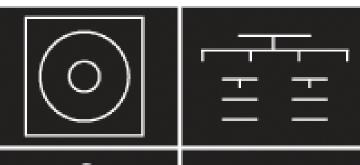
THINKING MAPS

Using Visual Patterns to Facilitate Learning

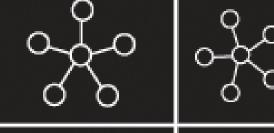
EIGHT DIFFERENT MAPS

Circle Map



Tree Map

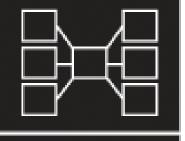
Bubble Map



Double Bubble Map

Flow Map





Multi-Flow Map

Brace Map



Bridge Map

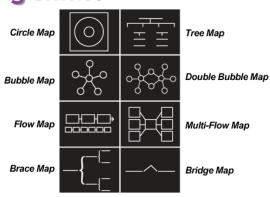
WHAT ARE THINKING MAPS?

- •Developed in 1988 by Dr. David Hyerle.
- A common visual language for learning.

They have a consistent design and are used at all grade levels.

Non linguistic representation of 8 thinking skills:

defining
describing
sequencing
classifying
comparing and contrasting
analogies



recognizing part whole relationships

With consistent use, the brain develops a pattern that connects the process to a specific Thinking Map.

•8 Maps that are used by teachers and students for reading comprehension, writing process, problem solving and thinking skills

FIVE QUALITIES OF THINKING MAPS

- Consistent. The maps are a visual for thinking skills
- Flexible. The learner—and the content determines the complexity of the ma
- Developmental. Based on primitive graphics
- Integrative. 1 topic + multiple perspectives= different maps.
- Reflective. Think about your thinking. Maps become life-long tools.

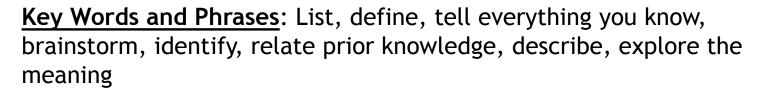
Why use Thinking Maps?

BRAIN RESEARCH

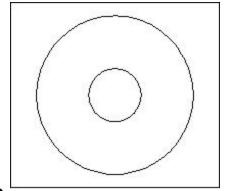
CIRCLE MAP

Thinking Process: Defining in Context

Key Question: How are you defining this thing or idea?



<u>Common Uses</u>: Brainstorm for writing, used as a starting point during the prewriting stage, defining words, identifying audience and author's point of view



DEFINE IN CONTEXT



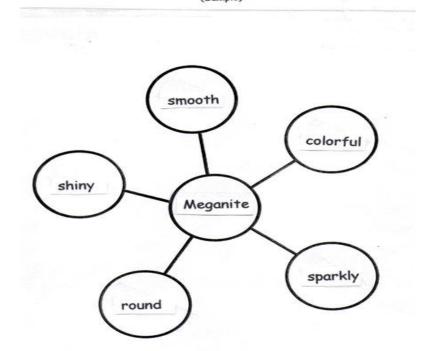
BUBBLE MAP

Thinking Process: Describing Qualities; Characterization

Key Question: How are you describing this thing? What adjectives best describe it?

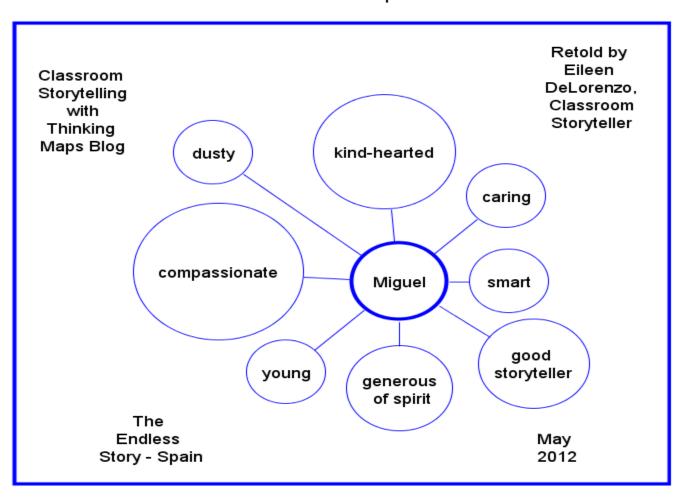
Key Words and Phrases: Describe, use vivid language, describe feelings, observe using the five senses

Bubble Map

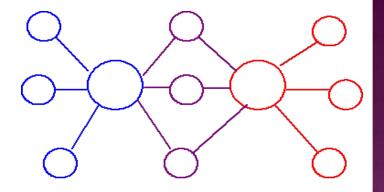


DESCRIBE

Bubble Map



DOUBLE BUBBLE



Thinking Process: Comparing and Contrasting

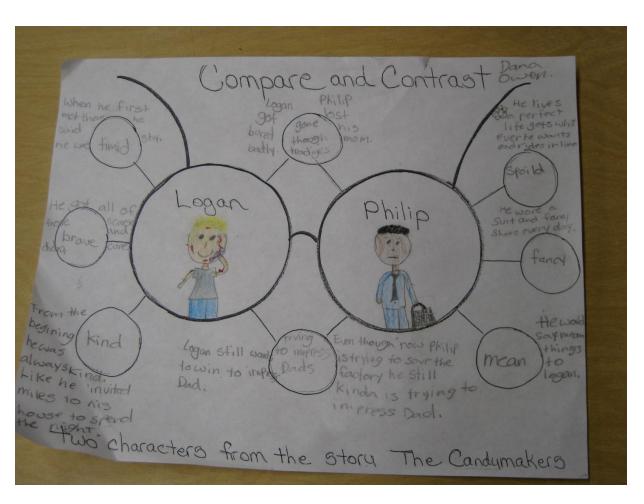
Key Question: What are the similar and different qualities of these things?

<u>Key Words and Phrases:</u> Compare/contrast, discuss similarities and differences, prioritize essential characteristics, distinguish between, differentiate

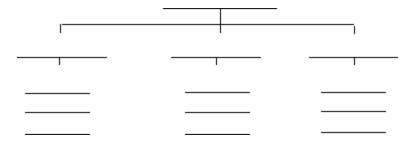
Name Teacher Date Period Expression vs. Equation an a mathematical arrangement Sentence a mathematical mathematical phrase symbols Examples: 3x+5=20 15=12+ xamples: equation expression X +5 254 = 100x+3 15 254 You You can simplify or must solve an may valuate an expression Contain equation to find numbers, variables to find the the answer. and operation answer. symbols Has Has an no

EXAMPLE: COMPARE AND CONTRAST 2 CHARACTERS FROM THE STORY. SHOW EVIDENCE TO SUPPORT YOUR OPINION. THE

A bubble map show helps the student use adjectives. Evidence is written outside the bubble.







Thinking Process: Classifying

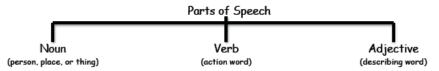
Key Question: What are the main ideas, supporting ideas, and details in information?

<u>Key Words and Phrases</u>: Classify, sort, group, categorize, give sufficient and related details



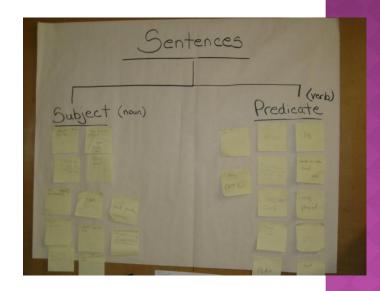
Name _____

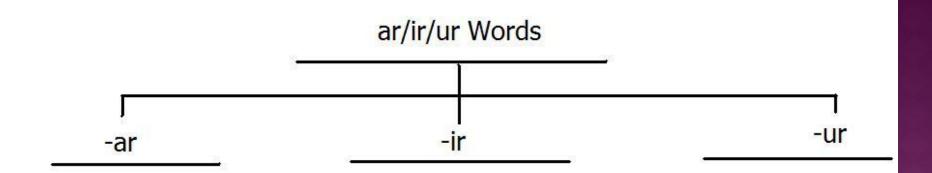
Cut the words out and paste them under the correct part of speech.



red	dog	smiled	smart	eat	pancakes
yard	dig	strange	chair	painted	small

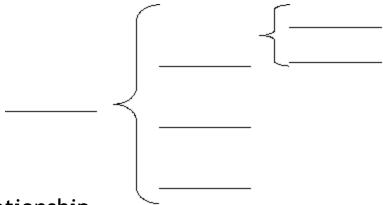
©JenniferBates2012





fur	sir	car	surf	bird	jar
tar	turn	first	far	dirt	turtle

BRACE MAP

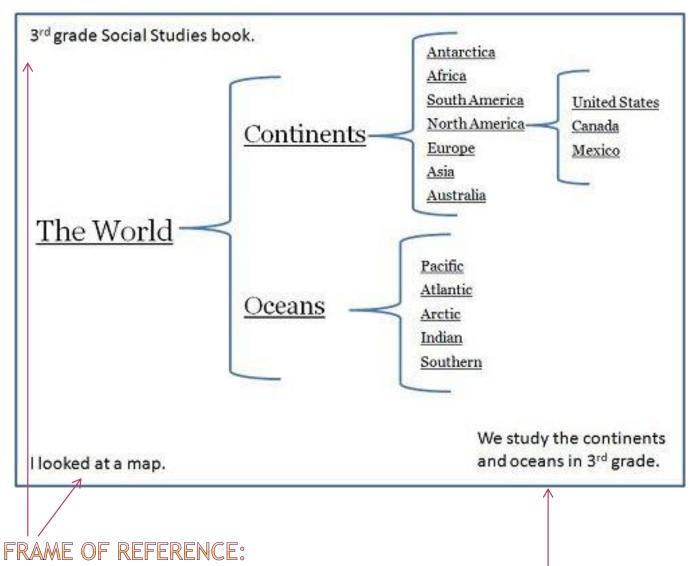


Thinking Process: Part to whole relationship

<u>Key Question</u>: What are the parts and subparts of this whole physical object?

Key Words and Phrases: Part of, take apart, show structure

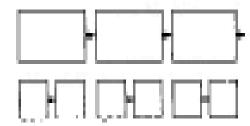
It is for parts only, for "types" of things, a Tree Map should be used.



SHOWS SOURCES FOR INFORMATION AND THE BIG IDEA

Name:	Date:
Visualizing Directions: Write down the part of the settle	tne Setting ng. Then, tell why the setting is important.
	ng. Then, tell why the setting is important.
Setting	
The setting is important because	
	{
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~

### FLOW MAP

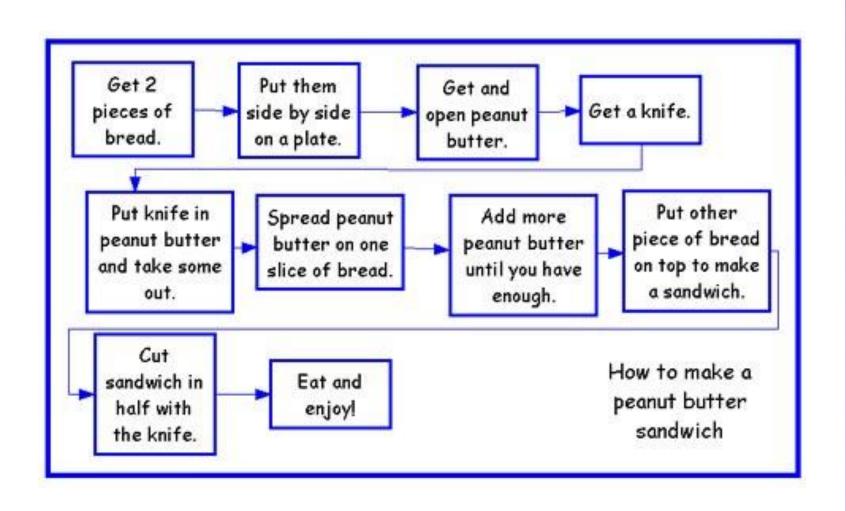


**Thinking Process**: Sequencing

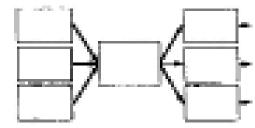
**Key Question**: What happened? What is the sequence of events? What are the sub-stages?

<u>Key Words and Phrases</u>: Sequence, put in order, order, recount, retell, what happens next, cycles, patterns, describe processes, describe change, solve multi-step problems

## EXPLAIN THE STEPS SEQUENCING



## MULTI FLOW MAP



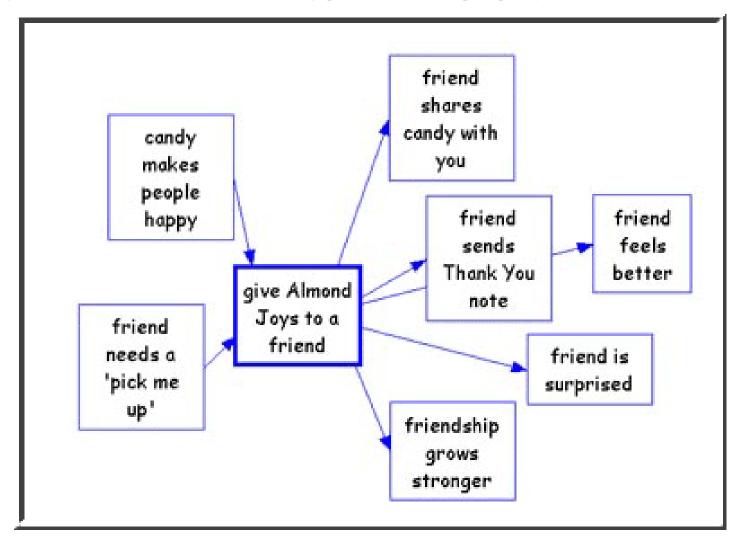
Thinking Process: Cause and Effect; Problem-Solution

**Key Question:** What are the causes and effects of this event? What might happen next?

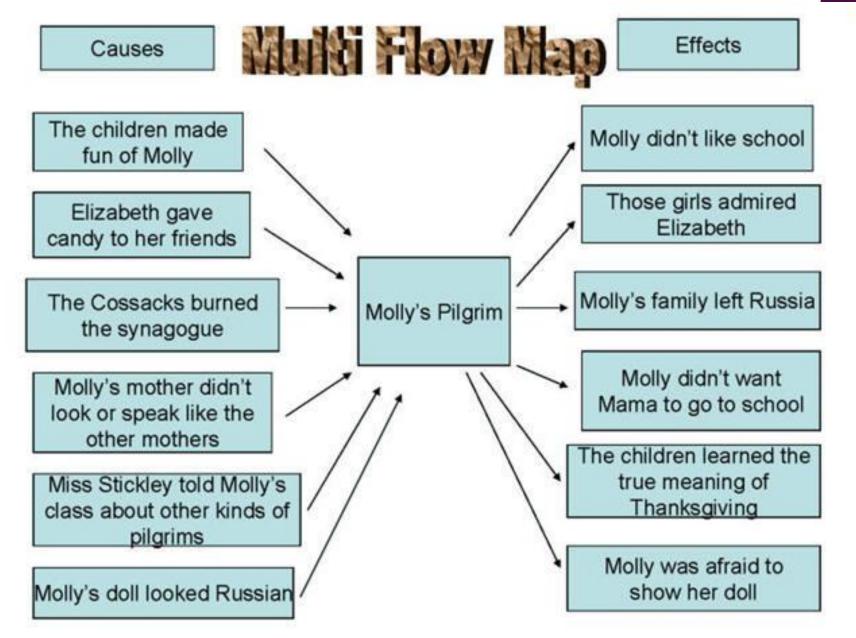
<u>Key Words and Phrases</u>: Causes and effects, discuss consequences, what would happen if, predict, describe change, identify motives, discuss strategies

<u>Common Uses</u>: Used to show and analyze cause and effect relationships. It can also be used with only part of the map showing, such as predicting outcomes.

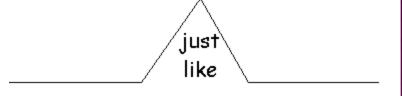
## WHAT HAPPENS IF YOU ...



## What caused you to do it?



## BRIDGE MAP



**Thinking Process:** analogies

RF:_____

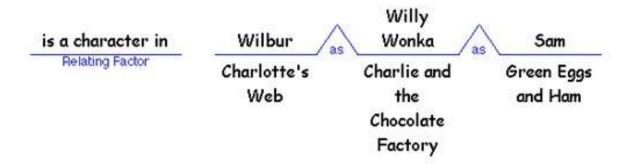
**Key Question**: What is the analogy being used?

**Key Words and Phrases**: Identify the relationship, guess the rule, interpret symbols

#### **Relating Factor:**

How are they connected?

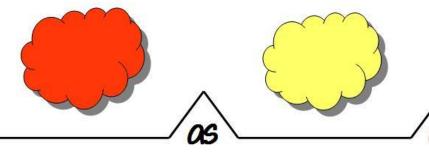
Identifies similarities between relationships. The relating factor answers "How are they related?" The Bridge Map should be able to be read as a complete sentence.



My name is:_____

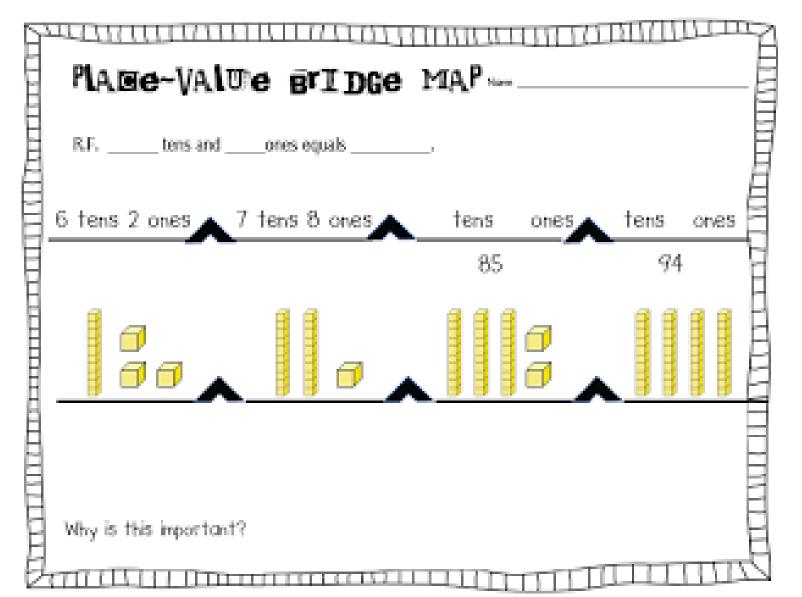
Directions: Use words and/or pictures to compare ideas for the different colors.

## Matching Colors





Relating factor: _____ is the color of _____



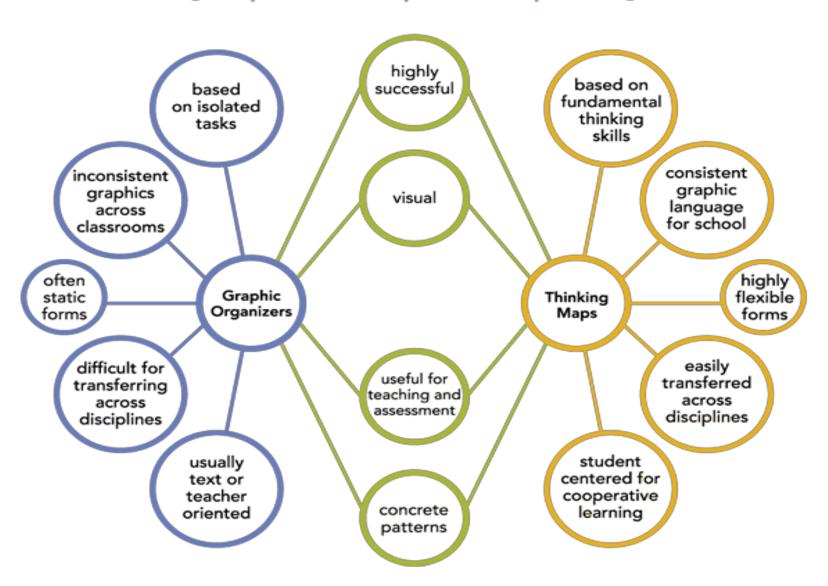
### EXAMPLE



- Directions: Compare and contrast Thinking Maps with other graphic organizers.
- I ask myself, "what map helps me compare and contrast?"

## I VISUALIZE A DOUBLE BUBBLE TO COMAPARE AND CONTRAST?

#### Thinking Maps vs. Task-Specific Graphic Organizers



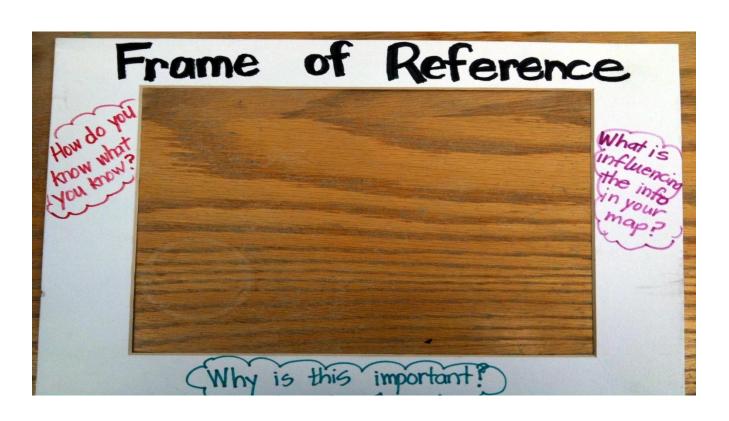
## FRAME OF REFERENCE

#### What is the Frame of Reference?

The Frame of Reference can be used with any of the eight maps.

It provides an area for students to

- synthesis information
- think more deeply
- support their reasoning (evidence)



## FRAME OF REFERENCE

Elaborating with the Extras (The E's)	Interpreting Information (The I's)
Include your own personal experiences.	What is the importance of this information?
Use supporting examples from the text.	What inferences can be made?
Incorporate evidence from text/world.	What influences affect this information?
What historical/literary events support your ideas?	
Include further explanation on the subject.	
Elaborate on your thinking and reasoning.	
What expert "opinions" can you find as support?	
Include excitement or personal feelings about the topic.	

### PREWRITING EXAMPLE

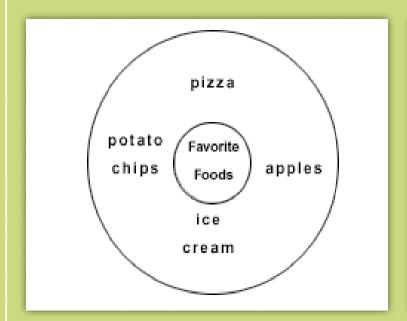
### Assignment:

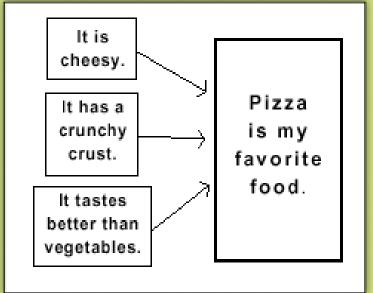
Think about your favorite food. Write a paragraph explaining why you like it.

## THINKING MAPS AND WRITING

#### Sample: Writing to Explain Why (First grade)

The following maps were created as part of a discussion of favorite foods. The circle map shows the student's brainstorming thoughts about his or her favorite foods. The one-sided multi-flow shows the student's reasons for why pizza is the food he or she likes the most. The student then uses this information to write about what his or her favorite food is and why.





## USEFUL WEBSITES

#### Examples of each map grades K-6

http://fdlrs.brevard.k12.fl.us/ThinkingMaps/default.html

#### Newsletters devoted to each Thinking Map

http://www.kcclc.org/thinkingmaps2?print-friendly=true

#### Chippewa Valley ELA Website

http://chippewavalleyela.pbworks.com

