 sentence summary of the articles ("Summary").
- 4. With group members, review both points of view, reasons and evidence, your summary, and the article to develop a response to the focus question. Record your opinion about whether or not the Inuit community on Baffin Island should approve the Mary River mine proposal ("After reading both points of view, I think ..."). **Remember to use key words from the focus question in your opinion statement.*
- 5. Pause after completing the first four steps for a whole group discussion about the boxes titled "My prediction" and "A call to action."



Point of View Graphic Organizer: Qikiqtani Web Site

Focus Question: Should the Inuit community on Baffin Island approve the Mary River mine proposal?

Summary:			
Some people think:	Other people think:		
Reasons and evidence that support this point of	Reasons and evidence that support this point of		
view:	view:		
After reading about both points of view, I think:			
<u> </u>			
My prediction:	A call to action:		



Point of View Graphic Organizer: Qikiqtani Web Site (Sample Answers, for Teacher Reference)

Focus Question: Should the Inuit community on Baffin Island approve the Mary River mine proposal?

Summary:

There is a proposal for a new iron ore mine on Inuit land. Changes in the demand for iron ore and the technologies used for mining make it reasonable to mine the high-quality iron ore in Nuluujaat. The current project proposal for mining Deposit No. 1 is a very large operation. In order to transport the iron ore, the mining company will need to build a train and a controversial deep water port. The Inuit have many concerns about the project proposal, including worries about the environmental impacts and if the money will benefit the community. Some people are excited about the new opportunities the mine might bring, but others are worried about the impacts.



Point of View Graphic Organizer: Qikiqtani Web Site (Sample Answers, for Teacher Reference)

Some people think:

• It is a good idea to mine the iron ore at Mary River.

Reasons and evidence that support this point of view:

- The proposed mine will bring new jobs and resources to the community.
- Mining of Deposit No. 1 should provide 18 million tons of iron ore each year for 21 years.
- During construction, the mine will need up to 1,000 employees. During operation, the mine will need 700–900 employees.
- The mining company will build a train and a deep water port for transportation of ore, people, and supplies.

Other people think:

• An iron ore mine at Mary River might have negative impacts on the land and community.

Reasons and evidence that support this point of view:

- The ships traveling to the port may have a negative impact on marine wildlife.
- The train might have a negative impact on caribou migrations and health.
- Water could become contaminated.
- Inuit don't yet have the training to participate in jobs at the mine.
- Inuit might not make money from the mine.

After reading about both points of view, I think: The Inuit community of Baffin Island should/should not approve the Mary River mine proposal.

My prediction: (should) The mine would bring much needed jobs and resources that will benefit the Inuit community for many	A call to action:
years. (should not) If the mine is built, caribou and other animals will be	



Sample Opinion, Prediction, Call to Action

OPINION: Fossil fuels should no longer be used to meet our energy needs.

PREDICTION: If we continue using only nonrenewable fossil fuels to meet our energy needs, we will have no energy resources to use in the future.

CALL TO ACTION: Tell your state representative to stop allowing the use of fossil fuels to meet America's energy needs!



Lesson 2 Homework: Letter to a Partner Task Card

- 1. Reread "Excerpts from the Qikiqtani Inuit Association Web Site."
- 2. Select two highlighted terms from the text and use them to complete the modified Frayer Models below. Select terms that are different from the term you analyzed in class.
- 3. Write a letter to your partner that shares your response to the text.
 - As you think about your letter, consider the following questions:
 - Why is this text important?
 - What does the author want readers to understand about the issue?
 - What do you think is the most important reason to approve or not approve the mine?
 - Your letter should include:
 - The date
 - A greeting
 - At least one body paragraph
 - At least seven sentences
 - A closing

Definition	Synonyms	Definition	Synonyms
	Antonyms		Antonyms
Key Term		Key Term	
Examples	How does knowing this term help you understand the text better?	Examples	How does knowing this term help you understand the text better?