What are Thinking Maps®?

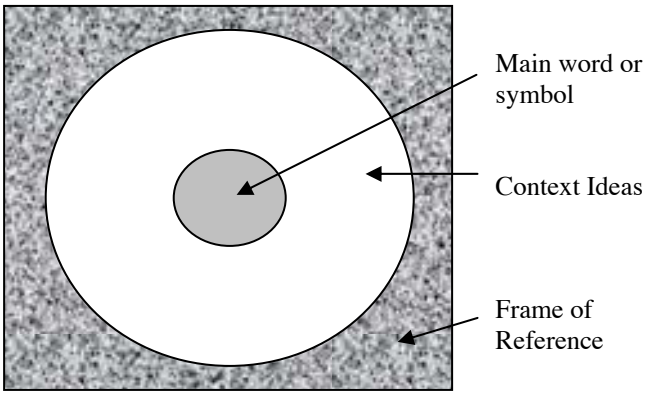
Did you know that only eight processes represent all our thinking?

All our teachers have been trained to use Thinking Maps®. Thinking Maps® is an exciting approach to help students develop a common language for meaningful learning.

We will emphasize one map every 2 weeks (grades 3-6). The first map was a CIRCLE MAP. A CIRCLE MAP *focuses on the thinking skill of* defining *in context or* brainstorming *an idea*.

CIRCLE MAP

Thinking Skill: Defining in Context & Brainstorming



Center circle: The main word, picture, or symbol to be defined is placed in the center circle.

Outer circle: All the related ideas students can think of are placed in the outer circle.

Frame of reference: The frame of reference around the map allows students to indicate where they got their information: their teacher, a textbook, their parent, the Discovery Channel, etc.

For instance, in each of the examples below students can best organize their thinking by using a CIRCLE MAP.

"What are all the ways we can make 100?"
"Tell me all the things you know about wind."
"Brainstorm all the ways you can recycle."
"Brainstorm all the words that rhyme with _____."
"Tell what you have learned about Michigan."
"Brainstorm all the things you know about good readers."

Thinking Maps® is good for ALL learners and is consistent with current research on the brain and learning. A powerful benefit of this approach is that it can be used at all grade levels and in all content areas and supports students in the development of critical thinking skills necessary for success in school and in the real world.

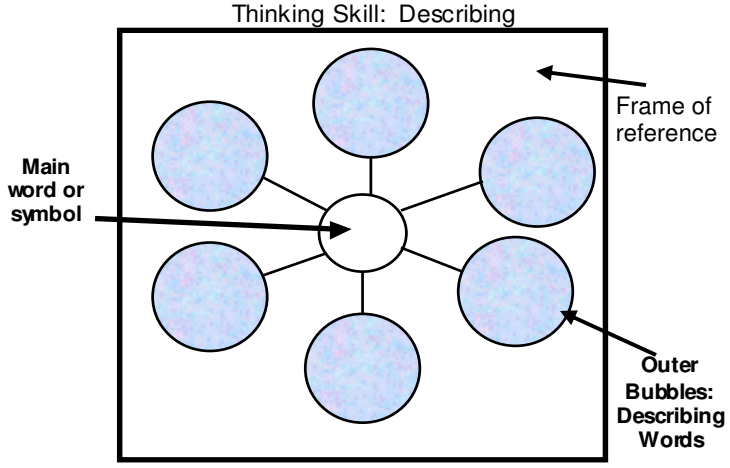
Parent Tip: ask your child to tell you what they know about circle maps and how they have used them at school.

Map Memo for Families: The Bubble Map©

A BUBBLE MAP© focuses on the thought process of describing. This map enables students to deepen their understanding of the topic as well as their vocabulary as they extend their thinking.

BUBBLE MAP

Thinking Skill: Describing



Center circle: The main word, topic or symbol to be described is placed in the center.

Outer bubbles: Only describing words—adjectives or adjective phrases—are placed in the bubbles.

Frame of reference: The frame of reference around the map allows students to indicate where they got their information: their teacher, a textbook, their parent, personal experience, the Discovery Channel, etc.

KEY WORDS FOR BUBBLE MAPS©

Describe using vivid language, observe using the five senses, describe feelings, attributes, characteristics, properties, adjectives, qualities

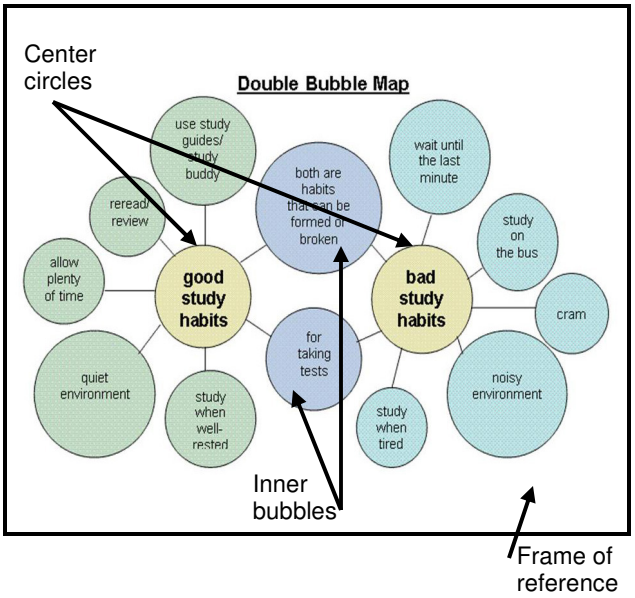
In each of the examples below students can best organize their thinking by using a BUBBLE MAP©.

"How would you describe this person, place, thing, idea, concept, picture, feeling, etc.?"
"Describe the traits of George Washington."
"Describe the main character in the story."
"Describe the characteristics of a leader."
"What qualities are important to this concept?"
"What are the properties of this scientific element?"
"What are the attributes of this number?"
"Describe the setting of the poem."

Parent Tip: ask your child to tell you what they know about BUBBLE MAPS© and how they have used them at school.

Map Memo for Families: The Double Bubble Map

A DOUBLE BUBBLE MAP focuses on the thought process of comparing and contrasting. This map helps students as they look closely and think deeply about two items. When students use a Double Bubble Map to compare and contrast two ideas, people, cultures or concepts, they are engaged in analyzing and organizing the content to better understand the subject matter.



Center circles: The two items being compared are written in the two center circles.

Inner bubbles (that connect to both circles): These show the similarities between the two items being compared.

Outer bubbles: The outside bubbles identify the qualities that share qualities with only one object - these are the contrasting qualities.

Frame of reference: The frame of reference around the map allows students to summarize why the similarities and diffferences are important or to identify what they have learned from contructing the map or to indicate the source of their information.

KEY WORDS FOR DOUBLE BUBBLE MAPS

Compare and contrast, discuss similarities and differences, distinguish between, differentiate

In each of the examples below students can best organize their thinking by using a DOUBLE BUBBLE MAP.

"Compare and contrast characters in a book (Frog and Toad). "

"Identify similarities and differences between two historical figures (Dr. Martin Luther King Jr. and Mahatma Gandhi)."

"Compare and contrast two ocean creatures studied in this unit (octopus and squid)."

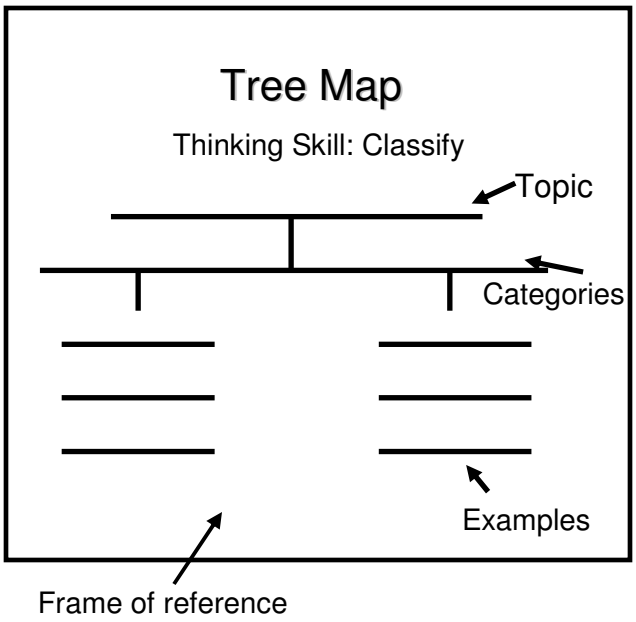
"Distinguish between Three Musicians and The Old Guitarist (two pieces of art)."

"Analyze life in pioneer days and compare it with life today."

Parent Tip: *ask your child to tell you what they know about DOUBLE BUBBLE MAPS and how they have used them at school.*

Map Memo for Families: The Tree Map

A TREE MAP focuses on the thought process of catergorizing. This map is used for classifying or sorting things into categories or groups and/or identifying main idea and supporting details.



Topic: This is the category name or main idea of the topic.

Categories: Individual subcategories of the topic are shown with an "connection line" to the topic.

Examples: Specific members of the categories or specific details are listed under each subcategory.

Frame of reference: The frame of reference around the map allows students to indicate how they know what they know about the categories or to determine if one source is better that another or if a certain point of view influences how the information is classified.

KEY WORDS FOR TREE MAPS

Classify, sort, group, give sufficuent and related details, types of, kinds of, list and elaborate, taxonomy

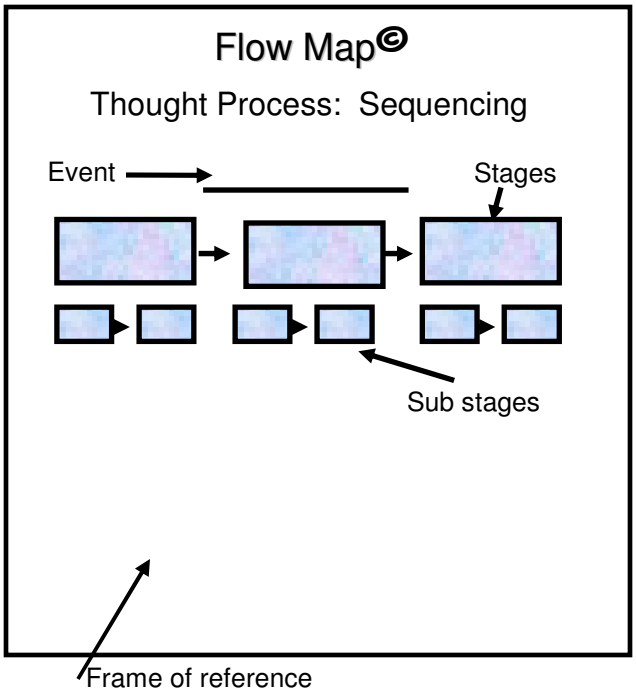
In each of the examples below students can best organize their thinking by using a TREE MAP.

"List important details of the story elements as you read."
"Sort these foods into categories identified in the food pyramid."
"Classify musical instruments in main categories and provide examples of each."
"List examples of edible and ornamental plants."
"Organize the animals according to species."
"Collect and organize a list of words to increase vocabulary."
"Group all the ways we measure things into categories and include specifc examples."

Parent Tip: *ask your child to tell you what they know about TREE MAPS and how they have used them at school.*

Map Memo for Families: The Flow Map©

A FLOW MAP© focuses on the thought process of sequencing. Flow Maps are used for sequencing and ordering information. They can be used to explain the order of events, the steps in a process, or show the relationships between stages and sub-stages of an event. This map helps students think logically and completely.



Event: This is the event or topic to be sequenced.

Stages: The rectangles flow in an organized direction and identify the stages or steps of the event from beginning to end (in order). Flow maps may be constructed in any direction, but must include arrows to indicate the next step or event.

Sub-stages: Sub-stages are written below the stage and also must be in a sequence. A flow map does not require sub-stages.

Frame of reference: The frame of reference around the map allows students to indicate where they got the information or what experiences influenced their understanding about the event.

KEY WORDS FOR FLOW MAPS ©

Sequence, put in order, order, recount-retell, what happens next, cycles, patterns, processes, change, solve multi-step problems

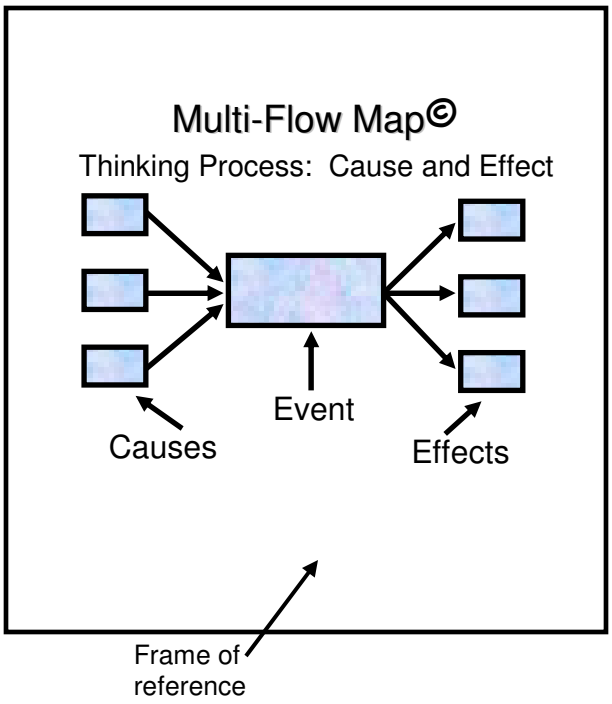
In each of the examples below students can best organize their thinking by using a FLOW MAP©.

"Recall the major events of the story."
"Show the sequence of problem-solving in math."
"Draw the water cycle."
"What must be done to be ready to go home at the end of the school day?"
"Order the major events in the settling of the American Colonies."
"Complete the steps in a science experiment."
"How do you make cookies?"

Parent Tip: ask your child to tell you what they know about FLOW MAPS© and how they have used them at school.

Map Memo for Families: The Multi-Flow Map©

A MULTI-FLOW MAP© focuses on the thought process of cause and effect. This map helps students analyze a situation by looking at what caused an event and the results/effects of the event - the 'why' and 'consequences' - good or bad.



Event: The event that occurred is first listed in the center rectangle. The event must show action.

Causes: In the rectangles to the left, the causes of the event are listed.

Effects: The effects/consequences of the event are listed in the rectangles to the right of the event.

Frame of reference: The frame of reference around the map allows students to indicate where they got their information: their teacher, a textbook, their parent, personal experience, the Discovery Channel, etc.

KEY WORDS FOR MULTI-FLOW MAPS©

Causes and effects, discuss consequences, what would happen if, predict, change, identify motives, why, results, outcomes, benefits

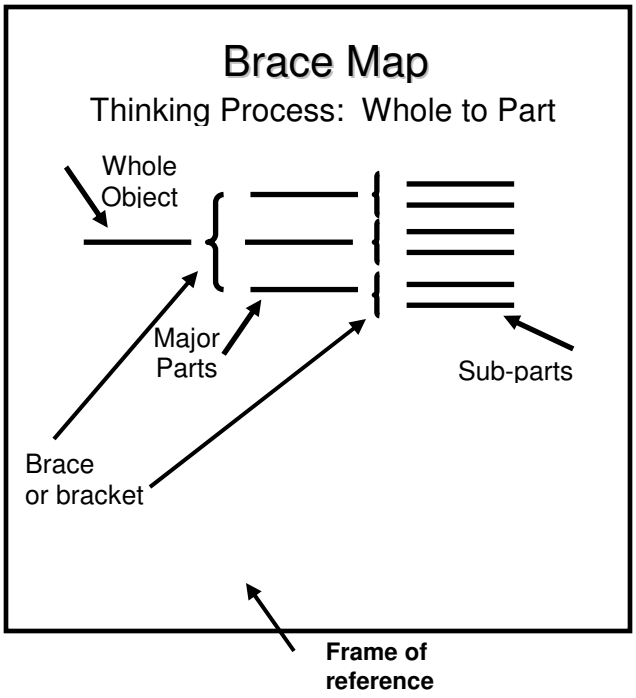
In each of the examples below students can best organize their thinking by using a MULTI-FLOW MAP©.

"What are the causes and effects of the Civil War?"
"What are the causes and effects of global warming?"
"What would happen if we had no rules to follow?"
"What movie shall we watch tonight?"
"Why is it important to wash our hands frequently?"
"What are the results of eating healthy foods?"

Parent Tip: ask your child to tell you what they know about MULTI-FLOW MAPS© and how they have used them at school.

Map Memo for Families: The Brace Map

A BRACE MAP© focuses on the thought process of whole to part replationships. Brace Maps help learners understand the relationship between a whole physical object and its parts. The map is used to analyze the structure of an item. It's like 'dissecting' on paper.



Whole object: The name of the whole object is listed in the line to the left of the first brace.

Major parts: The names of the major parts of the object are placed within the first brace. All the major parts add up to or equal the whole object.

Sub-parts: Major parts that have sub-parts are listed within the next brace. Sub-parts within a brace add up to the major part.

Frame of reference: The frame of reference around the map allows students to indicate how they know what they kmow.

KEY WORDS FOR BRACE MAPS

Parts of, take apart, show structure, physical components, anatomy

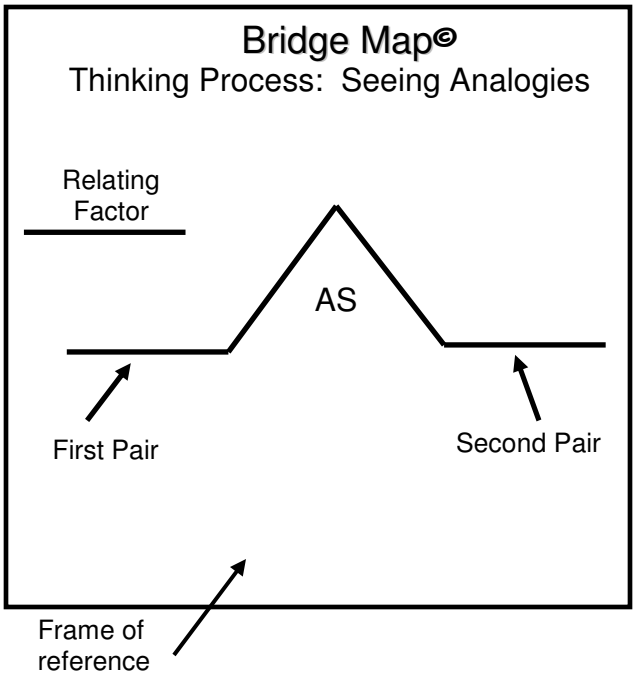
In each of the examples below students can best organize their thinking by using a BRACE MAP.

"What are the parts of a bicycle?"
"Show the structural partos of an instrument"
"What are the parts of an eye?"
"Show the structure of a plant."
"What are the parts of a gallom?

Parent Tip: *ask your child to tell you what they know about BRACE MAPS and how they have used them at school.*

Map Memo for Families: The Bridge Map©

A BRIDGE MAP© focuses on the thought process of seeing analogies. Students use a Bridge Map to identifying similarities between relationships and to create analogies. The relating factor between the words is made explicit and is underlined in these examples: "An apple <u>is a type of</u> fruit as a carrot <u>is a type of</u> vegetable". Another example is "1/2 <u>is equal to</u> 2/4 as 1/3 <u>is equal to</u> 2/6.



Relating factor: The relating factor is the similar phrase that fits both sides of the analogy.

First pair: The first pair of things that have the relating factor are written on the top and bottom of the left side of the bridge,

Second pair: The second pair of things that have the same relating factor are written on the right side of the bridge. The bridge can continue with more relating factors.

Frame of reference: The frame of reference around the map allows students to indicate what they knew or how they got their information about these relationships or to identify what makes these relationships important.

KEY WORDS FOR BRIDGE MAPS©

To identify common relationships, guess the rule, interpret symbols, similes, metaphor, allegory, ratio

In each of the examples below students can best organize their thinking by using a BRIDGE MAP©.

"In what ways are a finger and a toe alike?"
"How are the principal of our school and the president alike?"
"What is the relationship between coins and a dollar bill?"
"Create as many equivalent fraction analogies as you can."

Parent Tip: ask your child to tell you what they know about BRIDGE MAPS©and how they have used them at school.