## 8T Assignment #3: Resources & Rocks

Name:

- 1. Read the handout about the 'Communication Triangle.' Use the Communication Triangle to construct a writing prompt that gets your students to:
  - a. explain the difference between mineral resources categorized as construction, physical, and fuel, and
  - b. give at least one example of a mineral resource in each category.

To begin decide what the 3 points of the communication triangle will be for the prompt: (1) the role you assign to your **writer**, (2) the **audience** that your writer is addressing, and (3) the **form** that the writing will take:

Writer's role: \_\_\_\_\_ Audience: \_\_\_\_\_

Form: \_\_\_\_\_

Now, on the back side of this paper, write out your prompt (the instructions you give to your students explaining who they are, who their audience is, what they are discussing (see points a and b above), and the format of that discussion – *if you are still unsure of what you are doing, note that question #4 of last week's assignment used the communication triangle.* 

- 2. Now answer the prompt that you constructed for question 1 (put the answer below your prompt on the back of this page).
- 3. You are looking at the 8T mineral collection and are holding a gleaming galena admiring its cube-like form. Your friend Alice sees it and asks you to hand her 'that rock.' Explain to Alice why the cube of galena that you are holding is a mineral and NOT a rock. Be sure to include the difference between a mineral and a rock in your explanation.

4. Explain what texture(s) you can observe in an igneous rock that tell you whether that rock cooled slowly deep underground or quickly at the Earth's surface. Clearly explain why such textures tell you that.

5. List in order all of the steps involved in forming a sedimentary rock.

# 6. Which norm were you assigned to work on today? (*circle one*)

# paraphrasing pausing probing for specificity presuming positive intentions

Reread what the purpose of your norm is (see the handout you read).

How did you do?	
What worked and what didn't work as you tried to apply this norm?	
Did it help, hinder, or have no effect on productive group work? (clarify)	

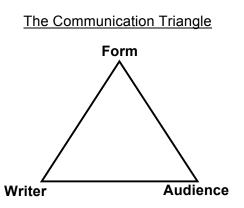
#### **Common Core Writing and Science**

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## The Communication Triangle

The Communication Triangle is a visual tool for structuring writing prompts. The points of the Communication Triangle represent three aspects of writing to consider when attempting to increase student engagement in the writing and make it more likely to evoke and make evident student thinking.

One point on the Communication Triangle represents the **writer**. This reminds us to be attentive to the role we are assigning the writer. Most writing tasks in school science can be described as "novice to expert" type



writing tasks. The novice to expert task generates depressed responses in students. It puts the student in the position of a novice trying to provide an answer to an expert (the teacher) who will determine its level of correctness. The novice has to take a risk in answering the question. When faced with this type of task students are reluctant to risk much. The act of answering basically becomes a guessing game in which the student tries to guess what the teacher will accept as the answer. By using the Communication Triangle you can free students of the novice to expert scenario. You can assign them a more expert role or a role that has a perspective from which to write. Students might be assigned roles as writers that can be that of – scientists, concerned citizen, parent, knowledgeable friend, spokes person, legislator, chairperson, doctor, researcher, etc.

A second point on the Communication Triangle represents the **audience**, who the writer is writing to. The concept of the novice to expert response is germane here as well. If we do not identify to whom the writer (student) is writing to then by default they are writing to the teacher (expert) and the likelihood of a diminished response is increased.

The third point of the Communication Triangle represents the **form** that the writing will take. Will it be argumentative where one is trying to make or defend a point, position, or perspective? Or will it be explanatory where one is uncovering reasoning and using evidence to substantiate that reasoning? Additionally, the writing can be in the form of a letter, newspaper article, email, memo, testimony, dialogue, or other written mode of communication. Assigning a form for the writing to conform to aids in scaffolding the writing task as it provides students with a model or structure to emulate when writing.

A writing tool that is similar to the Communication Triangle is referred to by its acronym – RAFT, which reminds one to be attentive to Reader, Author, Form, and Topic.