

# EXTRA PROCESSING TECHNIQUES

## Haiku Assignment

Haiku is a contemplative poetry that emphasizes nature, color, season, contrasts and surprises. Usually it has 3 lines and 17 syllables distributed in a 5, 7 and 5 syllable pattern. It should show a sensation, impression or drama of a specific fact or concept. It's almost like a photo of some specific moment. More than inspiration, it's need meditation, effort and perception to compose a real Haiku. Using a Haiku assignment in science requires student to concentrate on the major concepts and vocabulary of the assigned topic. Doing this creates links between the information and how the student's perceptions.

**Student Instructions:** *Haiku is a form of poetry from Japan. It is a minimalist form of poetry with the following form*

- 17 syllables
- 5 syllables in the first line
- 7 syllables in the second line
- 5 syllables in the third line.

**Slimy earthworm squirm  
Deeper into the wet ground  
To cultivate land**

In an **OUT (LEFT PAGE)** section, you must write a Haiku about the assigned topic. It must follow the pattern and deal with any aspect of topic covered in class. The section must have a border and artwork reflecting the topic - you pick the aspect you wish to emphasize in the haiku and artwork. There must be a short 3 to 5 sentence explanation telling how the Haiku shows an understanding of the assigned topic.

## Cinquains

A cinquain is a five-line poem written about a single concept, object or idea. Cinquains were developed by an American poet, Adelaide Crapsy, after examining the Japanese haiku format. The format is a short, unrhymed poem of twenty-two syllables and five lines. The five lines contain 2, 4, 6, 8 then 2 syllables. Each line is supposed to deal with a specific aspect of the cinquain's topic.

### Water Cinquain - An Example

- The first line consists of two syllables (the title).
- The second line consists of four syllables (describes the title).
- The third line consists of six syllables (states an action).
- The fourth line consists of eight syllables (expresses a feeling).
- The last line consists of two syllables (another word for the title).

**Raindrop  
Moisture, Falling  
Sustain, Nourish, Cleansing  
Teardrop, Diamond, Dropping, Earthward  
Dewdrop**

## Limerick Assignment

A limerick has FIVE Lines. The last words of the first, second and fifth lines rhyme with each other. The last words of the third and fourth lines rhyme with each other. The first, second and fifth lines are longer than the third and fourth lines. The pattern of sounds follows the pattern: Da DUM da da DUM da da DUM

### General Guidelines For The Limerick Assignment

1. The form or pattern of limerick writing must be followed.
2. The limerick must be original and not copied from somewhere
3. The limerick must be G or PG-13 rated. Anything else gets you into trouble.
4. The Science topic or concept assigned must be addressed in the limerick.

### Physics Topic: Heat and Energy

The physics test was quite near-o,  
And all thought everything was quite clear-o;  
"Why study this junk  
I'm sure I won't flunk."  
But then he earned an Absolute Zero

## Songs - BUT I CAN'T SING!

Songs must have lyrics (the words) written down but may be sung aloud. Do not write a song on a general topic (plants, chemical reactions, motion and so on). Wide-open topics will be overwhelming from the start. Select a specific topic. I as the teacher will specify a length, specific words, concepts and ideas to be used or addressed in the song. It is useful to select a popular tune then change the words. There will be a minimum length to the song. If you really enjoy writing or playing music, you may not stop writing just because a specific length is reached.

For the Love of Newton  
Keep doin' what your doin'  
Love of my life,  
Cause the force of your love,  
makes my heart uptight,  
Cause Netwon's Laws, Baby,  
Apply to love too

## Riddle Cards

A possible format for placing riddles into interactive notebooks is similar to that used with vocabulary cards. The riddle is placed on the front of a card. The answer and explanation are placed on the back of the card. The card is then taped onto OUT section of the notebook.

- One side of the RIDDLE CARD has the riddle and artwork written on in.
- The riddle should contain one or more clues. The clues might or might not rhyme, but must refer to aspects of the answer.
- The riddle must have artwork on front of the card. The artwork should reflect the topic of the riddle with a clue that MIGHT help solve the riddle.
- The artwork must be in color. At least 4 different colors (besides than black or white must be used).
- The BACK of the card has the answer to the riddle. The answer must be clearly and cleanly written across the top of the card.

Below the answer an explanation of the clues and how they lead to the answer must be given. An explanation is usually 2 to 3 sentences in length.

## Cartoon Project - Writing and Processing in Science

If the humor of a language is understood, then a person is mastering the language - How does the humor relate to science? - What does a person need to know or understand before humor makes sense? - What science concepts are needed for a student to understand the humor in a situation or problem?

### Guidelines - The cartoon does NOT have to be funny

#### The Front

- Single Frame cartoon (like a Farside)
- 4 colors minimum (Black and White DO NOT COUNT)
- Maximum 2 lines for a caption (speaking bubbles are okay, but not encouraged)

#### The Back

- Name of the Student
- The science concept being shown is stated
- A paragraph explaining why or how the cartoon shows or addresses the concept stated is written

## Copy Change

Complete the focusing frame for your object. Be sure to repeat the first line at the end to emphasize its importance. When you are done, share with a partner.

The important thing about \_\_\_\_\_  
is \_\_\_\_\_.

It's true that \_\_\_\_\_  
and that \_\_\_\_\_  
and that \_\_\_\_\_

But the important thing about \_\_\_\_\_

## Science Photo Project

### Technology Tie In

Take a photo then explain what aspect of science is shown in a photo. The photo must be 8 x 10 inches. The photo may be in color or black and white. If the photo is taken with a digital camera, the electronic file must be included on a disk with the essay and photo. A 250 maximum word essay must be written to explain the science concept shown in the photo. The essay and photo must be given a title. The essay must identify the main science concept of the photo. The essay must explain how the photo shows the concept. An explanation as to why the photo is considered to be NATURAL or CONTRIVED must be part of the essay. The science in the photo must be explained in simple terms. The essay must address any special or unique steps needed to compose or take the photo.

#### Written on the back of the photo

- Student Name
- Natural or Contrived photo
- Main Science Concept shown in the photo

#### Essay Main Points

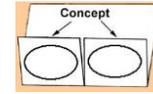
- 250 word maximum essay
- Must identify the main science concept in the photo
- Must identify if the photo is Natural or Contrived
- Must explain how the photo shows the main science concept
- Must explain any special or unique steps to take the photo

## Fabulous Fold-Ups!

Concept maps demonstrate relationships between ideas. They help you understand concepts by clarifying ideas and terms, and by dividing complex concepts or processes into smaller parts. You can use concept maps to relate, define, brainstorm, and sequence.

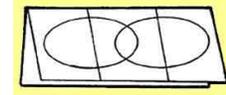
#### Instructions for a Concept Map Fold-Up:

1. Fold a sheet of paper along the long or short axis, leaving a two-inch tab uncovered.
2. Fold in half or in thirds. (Additional tabs can be created by folding into more parts.)
3. Unfold and cut along the inside fold lines to create tabs.
4. Have students identify the concept by writing key words or using pictures on the two-inch tab. Draw arrows from the central idea to the tabs, where students record data underneath each tab.



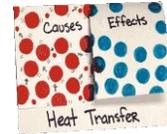
#### Instructions for a Venn Diagram Fold-Up:

1. Fold a sheet of paper in half like a hotdog.
2. With the paper horizontal, fold the right edge toward the center, trying to cover one half of the paper.
3. Fold the left side over the right and crease to form three tabs.
4. Draw two overlapping ovals on the front.
5. Cut up the two valleys on one side only



#### Instructions for a Focus Skills Fold-Up (Cause and Effect):

1. Fold a sheet of paper in half horizontally (hamburger) so that one side is one inch longer than the other side.
2. Cut the shorter side in half, up towards the fold (mountain top) to create two flaps.



## Vocabulary Card Instructions

The purpose of a vocabulary card is to assist students in learning and understanding terms, phrases or concepts covered in class and necessary for understanding.

Vital Statistics: Word (spelled correctly), Pronunciation (optional), Definition – meaning of word using terms the student understands (1 of the 3 sentences), Link – a word useful in remembering it the meaning should be known; often related or rhyming with the vocabulary word. Use 2 other sentences helping delineate the meaning of the vocabulary word. These should be student generated.

- The FRONT side of the card has a cartoon or diagram showing an example or application of the term. The diagram or cartoon must have at least 4 different colors (other than the white of the paper). There should be a minimum of writing and explanations on this side of the vocabulary card.
- The BACK of the vocabulary card has the word or term, a LINK and three different sentences using the term. The sentences may be a definition, an example or another use showing or interpreting the word or phrase.

Advertisement	Comic Strip	Graphs	Newspaper Article	Scrapbook
Advice Columns	Clustering	Greeting Card	Nursery Rhyme	Skit
Announcements	Collage	Grocery Lists	Obituary	Slogans
Awards	Compare/Contrast	Headlines	One Pager	Society Pages
Banner	Crossword Puzzle	Horoscopes	Persuasive Essay	Song/Rap
Beauty Tips	Dictionary	Illustration	Picture	Sports Stories
Bedtime Story	Editorial	Instructions	Poetry	Story Board
Billboard	Encyclopedia Entry	Interview	Political Cartoons	Story Map
Biography	Fables	Invitation	Postcards	Summaries
Board Game	Facial Expressions	Job Application	Problem Solution	Thank You Note
Brainstorming	Fashion Articles	Jokes	Questionnaire	Timeline
Brochure	Finish This	KWL	Questions	Travel Brochure
Bumper Sticker	Flow Chart	Letter	Ransom Note	TV Commercial
Campaign Speech	Fold-ups	Love Notes	Real Estate Notice	Venn Diagram
Cartoons	Fortunes	Magazine Clippings	CD/Book Cover	Video
Cause/Effect	Four Square	Maps	Remedies	Wanted Poster
Cereal Box Cover	Good News/Bad	Masks	Report Cards	World Map
Character	News	Matrix Menus	Resumes	Word Search
Chart	Gossip	Monologues	Riddles	???
Children's Book	Graffiti	Newscast	Sales Pitches	