

Name: _____

Date: _____

Mineral Resource Use and Exploration Technology Worksheet Part 1



Instructions: Answer the following questions and submit them with your Unit 3 Portfolio.

1. What three factors of sustainability should we remember when discussing the impacts of mining?

2. List the major use for the following mined minerals:

Iron ore

Limestone

Gypsum

Quartz

Marble / Granite

3. What is **dimension stone**?

4. What is a positive impact of mining? _____

5. What is a negative impact of mining? _____

6. List the three main mines that are currently closed in NL, indicate the major mineral(s) mined, and the years they were in operation.

7. What does **IOC** stand for? _____

8. What four regions of Newfoundland-Labrador currently have open mines?

9. Using question 8 above, name the companies and the minerals they are mining.

10. What is the *expected mass* of the 2014 iron ore shipments from Labrador?

11. When is production from the Wabush 3 reserve expected to start? How long will it last?

12. What is the *projected value* for the Anaconda Mining 2014 gold shipments on the Baie Verte Peninsula? _____

13. What is the *expected lifetime* of the Ming Mine near Baie Verte? (*State the year production began to the expected year the reserves will be depleted.*)

14. What company owns and operates the Nugget Pond mill?

15. What does **VNL** stand for? _____

16. Where are they constructing their processing plant? _____

17. State the production masses for each mineral below for the period January – June 2014 from the mine at Voisey's Bay.

Nickel (Ni) _____
Copper (Cu) _____
Cobalt (Co) _____

18. When is the underground mine at Voisey's Bay due to start ore production? _____

19. What company operates the Duck Pond Project at the mine near Millertown?

20. What metal concentrates has been mined there since 2007? _____

21. What does **GDP** stand for? _____

22. Ask Google, "What is GDP?" and write its meaning below.



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Mineral Resource Use and Exploration Technology Worksheet Part 2



Instructions: Answer the following questions and submit them with your Unit 3 Portfolio.

1. What are the four major stages in the mining cycle?

2. What are four possible methods for mineral exploration?

3. What could poor vegetation mean if seen on satellite imaging?

4. Why do geologists look for folds and faults in aerial photographs?

5. Complete the statement: “ _____ data and _____
properties of soil, rock, and vegetation is collected and used to identify _____,
_____, and _____ types from satellite imagery.”

6. What is a **geophysical anomaly**? What could it mean?

7. What is a **drill core**? _____

8. What two ways are drill core samples examined to provide exploration companies the information necessary to begin or abandon mining operations in an area?

9. What is the drill bit made of? Why?

10. What is a **grab sample**?

11. What is an **assay**?

12. What is **panning**?

13. What are **placer deposits**?

14. What is **geochemical ground exploration**?

15. What is a **geophysical survey**?
