

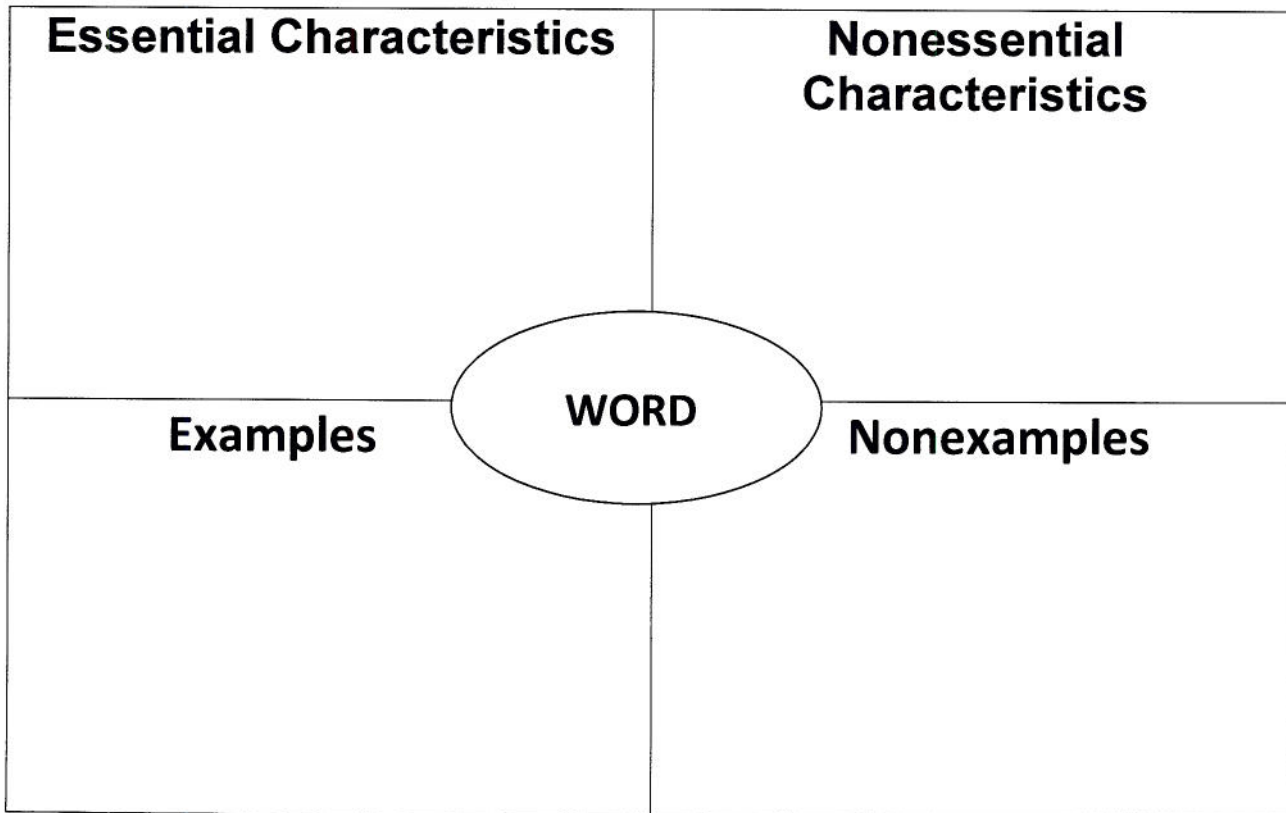
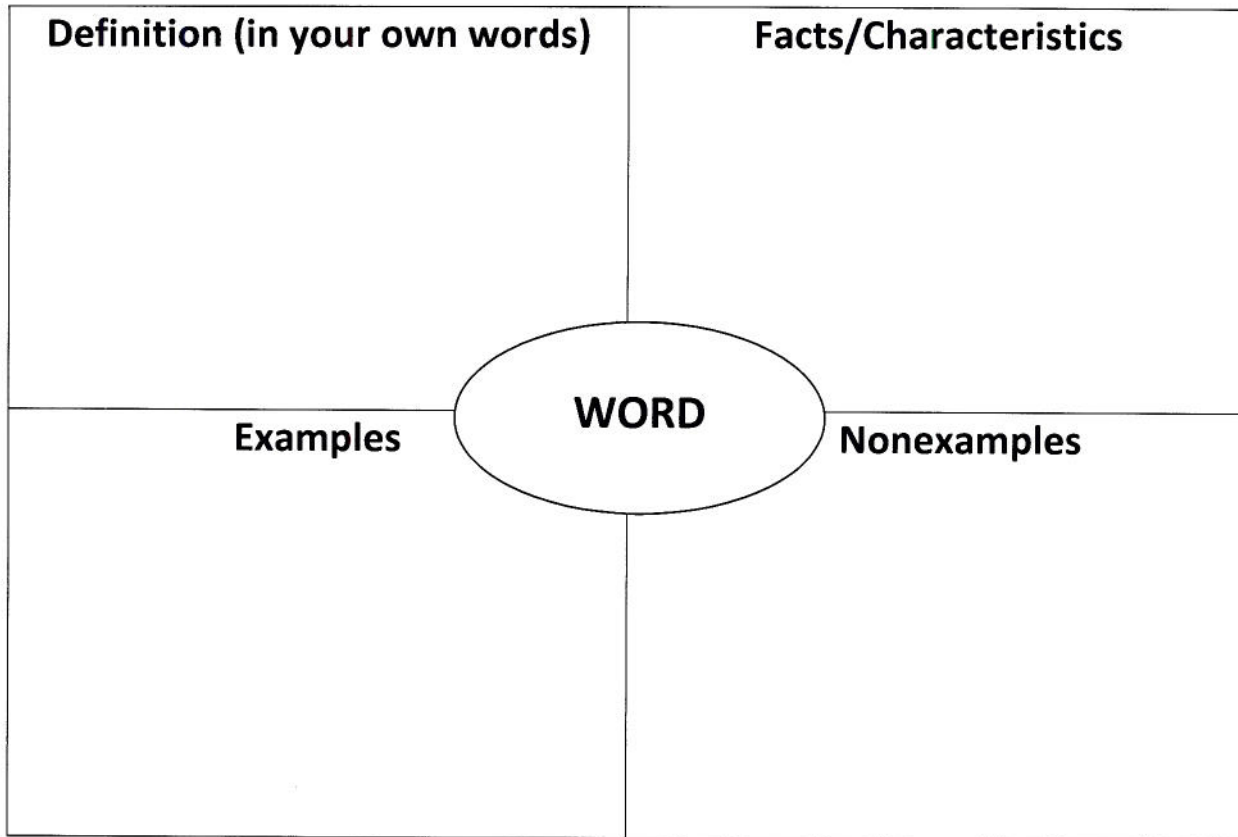
Anticipation Guide - Template

Instructions:

- Check "Agree" or "Disagree" beside each statement below *before* you start the task.
- Compare your choice and explanation with a partner.
- Revisit your choices at the end of the task. Compare the choices that you would make *after* the task with the choices that you made before the task.

Before		Statement	After	
Agree	Disagree		Agree	Disagree
		1.		
		2.		
		3.		
		4.		
		5.		

FRAYER MODEL



Journal Writing – Forms and Sample Stems

Forms	Stems, Starts, Ideas
1. Personal Writing <i>reflecting on feelings, attitudes, successes, challenges</i>	<ul style="list-style-type: none"> - I think I'm good/weak in working with fractions because ... - When I'm asked a question in class I ...
2. Summaries <i>answering the question, "What did you learn?"</i>	<ul style="list-style-type: none"> - Create a poster about today's lesson to advertise it. - Brainstorm everything you know about probability; linear relations ; polynomials ...
3. Definitions <i>defining math terms in their own words to show understanding (may be used as part of a personal math dictionary)</i>	<ul style="list-style-type: none"> - Explain what is meant by the term 'polygon'. - What is a linear relationship? Give an example.
4. Translations <i>taking information from one source and having the students put it in their own words</i>	<ul style="list-style-type: none"> - Draw a diagram/picture to show what the word problem describes. - What did you learn from your graph in question #3?
5. Reports <i>after a series of lessons or a unit, bringing understanding together</i>	<ul style="list-style-type: none"> - We have looked at mean, median and mode ... Report on how they are the same/different. - Report on the survey that you took (topic, method, results and conclusions).
6. Instructions <i>writing a series of steps in a procedure</i>	<ul style="list-style-type: none"> - How do you find the centroid of a triangle using Geometer's Sketchpad? - How do you use your calculator for linear regression?
7. Lists <i>making a list (this is the easiest form of writing for students with communication difficulties; it requires no particular syntax)</i>	<ul style="list-style-type: none"> - List all the things you still need to do to complete your math project. - List different forms of a linear relation. - Make a list of all the things that can be changed after you press the MATH key on the graphing calculator.
8. Self-assessments <i>giving feedback or comments about math work, learning experiences</i>	<ul style="list-style-type: none"> - The hardest problem was ... - I think I could do better if ...
9. Descriptions <i>describing procedures, conversations, group work</i>	<ul style="list-style-type: none"> - Our group had trouble agreeing on ... - The two different solutions that we got were ...
10. Arguments/Justifications <i>persuading others of a point of view, refuting other points of view, justifying a choice ...</i>	<ul style="list-style-type: none"> - The most efficient way to solve this problem is ... - I assumed a value of ____ for the width because ...
11. Explanations <i>reasoning, findings, terms, attempts, strategies, answers, procedures, patterns, suggestions</i>	<ul style="list-style-type: none"> - A calculator was not necessary to solve this problem because ... - If we had to double the volume we would change ... - There was more than one possible solution because ...
12. Applications <i>where this math/lesson could be used</i>	<ul style="list-style-type: none"> - How would a person in the field of medicine use mathematics? - How could a surveyor use the Pythagorean theorem? - Could a graph of a linear relation be used at a car rental business? Explain.
13. Problem Design <i>student creates a problem that has to incorporate specific criteria</i>	<ul style="list-style-type: none"> - Create a problem around the given graph. - Create a problem that can be solved by using the equation $-17 = 539$ - Create a problem that requires knowing that the alternate angles between parallel lines are equal.

2x

Suggested Prompts for a Text-Features Search

1. Using the Table of Contents, find the chapter number for the topic _____.
(e.g., ratio and rate, statistics and probability, exponents)
2. In the Index at the back of the text, find and list all the pages that deal with _____.
(e.g., integers, line of best fit, surface area)
3. On page _____, what is the purpose of the coloured box?
(e.g., highlights the key ideas of the section)
4. On page _____, what is the purpose of the icon beside question _____?
(e.g., indicates that the use of a graphing calculator or spreadsheet is required)
5. Where would you go in the textbook to quickly find a definition for _____?
6. Where would you find the answer to question _____ on page _____?
7. In Chapter Two, which page reviews skills needed for the mathematics in this chapter?
8. Turn to page _____. How does the textbook review the concepts of the chapter?
9. Which page has the "Review Test" for Chapter Four?
10. Open the text to page _____. What does the word "cumulative" mean?
(e.g., cumulative review).
11. On page _____, what is the purpose of the **boldface** type?
12. Name the topic for the Chapter Problem in Chapter Five.
13. Where would you go in the textbook to quickly find information on _____?
(e.g., Geometer's Sketchpad®, graphing calculator, spreadsheet)

Source: <http://oame.on.ca/main/index1.php?lang=en&code=ThinkLit>

Marzano's Six Step Process Teaching Academic Vocabulary

1. Provide a description, explanation, or example of the new term.

- Looking up words in dictionaries is not useful for teaching vocab
- Provide a context for the term
- Introduce direct experiences that provide examples of the term
- Tell a story that integrates the term
- Use video as the stimulus for understanding information
- Ask students to investigate the term and present the information to the class (skit, pantomime, poster, etc.)
- Describe your own mental picture of the term
- Find or create pictures that explain the term

2. Ask students to restate the description, explanation, or example in their own words.

- Monitor and correct misunderstandings
- Must be student's original ideas, not parroting the teacher

3. Ask students to construct a picture, symbol, or graphic representing the word.

- Model, model, model
- Provide examples of student's drawings (and your own) that are rough but represent the ideas
- Play "Pictionary"
- Draw an example of the term
- Dramatize the term using speech bubbles
- Let them find a picture on the internet, if necessary

4. Engage students periodically in activities that help them add to their knowledge of the terms in their notebooks.

- Highlight prefixes, suffixes, root words that will help them remember the meaning of the term
- Identify synonyms and antonyms for the term
- List related words
- Write brief cautions or reminders of common confusions
- Translate the term into another language for second language students
- Point out cognates to words in Spanish
- Write incomplete analogies for students to complete
- Allow students to write (or draw) their own analogies
- Sort or classify words
- Compare similarities and differences

5. Periodically ask students to discuss the terms with one another.

- Think-Pair-Share
- Compare their descriptions of the term
- Describe their pictures to one another
- Explain to each other any new information they have learned ("aha's")
- Identify areas of disagreement or confusion and seek clarification
- Students can make revisions to their own work

6. Involve students periodically in games that allow them to play with terms.

- Pictionary
- "Oops" (formerly known as "Bang")
- Upset the fruit basket
- Memory
- Jeopardy (vocab words are on the board, players make up a question to define)
- Charades
- Name that Category (\$100,000 Pyramid)
- Password
- Talk a Mile a Minute (like Catch Phrase)
- Bingo (you give definition, kid marks the word)
- Create a skit (assign groups of 3-4 kids 3 vocab words to make a skit out of)
- Swat Game (post 2 sets of words, kids on 2 teams compete to find words first and swat with fly-swatter)

BEFORE you begin your next UNIT of INSTRUCTION:

1. What Power Indicators (standards) are included in this Unit? List indicators.

-
-
-

2. What is the key academic vocabulary needed in this Unit? List words.

-
-
-
-
-
-

Plan for direct vocab. instruction: (Marzano's 6 Steps for Teaching Vocab.)

1. YOU provide a description, explanation or example. (story, sketch, powerpoint)
2. Ask students to re-state or re-explain meaning in their own words. (journal, community circle, turn to your neighbor)
3. Ask students to construct a picture, graphic, or symbol for each word.
4. Engage students in activities to expand their word knowledge. (add to their notes, use graphic organizer format)
5. Ask students to discuss vocabulary words with one another. (collaborate)
6. Have student play games with the words. (Bingo w/definitions, Pictionary Charades,)

3. Plan to provide or activate background knowledge:

- | | |
|---|--|
| <input type="checkbox"/> Study Trip | <input type="checkbox"/> Guest Speaker (expert) |
| <input type="checkbox"/> Bring In Live Sample | <input type="checkbox"/> Bring In Actual Artifacts |
| <input type="checkbox"/> Theme Day ("Indian Day") | |
| <input type="checkbox"/> Video (United Streaming) | <input type="checkbox"/> Show Photos |
| <input type="checkbox"/> Posters | <input type="checkbox"/> Models of Actual Items |
| <input type="checkbox"/> Graphic Organizer | <input type="checkbox"/> PowerPoint |
| <input type="checkbox"/> Community Circle Topic | <input type="checkbox"/> Read Aloud (story) |
| <input type="checkbox"/> Other | |

4. Now you are ready to plan your Unit's lessons, activities, and assessments.

Word

Picture

Synonym

Antonym

In my own words: _____

Sentence _____

.....

Word

Picture

Synonym

Antonym

In my own words: _____

Sentence _____
