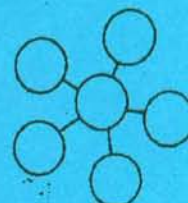
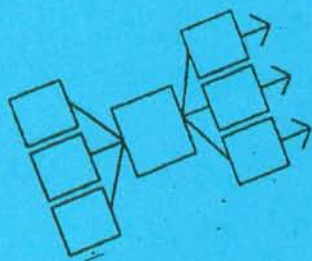


# **THINKING MAPS<sup>®</sup>** **RESOURCE GUIDE**

**APPLICATIONS AND STRATEGIES FOR  
CLASSROOM USE**

**QUALITY ASSURANCE PROJECT  
COLLABORATION D.28/D.75**



**T ogether  
E veryone  
A chieves  
M ore**



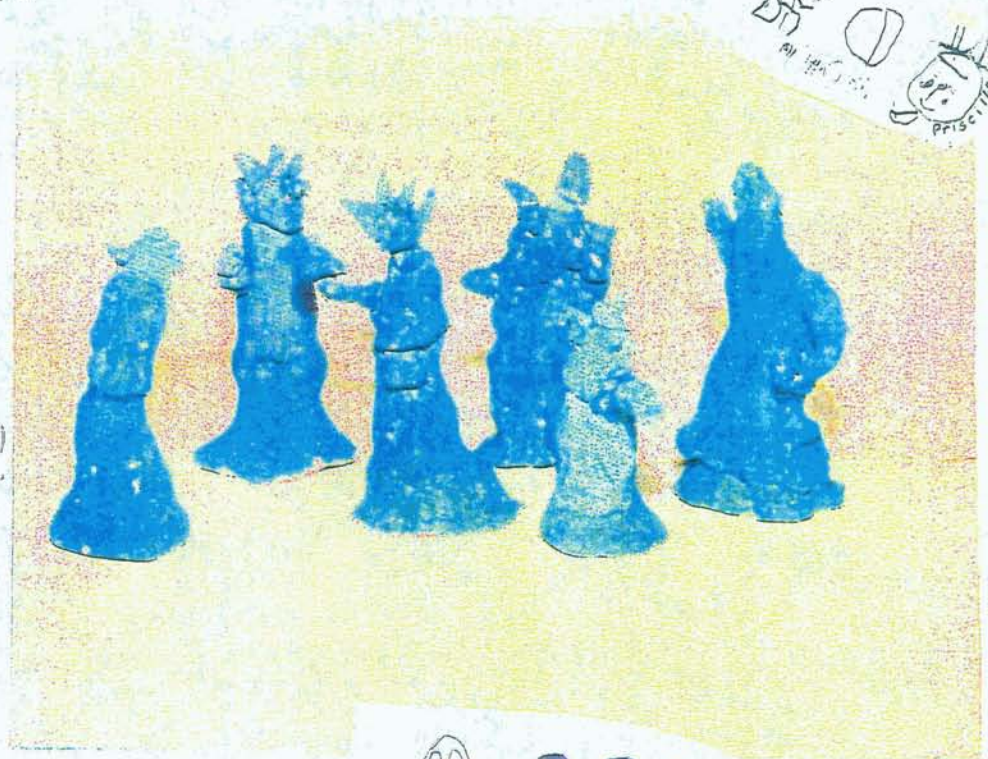
**Look at what we have done!**



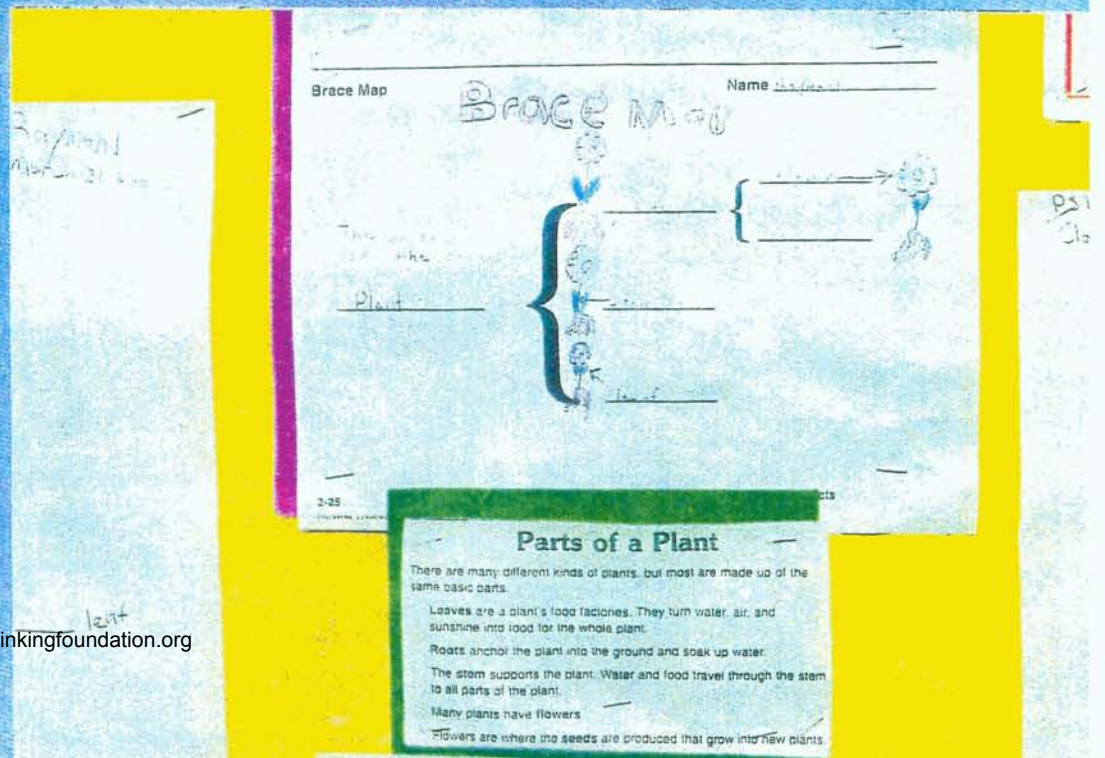
Look at our  
Stamobiles!



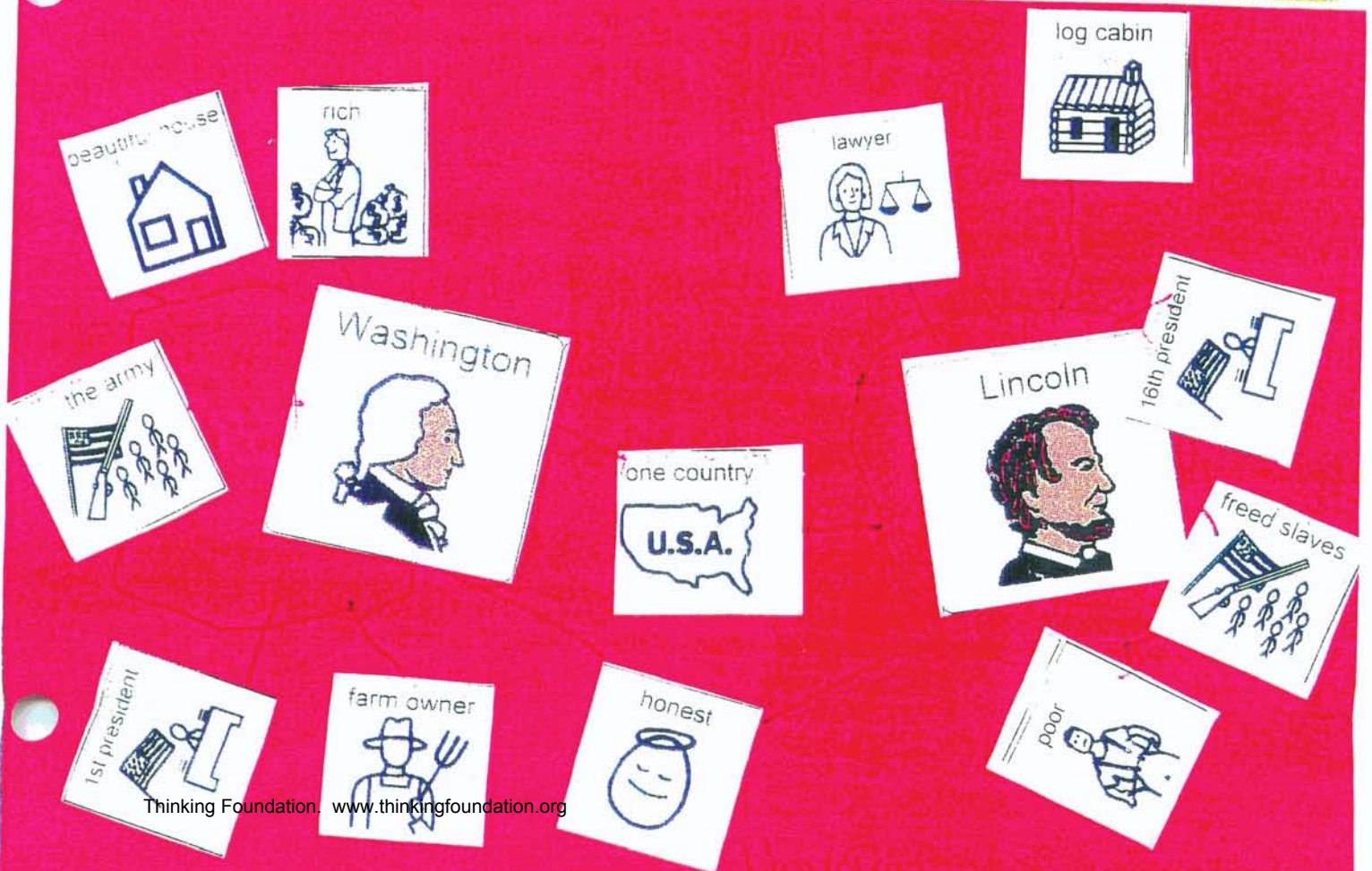
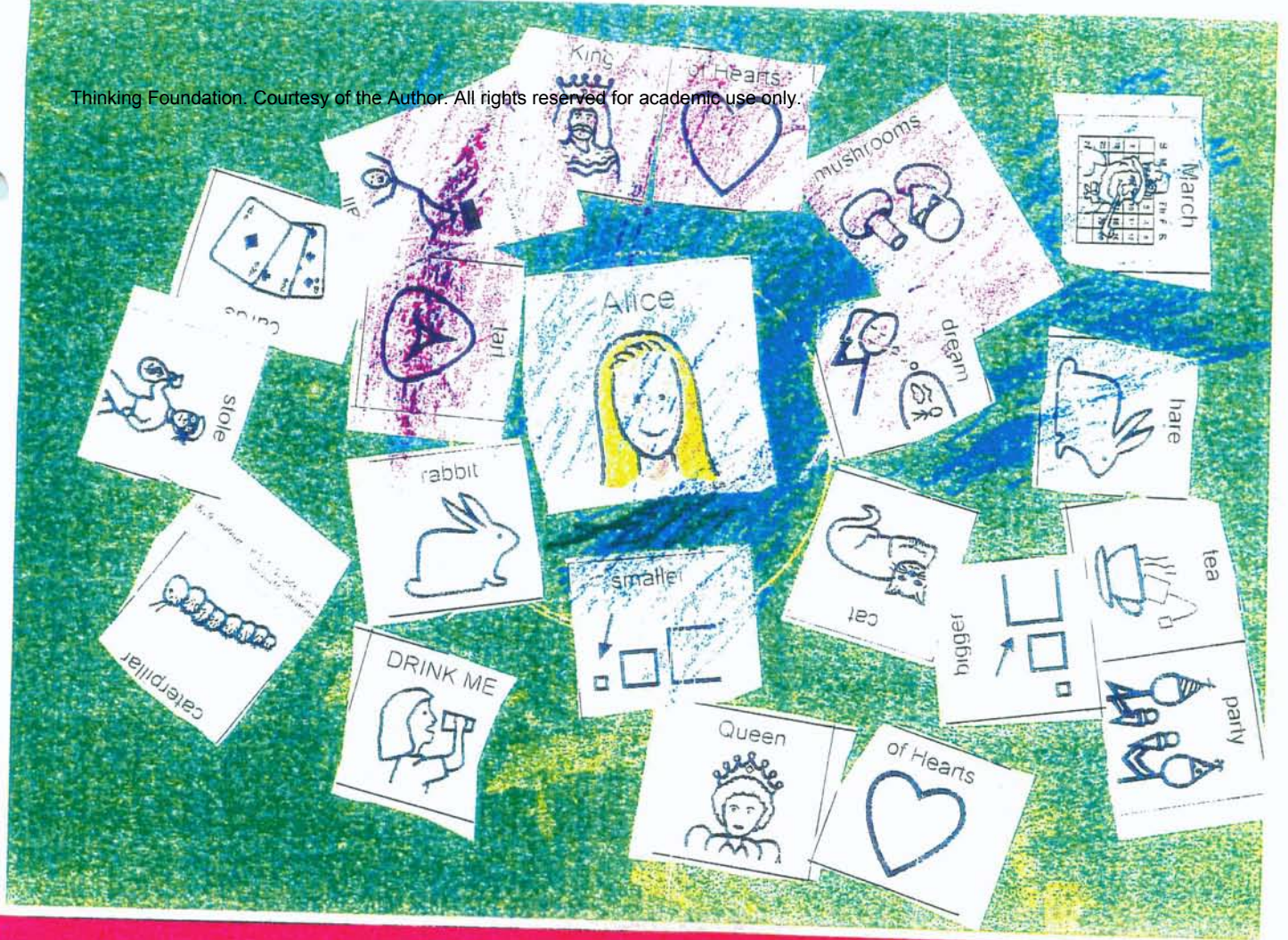
Look at our  
Statues of Liberty!





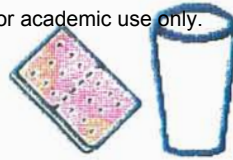








snack



nealthy



not



healthy



nuts



applesauce



crackers



fruit



yogurt



juice



vegetables



cheese



ice cream cone



pudding



cake



cookies



chips



yes



magnet attracts



no



nuts bolts



paper clip



metal door



refrigerator



pencil



brads



hand punch



plastic c



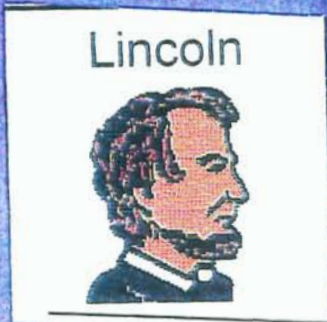
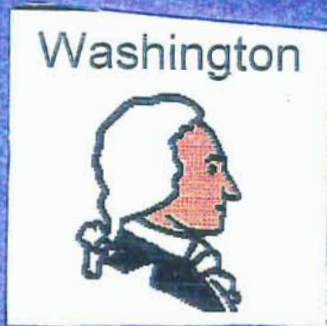
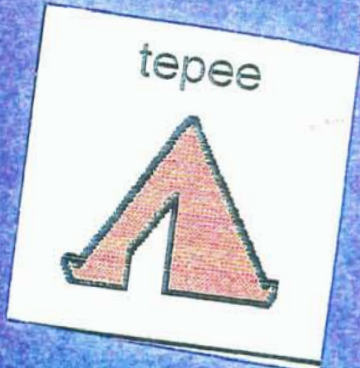
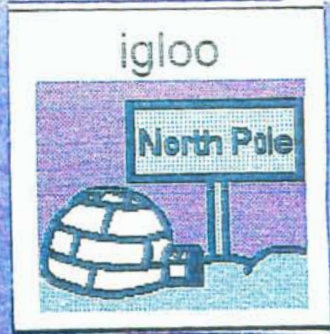
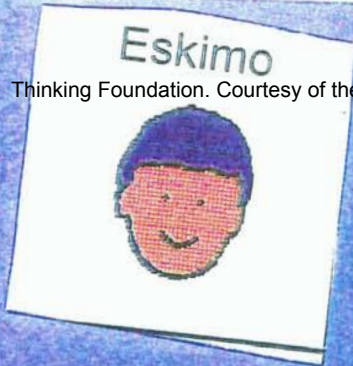
paper



rubber bands





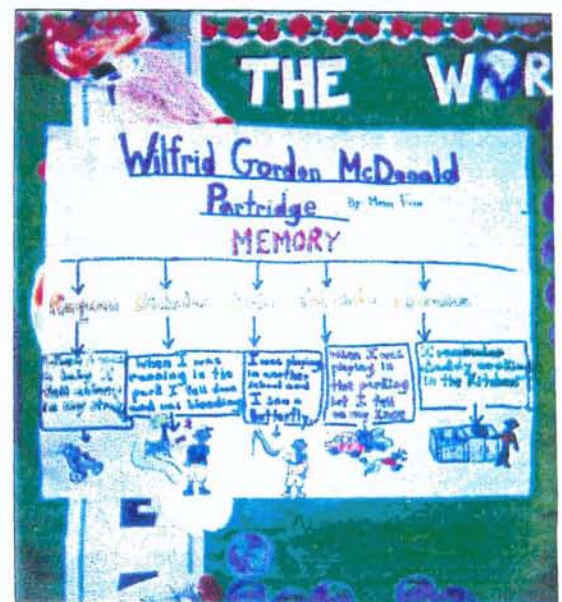
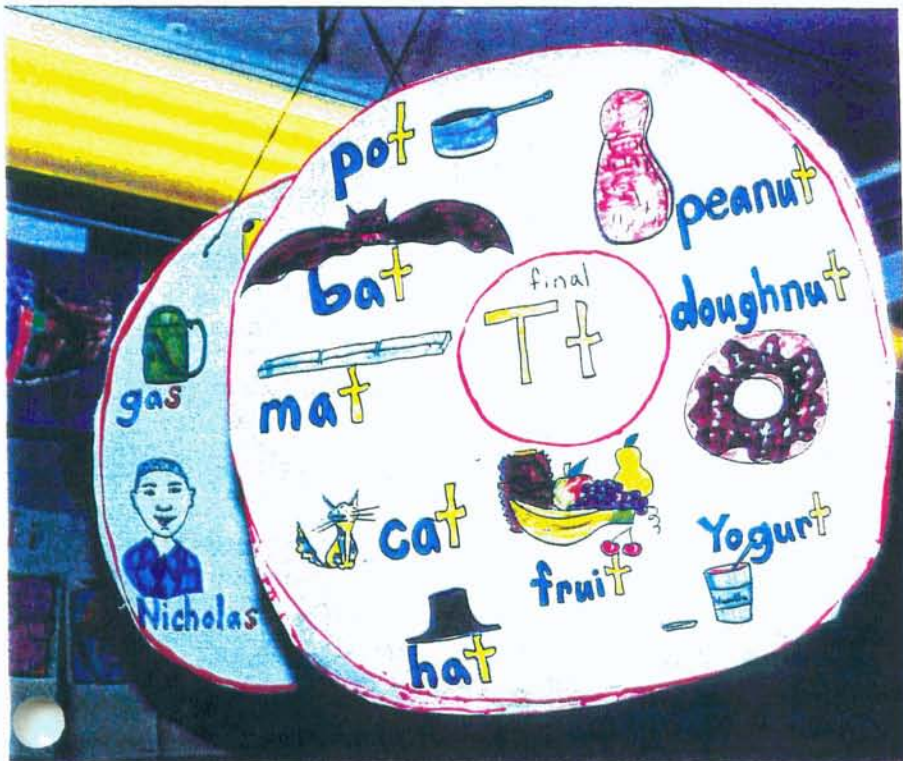
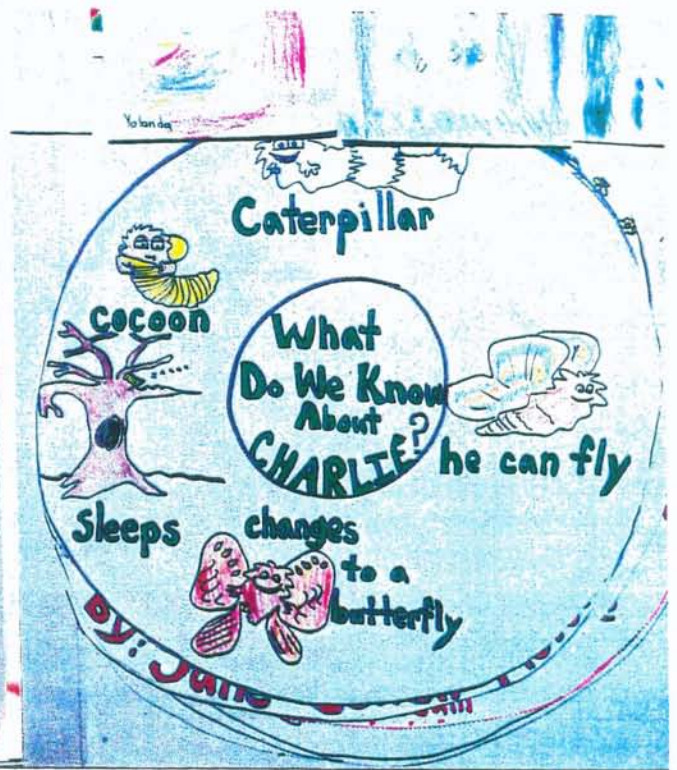
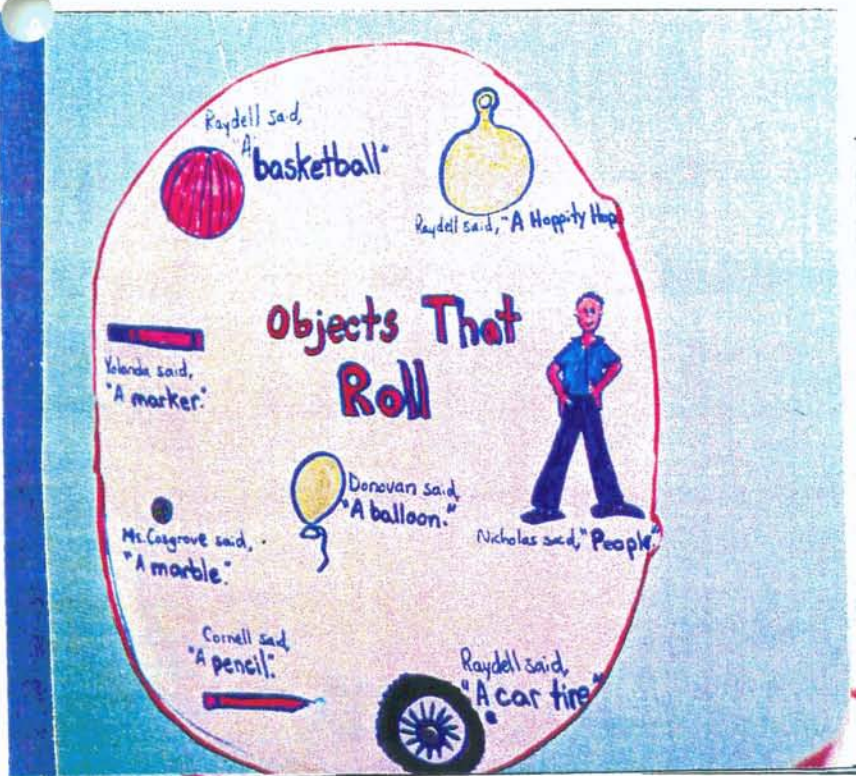


SHARON



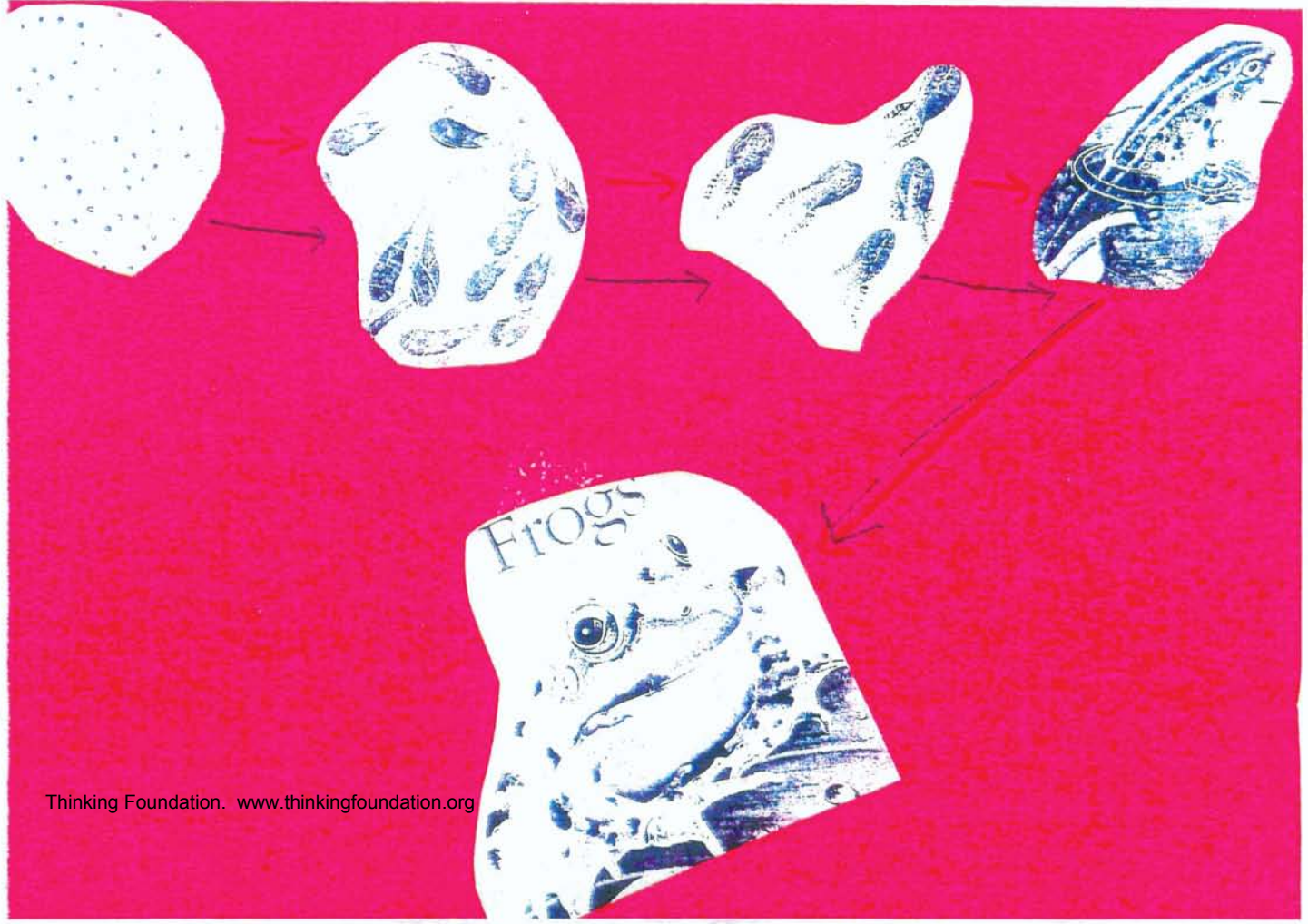
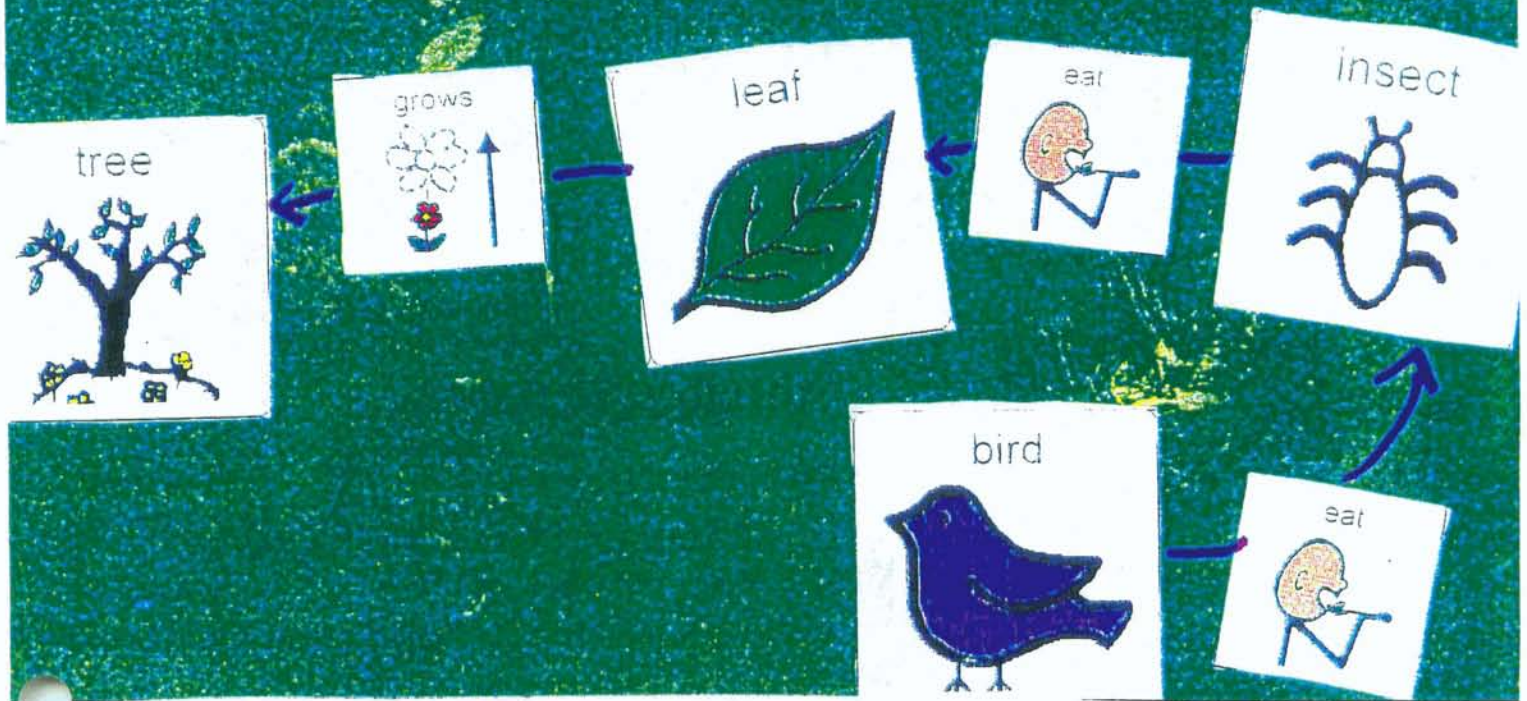
P.S.  
140

Ms. Erin Cosgrove





# of LIFE





## **QUALITY ASSURANCE PROJECT COLLABORATION**

### **Community School District 28**

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**Forest Hills, New York 11375**

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**Community Superintendent**

**Ira C. Plotkin**

**District Administrator Special Education**

**Micki Shulman**

**Chairperson Committee on Special Education**

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**New York, New York 10010**

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**Superintendent**

**Toby Moskowitz**

**Assistant Principal Liaison**

**Susan Wasserberger**

**Charles Leone**

**Assistant Principals**

**Jerry Hauk**

**Teacher Representative**

**Victor Bellini**

**State Education Department**

**Judy Goldstein**

**Grant Coordinator**



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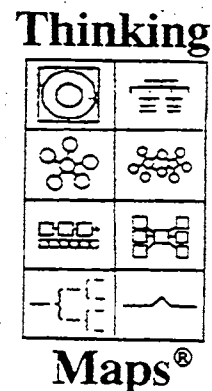
**Milt Chaikin  
Program Evaluator**

**Resource Guide written by Judy Goldstein and participating  
teachers and students.**

**Olga Rothman - Support Teacher, Coordinator/Editor  
Anita Dottin P993Q@J72 - Art Consultant**

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## **Why Should You Read This Resource Guide?**

- **To become more effective at using Thinking Maps® in your daily teaching.**
- **To increase your knowledge of connecting Standards and Principles of Learning to Thinking Maps.**
- **To learn from others.**
- **To encourage you to want to learn more.**
- **To further your knowledge about the Quality Assurance Grant in Districts 28/75.**
- **To motivate you to participate in the training.**

**“Professional development *is* the job.”**

Anthony Alvarado

**We are in the profession of teaching and learning. In order to meet the challenge of higher standards we need to raise student achievement. To do that we need to focus on teaching and learning and to realize that *“Professional development is the job. . . . that our work, both teachers, administrators and supervisors is professional development and that an occasional workshop or seminar is not the way to go. . . . The underlying vision for professional development is that it is continuous and that it is for everybody. The best people in any profession are the people who work hardest at improving their practice.”***

**(Anthony Alvarado, American Educator, Winter 1998. Former N.Y.C. Chancellor, current Chancellor of Instruction in San Diego.)**

**The VISION of the Quality Assurance Team in D28/75 is to focus on teaching and learning and to get people at all levels focused on quality instruction to meet the goal of improved student outcomes. Strong emphasis is being placed on the professional development model which includes workshops and college courses to inform, as well as consultants in classrooms to assist with effective implementation.**



**We are asking our students to work hard and we need to keep reminding them that success takes time, practice, patience, hard work and making mistakes. It's okay to make mistakes. That's part of learning.**

**As teachers and learners, it is important for us to reflect upon this as we go through our own learning process. In this way we begin to become "reflective practitioners" of our own process of learning.**

**Innovative and field tested curricula is needed to keep students engaged and motivated. If students are learning in a way that makes sense to them they will be motivated and successful. The Quality Assurance Team chose Thinking Maps® because it is a curriculum tool that can be used in all curriculum areas at every grade level, starting at Pre-Kindergarten up to Post Graduate School. The Thinking Maps® tool gives students a common visual language that assists them to organize information, visualize their thinking and develop thinking skills within all content areas. Thinking Maps increase students abilities to read, write and comprehend. Use of the Maps support teachers when planing lessons.**

**Teaching children how to behave is critical to the foundation of learning. We chose Applied Behavioral Analysis because it has been field tested for 30 years and has proven to be successful with children, including children with a variety of special needs.**

**It is our continued vision to see both Thinking Maps® and Applied Behavioral Analysis used in all special education classrooms throughout the District. Can we make a commitment to meet the challenge?**



## OBSERVATIONS AND SUGGESTIONS FOR FURTHER USE OF THINKING MAPS®

The **KEY** to using the Thinking Maps® is to get the students to see the connection between the thinking skill and the map. Each map is a visual representation of a particular thinking skill. This is what distinguishes the Thinking Maps® tool from other graphic organizers. What makes this tool even more special is that it can be used in all curriculum areas. In order to assist students to see the connection between the thinking skill and the visual map we need to help them make the connection in our teaching.

**Possible Dialogue:** You might tell the students that when we use the maps we are practicing visualizing higher order thinking skills. (This is for older students.) For younger ones you might tell them that each map helps us to organize our thinking and that each thinking skill has a name. In this way we are giving the students a name or a label and developing vocabulary in the domain of thinking. We are teaching the language of thinking, language that will improve outcomes for students in school and in the world.

Thinking Skill	Thinking Map
Brainstorming/Defining in Context	Circle Map
Describing Qualities	Bubble Map*
Comparing and Contrasting	Double Bubble Map**
Sequencing	Flow Map
Cause Effect Relationships	Multi Flow Map
Classifying	Tree Map
Whole-Part Relationships	Brace Map***
Analogies	Bridge Map

\* Use only adjectives or adjective phrases

\*\* More flexibility - (Adjectives/Adjective Phrases and other parts of speech.)

\*\*\* Use only for physical objects.



Assist students to see how using Thinking Maps® helps us in everyday living as well as in academic/school work. For example:

- When you want to plan your day, what thinking skill will you use? What map will you use? Why is it important to plan your day?
- When we receive consequences in our lives, either positive or negative, what thinking skill can we use to determine the events that led to the consequences? What map will we use to demonstrate that skill? Can we make such a map now based upon our personal experiences?
- If a basketball player is on a court, he/she needs to know the sequence of plays. What thinking skill is he using? What map will he use?
- When you want to describe a person or an object, what skill are you using? What do we call the words that we use to describe something? *Attributes/characteristics*. (We need to **teach** students to use adjectives and adjective phrases to describe.)

## **Suggestions for using Thinking Maps® To Teach Language Skills.**

### **Use a Tree Map to Classify Parts of Speech.**

**Learning Standard:** E4a The student demonstrates a basic understanding of the rules of the English language in written and oral work and selects the structures and features of language appropriate to the purpose, audience, and context of the work. The student demonstrates control of:

- grammar;
- sentence construction;
- spelling;
- usage.

(Performance Standards, New York City First Edition. English Language Arts, pg. 28.)

### **Principles of Learning: Accountable Talk**

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- Talk is essential to learning
- Talk must be accountable to standards of evidence
- We indicate accountable talk when we press for clarification and explanation



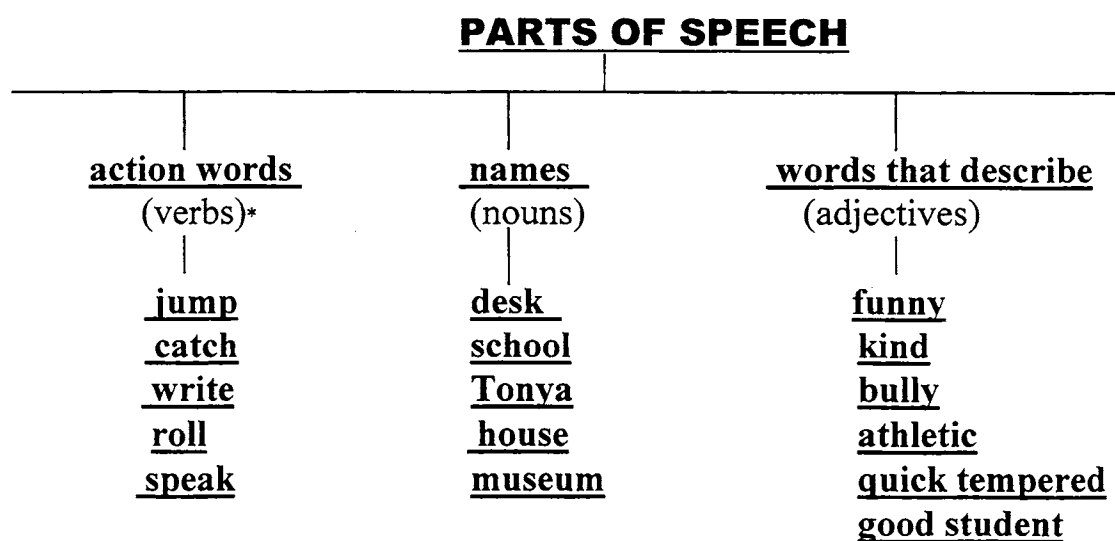
**Teacher Aim:** To teach students parts of speech.

**Purpose\Why?** Talk is essential to learning. Knowledge of parts of speech and sentence structure assist us in speaking and writing with greater clarity.

**Behavioral Objective:** Students will begin to make a list of parts of speech and use bubble and double bubble maps to describe qualities using adjectives and adjective phrases.

**Thinking Skill:** Classifying

**Thinking Map:** Tree Map



\*Note: Verbs can be classified by action verbs and state of being verbs. In this example I am only focusing on action verbs.

T: Let's make a sentence with the words Tonya and school.

S: Tonya goes to school.

T: Let's make a sentence with the words Tonya and kind.

S: Tonya helps me with my work and is a good student. She is kind.

T: Let's make a sentence with the words school, write and desk.

S: In school we write on moveable desks.

Let's underline the names or nouns in our sentences.

Let's circle the action words or verbs.

Let's put a box around the words that describe or adjectives.

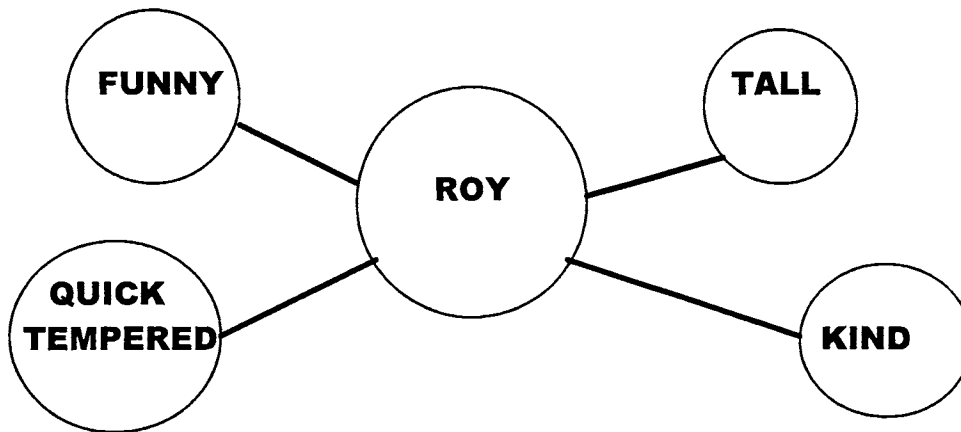


Question: What part of speech is the word bully? It can be a noun or an adjective. It depends upon how it is used in a sentence. I am going to use it both ways. I will underline the noun, circle the verb and put a box around the adjective. Can you explain why in one sentence it is a noun and why in another sentence it is an adjective?

A bully is a person who likes to push smaller people around. Kenny is a

nasty bully who threatens students.

**LET'S MAKE A BUBBLE MAP THAT DESCRIBES THE CHARACTERISTICS OF ROY.**



Roy is one of my friends. I like being with him because he is funny and kind. He is also tall and thin. I stay away from him when he gets angry because he is quick tempered. I would like to teach Roy about Conflict Resolution so he could learn what to do when his temper gets the best of him.

Students can be asked to add to their list of nouns, adjectives and verbs and possibly pronouns could be introduced. The goal would be to keep adding to the list until all parts of speech are part of the tree map.



**Observation: MIS IV, 1<sup>st</sup>/2<sup>nd</sup> grade classroom.**

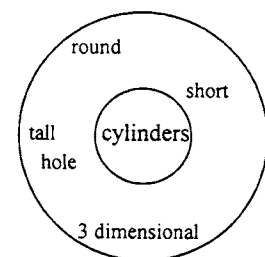
The teacher engaged the students in a math lesson to meet the following objective:

**Behavioral Objective:** Students will use a piece of string to compare the height of each cylinder to its circumference. **Note:** This was not the first lesson the teacher had given about cylinders and there was evidence of thinking maps charts in the classroom about cylinders and other shapes used in mathematics.

Below is a **possible teaching sequence** based upon the above strategy (see previous page) for **beginning** to use Thinking Maps.®

First: **Brainstorm - Circle Map**

Questions: What do you already know about cylinders?  
Where do we find cylinders?



Second: **Define in Context - Circle Map**

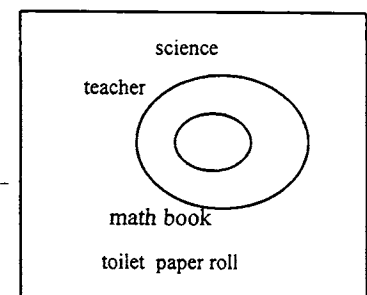
Question: What is a cylinder?

The intention is for the students to build a vocabulary about 3 dimensional shapes, be able to define the word cylinder within the context of math, and to know the function of cylinders. Defining in context teaches the students the linguistic distinctions in a domain - eg. the vocabulary of math.

What is the context? That's the box around the circle map.

Ask: How do you know about cylinders?

- math lesson on 3 dimensional shapes
- math book
- experiences with cylinders
- the cardboard roller used for toilet paper, paper towels



Let's write a definition of a cylinder.

A cylinder is a solid 3 dimensional circular shape. An example of a cylinder is a toilet paper roll or a soup can. Cylinder/cylindrical shapes are used in the construction of buildings. Homework: Observe objects in your home. What objects are shaped like cylinders? Observe buildings in your neighborhood. Do you see any cylinder shapes? Hint: Some buildings have columns.

**Note:** The Circle Map is used for two different thinking skills.

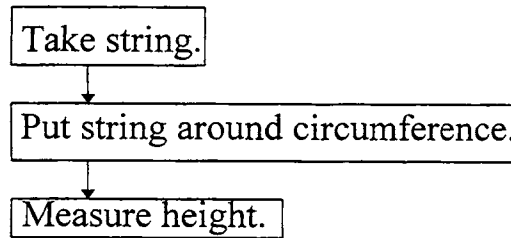
Question: What are they?

Answer: Brainstorming and Defining in Context. Each skill has a different purpose.

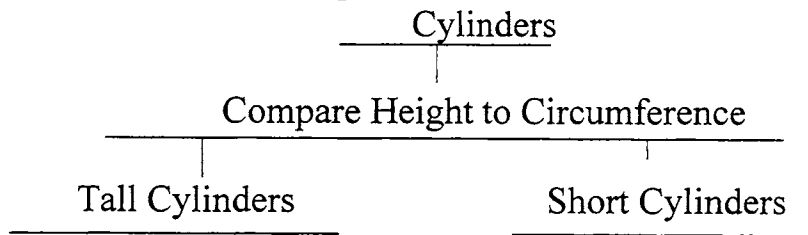


Third: **Sequence - Flow Map®**

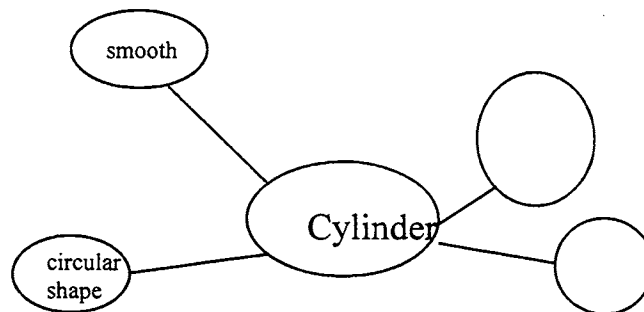
Behavioral Objective: To measure many cylinders of different sizes.



Fourth: **Categorize - Tree Map®**

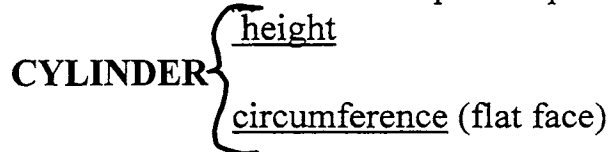


Fifth: **Describe Qualities - Bubble Map®** Remember to use adjectives or adjective phrases.



Sixth: **Part-Whole Relationships- Brace Map®**

What are the component parts and subparts of a cylinder?



Note: Use Brace Maps® to discuss parts of **physical objects**.  
E.g. Parts of a plant, chair, tool, computer, etc.



**Observation: MIS I, 5/6<sup>th</sup> grade classroom.**

Bill Waste demonstrated the following based upon **the teacher's request** to learn how to use a Bridge Map® in a math class and connect it to measurement skills. The students were familiar with the name of the maps and the thinking skill connected to each map. It was obvious that the teacher gave the students a lot of practice naming the thinking skills and connecting them to the maps.

**Thinking Skill: Seeing Analogies - Bridge Map®**

Please note his dialogue and the sequence he used to get to measurement.

BW: "Analogies mean seeing how things are the same. We use analogies all the time. Let's use the bridge map to show how things are the same".

Blue and Sky                      Green and Grass                      Yellow and Sun  
How are they alike? Color of Object.

There are two parts to a Bridge Map.

is the color of                      blue                      green                      yellow  
*relating factor*                      sky                      grass                      sun

"Blue is the color of the sky as green is the color of grass as yellow is the color of the sun".

BW: "This is a different analogy. We have a different relating factor.

Is the opposite of                      night                      up                      tomorrow                      front                      hot                      sharp  
*relating factor*                      day                      down                      today                      back                      cold                      dull

"Night is the opposite of day as up is the opposite of down, as tomorrow is the opposite of \_\_\_\_\_ etc."

"What does all of this have to do with math?

Let's look at **MULTIPLICATION**. We need to change the relating factor."

X6                      1                      2                      3                      4  
*relating factor*                      6                      12                      18                      24

$$1 \times 6 = 6$$

$$2 \times 6 = 12 \text{ etc.}$$

Let's see how fractions are = to each other.

Are these the same? Is  $2/12$  equivalent to  $1/6$ ? Is  $3/18$  equivalent to  $1/6$ ?

**“Measurement** - We have two basic measuring systems - metric and standard.”  
is the name for       $\frac{8\text{oz}}{\text{cup}}$        $\frac{16\text{oz}}{1 \text{ pint}}$        $\frac{32\text{oz}}{1 \text{ quart}}$        $\frac{64\text{oz}}{\frac{1}{2} \text{ gallon}}$   
**relating factor**

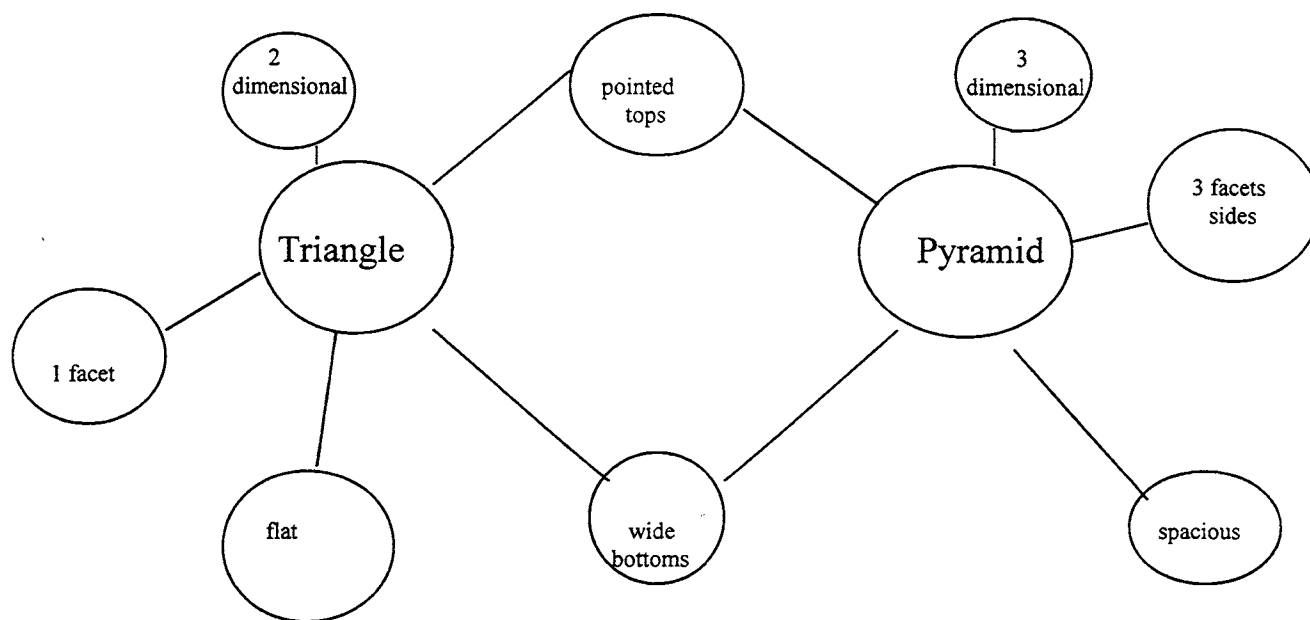
A cup is the name for 8 oz of liquid. A pint is the name of 16 oz of liquid, etc. These are different names for ounces.

**Symbols**  
is the symbol for       $+$        $-$        $\times$        $\div$   
**relating factor**      addition      subtraction      multiplication      division

A **plus** sign is the symbol for addition as a **minus** sign is the symbol for subtraction, as a **times** sign (x) is the symbol for multiplication as a \_\_\_\_\_ is the symbol for division”.

**Observation:** SIE VI Class, Junior High School. The art cluster teacher used various maps to teach about shapes and the students used shapes to make cards. This is an example of one of the maps that was discussed during a post observation conference.

**Thinking Skill: Comparing and Contrasting - Double Bubble Map®**





The Double Bubble Thinking Map® shown on page 9 is used to compare and contrast **qualities** of two shapes. **When you first teach the double bubble, model with words that demonstrate qualities/adjectives.** If the students use words that define rather than describe, ask questions so that students turn the words into adjectives or adjective phrases. (Accept the students responses and then rephrase. Tell them why. In this way we are giving students examples of adjectives and adjective phrases, increasing their vocabulary and demonstrating various ways to say the same thing.) Please note that a **Double Bubble Map** does have flexibility because when comparing and contrasting it is sometimes difficult to use adjectives or adjective phrases exclusively. Below is an example based upon student/teacher work.

Many students have difficulty expressing themselves using adjectives and adjective phrases. Column I represents examples given in class for double bubble maps. Column II represents shifting the language to adjectives/adjective phrases.

I

II

learned to grow crops  
hunted for food  
moved from place to place

crop growers  
experienced hunters  
migrants

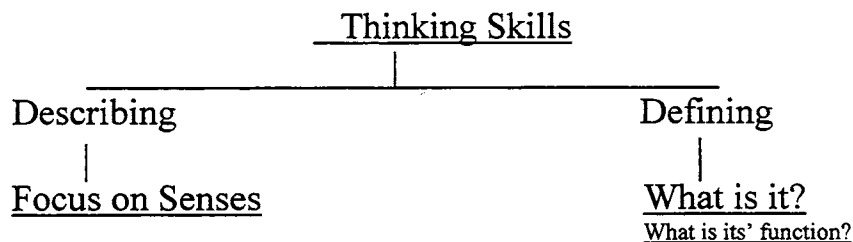
not waterproof  
fired again and again  
came in many colors

porous  
glazed and refired  
colorful

dress myself  
mom feeds me  
didn't listen  
didn't tell the truth

independent dresser  
dependent on mom to feed me  
inattentive  
liar

- It's easy to confuse describing and defining.
- **Describing** - Focus on the senses. What does it look like, feel like, taste, smell and sound like. **Bubble Map.**
- **Defining** - What is it? How/Why do we use it? What is it's function? **Circle Map.**



## SOME REMINDERS WHEN PLANNING LESSONS

- Know what it is you want to teach and why? Why do the students need to know how to compare the height of a cylinder to its circumference? You need to know why and it's important to tell the students why so they understand why they are learning what they are learning. *"The Power of Purpose."*
- Know the **Learning Standard and Principle of Learning**.
- Know what it is the students will be able to do to demonstrate they are learning. The students will be able to . . . . . That is the behavioral/learning objective.
- Clearly state the goal and why. Model what you want the students to do. Much modeling may be needed. Plan for a lot of guided practice and then independent practice. Assess students during guided and independent practice. Individualize and plan further lessons so that students meet independent mastery. If that is not possible for some learners, make sure to state the supports the students need in order to meet the goal. Homework should be on the students independent level, not on the students frustration level.
- TASK ANALYZE the activity. When a student does not understand, look for the missing step. This is **crucial** to student learning. All students can learn if the task is analyzed to meet their learning needs and they are given enough practice. (Curriculum materials have been ordered that task analyze skills. For some of our students there may still be missing steps. You will fill in those steps.)
- Determine what Thinking Map® will assist you in planning your lesson based upon the purpose of your lesson.
- Be prepared with questions to get the responses that demonstrate the students understand the learning experience.
- Consistent use of a behavior management program is necessary - one that has been field tested for years. Applied Behavioral Analysis is such a program. The teachers who participated in the ABA course with Dr. Rousseau from City College and received in classroom consultations by Dr. Rousseau and Dr. Bahadourian met with success in helping students to spend more time on task.



**“Learning is a matter of attitude not aptitude.”**

Author unknown

Learning takes **time, practice, patience, making mistakes and HARD WORK**. We need to remember that for ourselves as well, and keep telling it to our students. Much repetition is needed as well as carefully planned **direct instruction**. Students need to be **given practice under various circumstances** so that they can **transfer and generalize** the skills they have learned.

American Educator AFT Magazine, Summer 2000, has an article by Gilbert T. Sewall entitled **Lost in Action**.

His major claim is that “we have lost the focus of traditional pedagogy and have replaced **hard and serious work of the mind** with activities that are often “time-consuming and trivializing.”

“Sometimes teachers must inform directly; at other times they guide students to figure things out for themselves. Active, attentive listening . . . is imperative. Repetition, practice and memorization have their part, as does learning to take organized notes. **At the core, always, is serious content approached seriously**. Knowledge builds upon knowledge. . . . **Needed is sequenced content and classroom time to allow students to build a storehouse of knowledge and skills and the ability to use them. . . . The more students know, they more they will want to know.**

“Students need to: unearth meaning; to evaluate , interpret, compare, extend, apply; analyze errors; present findings; defend solutions; attend carefully to what others say; get their thoughts down clearly on paper; to understand. **This is not boring and it is not passive. This is real action learning.** This is the *mind* at work. Those who would banish such teaching by dismissing it as dull and ineffective are **better advised to put their efforts into helping teachers sharpen these familiar and research-validated approaches.**”

**EXPERIENCE + REFLECTION = GROWTH**

John Dewey

We are often not given the time to **think about what it is we are learning, to reflect upon teaching practices, to share our reflections, experiences and suggestions with others and to take what we have learned and use it in depth**. The intent in writing this Resource Guide is for it to be a review as well as a vehicle to motivate you to continue to use **Thinking Maps®** as tools in your classrooms. You can be resources for one another. The **Blue Thinking Maps® Manual** an excellent and necessary resource. Another intent in writing this guide, is to motivate staff who have not participated to want to participate.

The Quality Assurance Team in D. 28/75 plans to continue **Thinking Maps®** consultant support and training. We also plan to continue to teach staff members to use the principles of Applied Behavioral Analysis and include classroom consultations with Dr. Marilyn Rousseau and Dr. John Bahadourian. We believe that the **Thinking Maps Tool** and applying the principles of ABA will give our students what is needed so that they can participate in “hard and serious work of the mind” to meet their fullest potential. It is our continued goal to support teachers and supervisors to “sharpen these research-validated approaches.”

## TEACHER ACKNOWLEDGEMENTS

### Thinking Maps® Participants

In the section that follows work is presented in the following order by  
Program and Teacher

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	Kerri Branca	MIS I	Third/Fourth Grade
	Yosefiah Campbell	MIS I	Fourth/Fifth Grade
	Dorothy Taylor	MIS I	Sixth Grade
J 72	Agnes Romeo		
	Resource Room		Seventh Grade

#### DISTRICT 75

875Q	Sharon Feldman	SIE I	18 years old
P993@J72Q	Anita Dottin	SIE VI	10 - 14 years old
752Q (QSCD)	Steve Mueller	SIE IV, VII	Grades 7-9
	Vinnie Born	SIE IV, VII	Grades 7-9
	Pat Gatuso	SIE IV	15 - 18
	Harriet Burger	SIE IV	15 - 18
	Marion Lawlass	SIE IV	15 - 18

Olga Rothman	Support Teacher	Adults
Judy Goldstein	Grant Coordinator	



Teacher: Ms. Erin Cosgrove  
Map: Circle map  
Map Objective: To brainstorm

Things That Roll.

Grade: MIS IV Kindergarten  
Ratio: 12:1:1  
Room: TC  
School: PS 140

English/Language Arts

Standard 1-

Language for  
Information  
and

Understanding

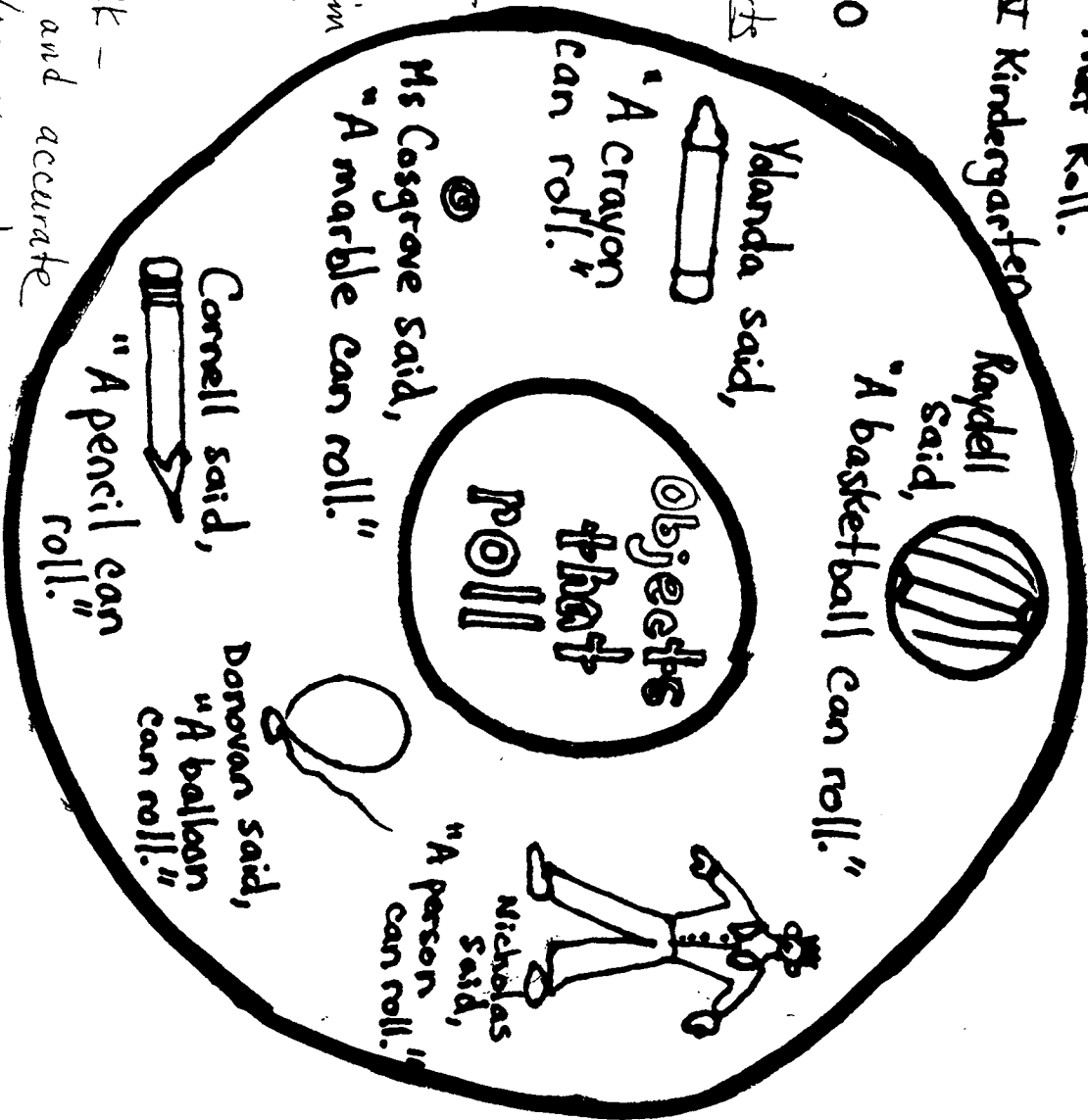
Student used  
verbal and

visual communication  
to discuss objects  
that roll,

Learning Principle:

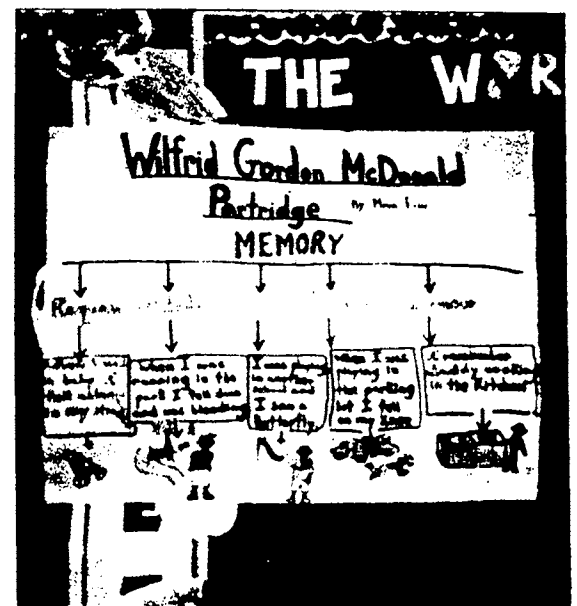
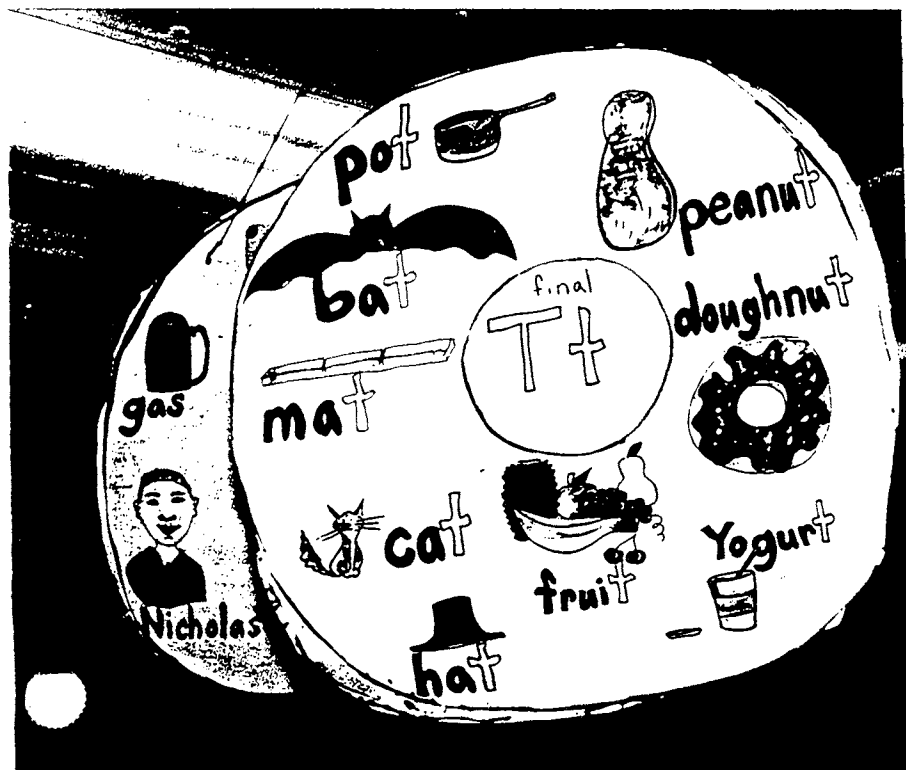
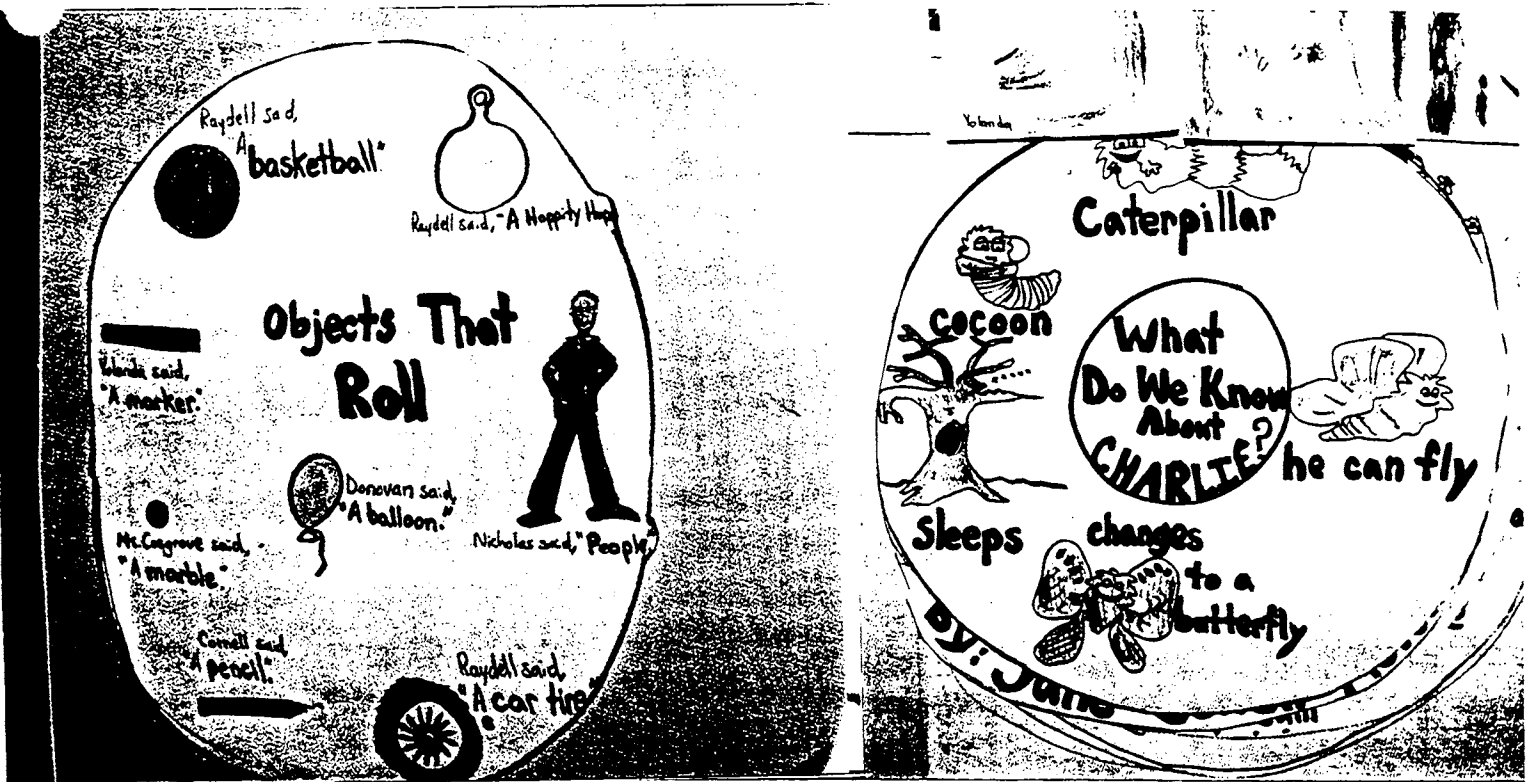
Accountable Talk -

Use evidence and accurate  
knowledge to develop concept,



P.S.  
140

Ms. Erin Cosgrove





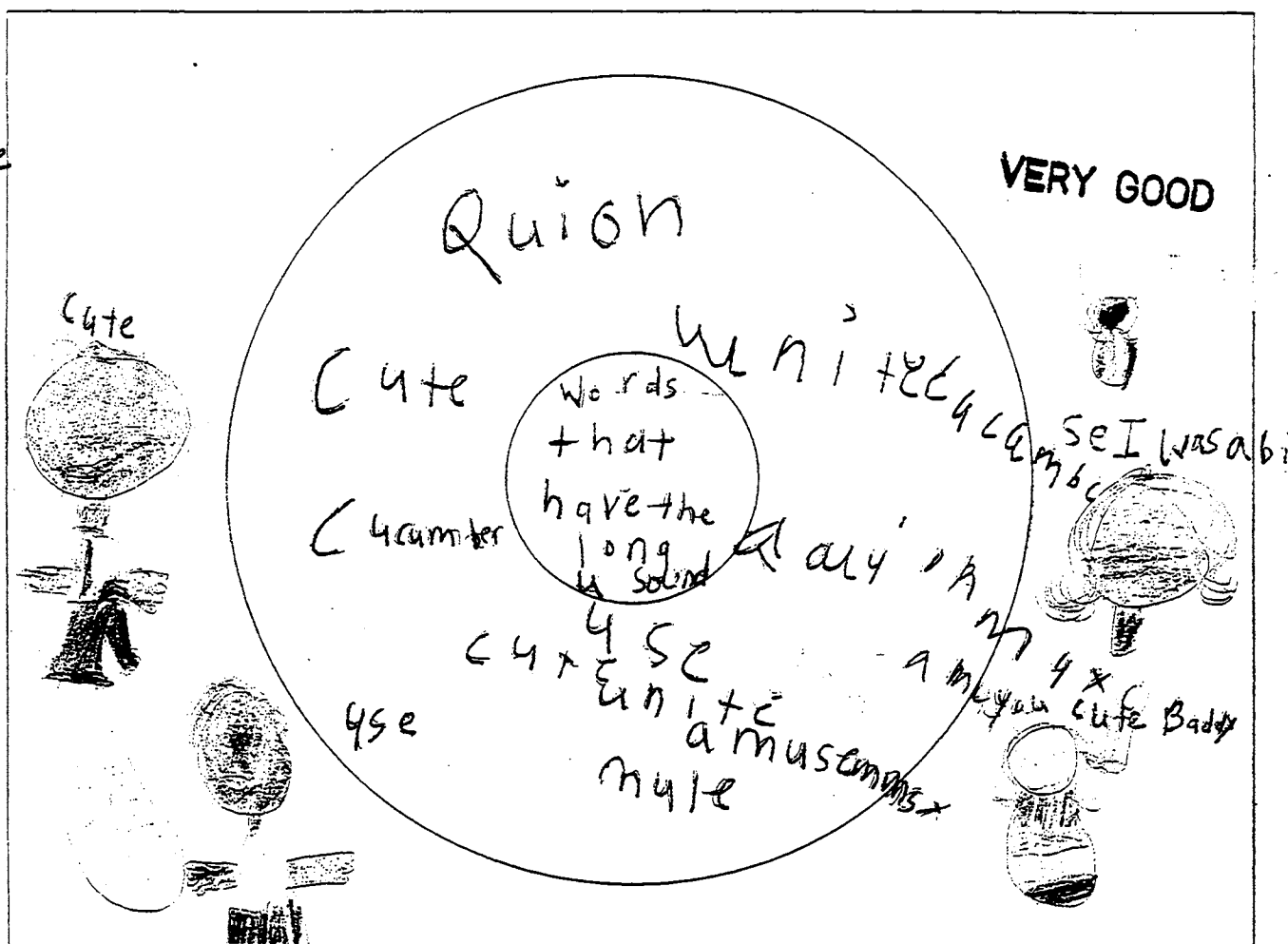
## Circle Map and Frame

MAR 28 2000 Name Naomi  
Naomi

Grade 2  
years old  
mis 4  
Ms. Padmore  
PS 140

Open Court  
Literacy

# Principles of Learning Model of Student Work



## Circle Map for Defining in Context • Frame for Frame of Reference



Ms. Padmore class 2-202 (G) March 28, 2000

# Circle Map and Frame

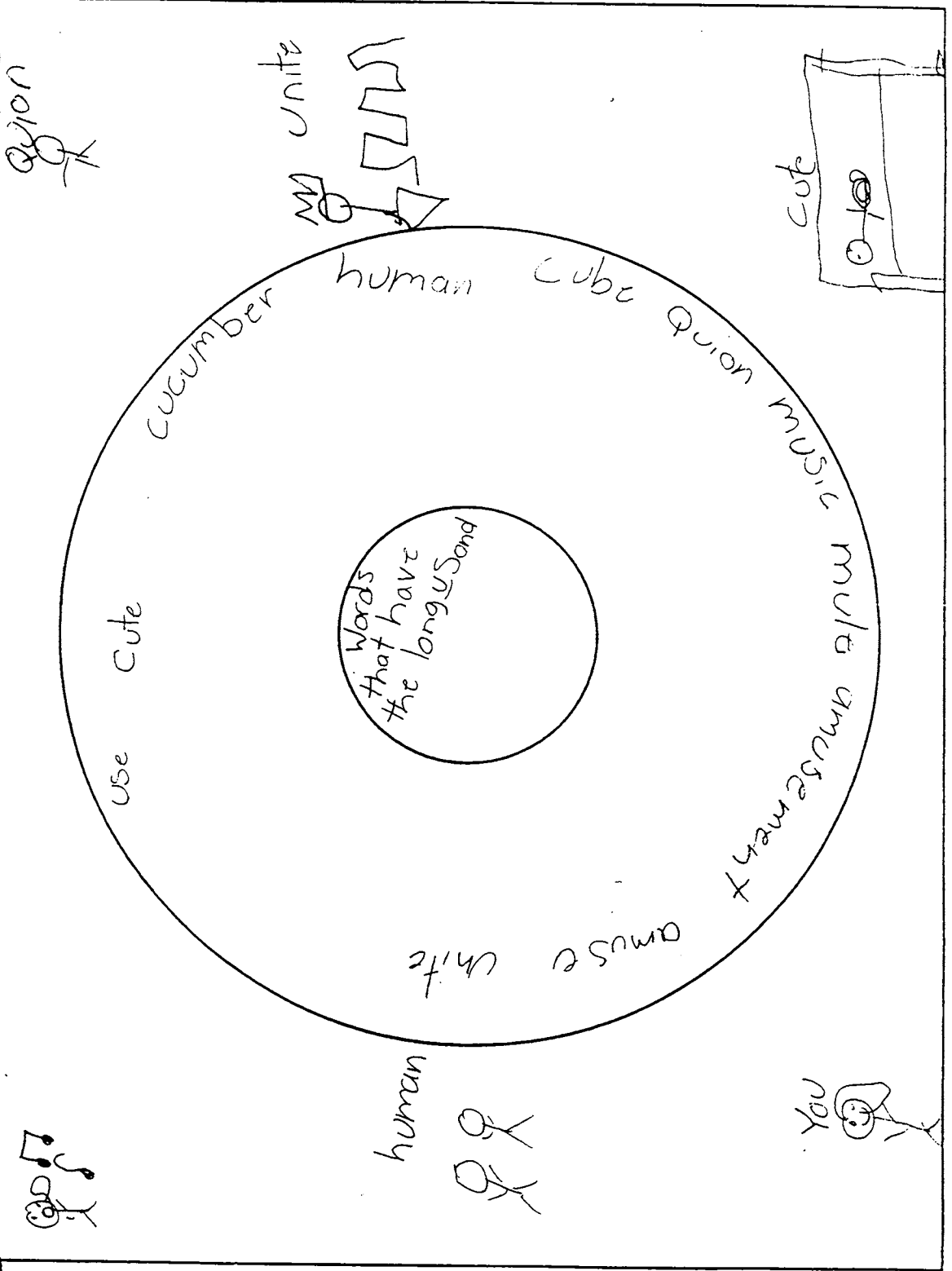
Name Tashina **MAR 28 2000** Standard: The student demonstrates a basic understanding of the circle of the English language

E 7a

Literacy

Grade 2

Principle of Learning: Model of student work.



Circle Map for Defining in Context • Frame for Frame of Reference



# Bridge Map

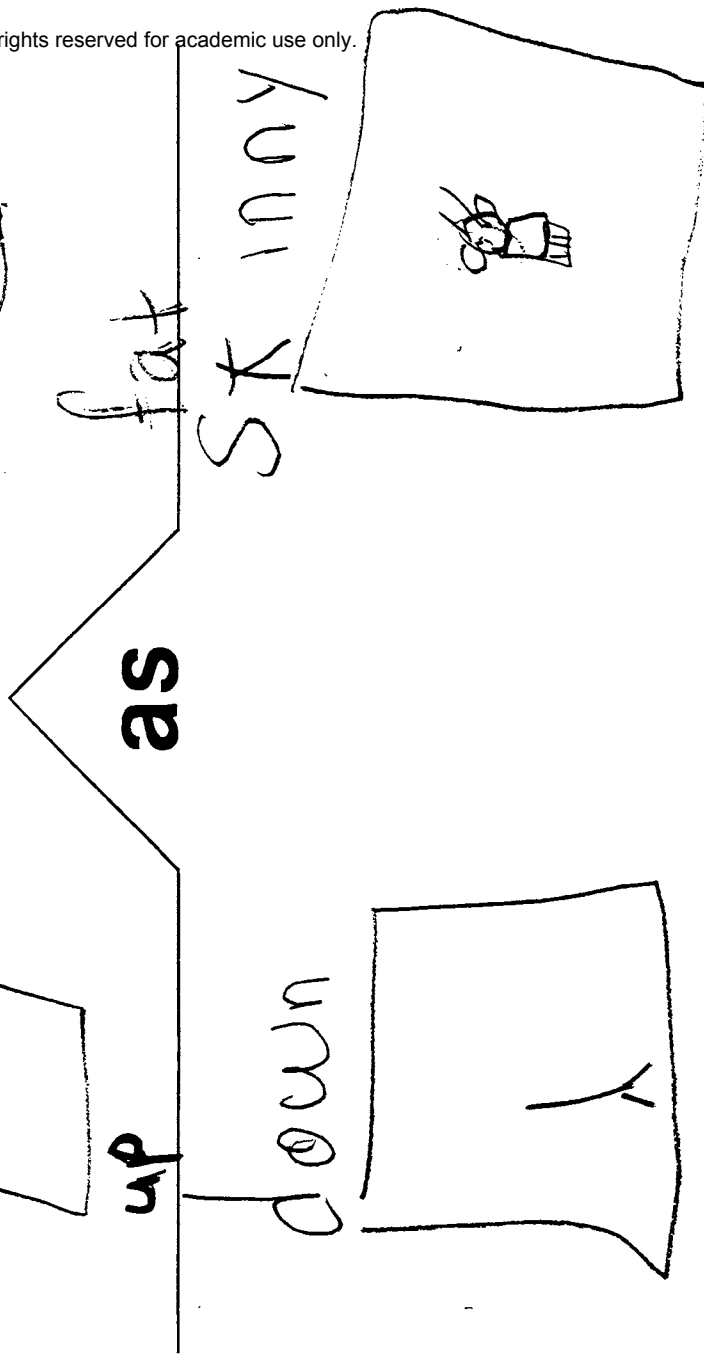
P.S. 40 Q  
Grade 2 (7 years old)  
2-202

Ms. Padmore  
MIS-H  
Literacy

Good!

Name A. J. J. J.

March 28 2000



Standard - E4g - The student demonstrates a basic understanding of the English language: Grammar  
of the Bridge Map for Seeing Analogies (similar relationships between ideas)

P.S. 400

March 27, 2022

## Bridge Map

Class 2-202

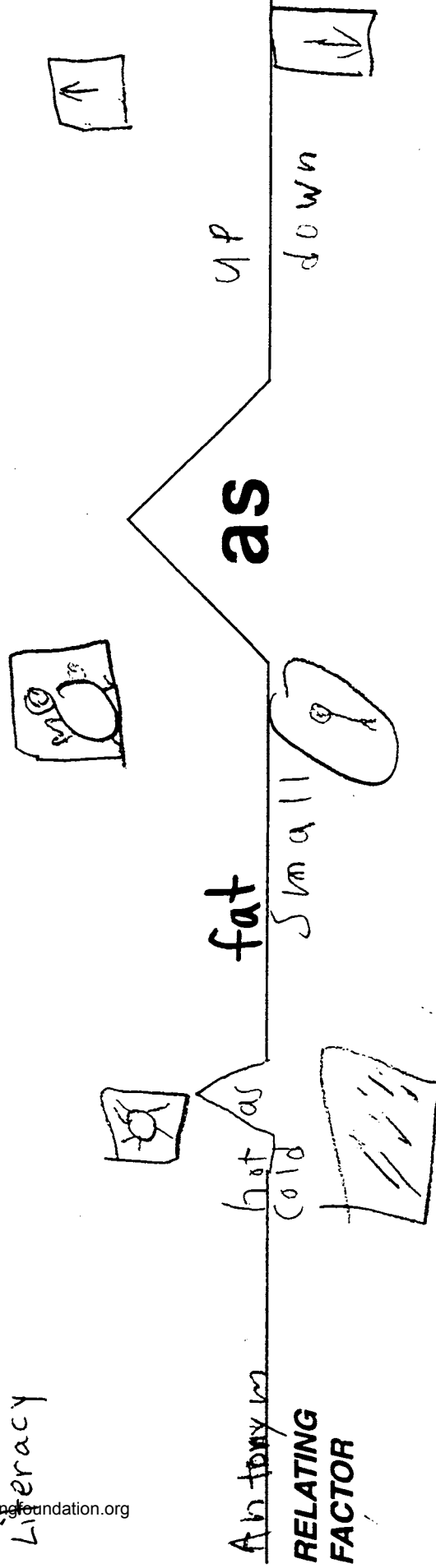
Grade 2 (7 years old)

Ms. Fadmore

MS-4

Literacy

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Learning Standard E4a - The student demonstrates a basic understanding of the rules of the English language: Grammar

Principles of Learning: Academic Rigor in a Thinking Curriculum

High Thinking Demand - Seeing Analogies

Bridge Map for Seeing Analogies (similar relationships between ideas)

Tu E H i m e

PS 1420

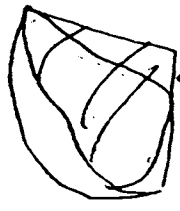
CLASS 274202  
Bridge Map

March 28 2000 Name Tashina

Grade 2 (7 years old)  
Ms Radmore

MIS-4  
Literacy

✓ Good!



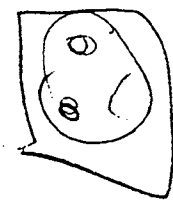
soft

as

Happy

hard

Sad



Antonym

RELATING  
FACTOR

Learning Standard E4a: The student demonstrates a basic understanding of the English language - Grammar

Bridge Map for Seeing Analogies (similar relationships between ideas)

Principles of Learning:  
Accountable Talk  
Press for clarification and explanation.



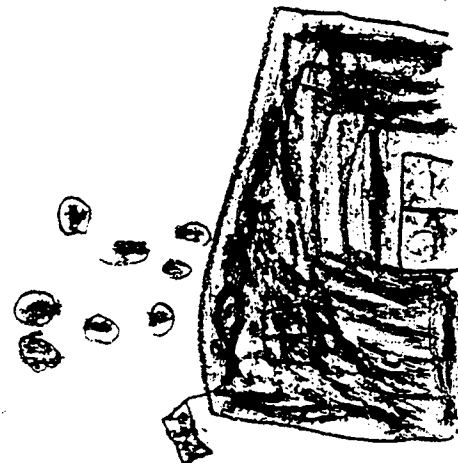
P.S. 40 M4-202

FEB 08 2000

Ms. Padmore

morning

I wake up  
and go to  
School. ✓



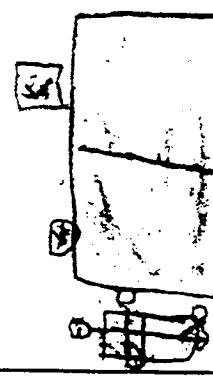
afternoon

I go to  
play in the  
park. ✓



night

I eat Vix  
and go to  
sleep. ✓



English Language Arts - Standard E2a Produce a sequenced report of information.

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Padmore

PS40Q March 31, 2000 Kewané

2-202 (7 years old)

Name Kewané

## Brace Map

Standard: S2a. Demonstrates understanding of characteristics of organisms.

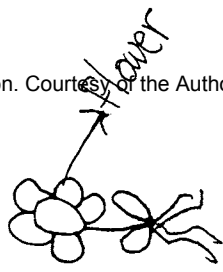
the Parts of a

Plant

Principles of Learning.  
Organize for Effort

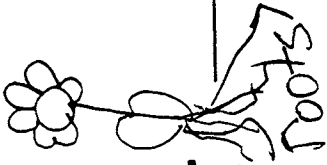
• Expert Instruction -

Use of Thinking Map to demonstrate analysis of whole/part relationships.

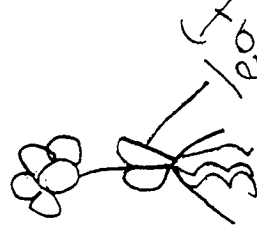
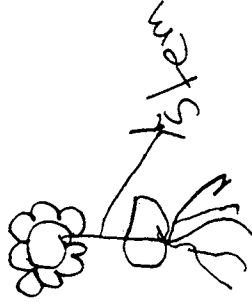


Flower

roots



Stem

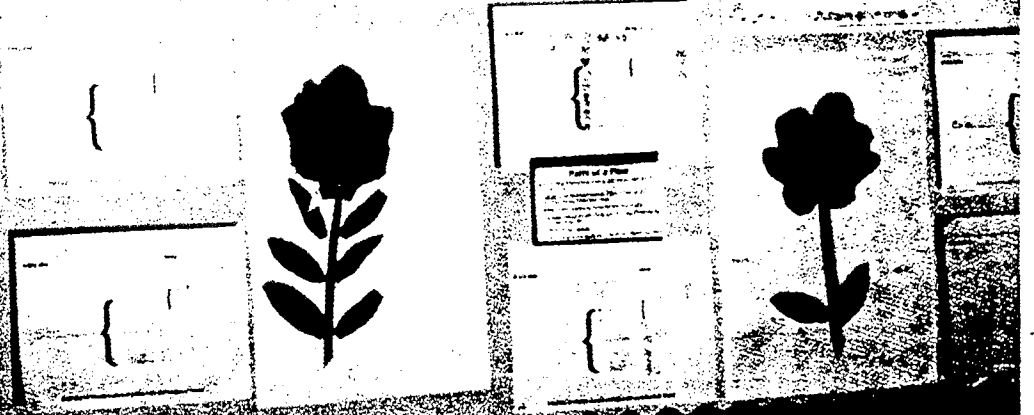


leaf

Standard 52a Demonstrates understanding of characteristics of organisms

Mapping Out the Parts of a Plant

What are the different parts of a plant?

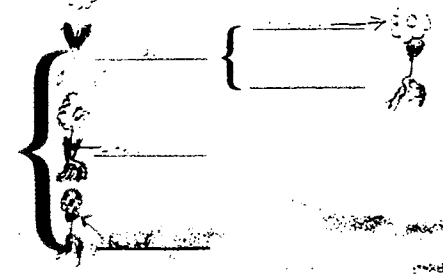


Brace Map

Name \_\_\_\_\_

BRACE MAP

Plant



2-25

### Parts of a Plant

There are many different kinds of plants, but they are made up of the same basic parts.

Leaves are a plant's food factories. They turn water, air, and sunshine into food for the whole plant.

Roots anchor the plant into the ground and soak up water.

The stem supports the plant. Water and food travel through the stem to all parts of the plant.

Many plants have flowers.

Flowers are where the seeds are produced that grow into new plants.



Teacher: Ms. BRANCA

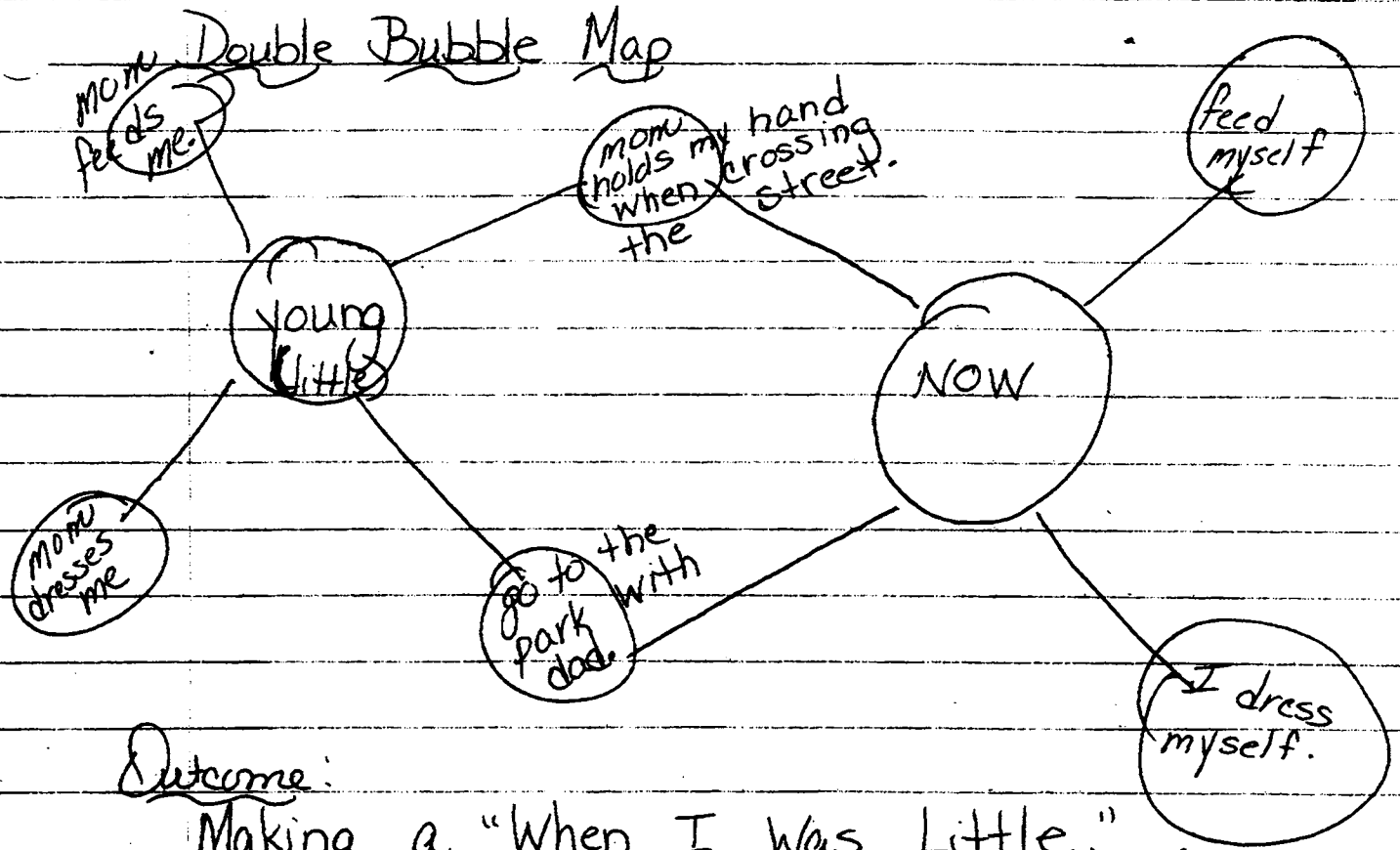
Class: MIS - I → 3/4

Subject: Literacy

Type of Map: Double Bubble Map

Principles of Learning - Organize For Effort

- The book of the month "When I was Little, Now I .." by Jamie Lee Curtis was read out loud to the class. After the reading a discussion was had about when the students were younger. They then compared the events that happen now.



Outcome:

Making a "When I Was Little." Book!

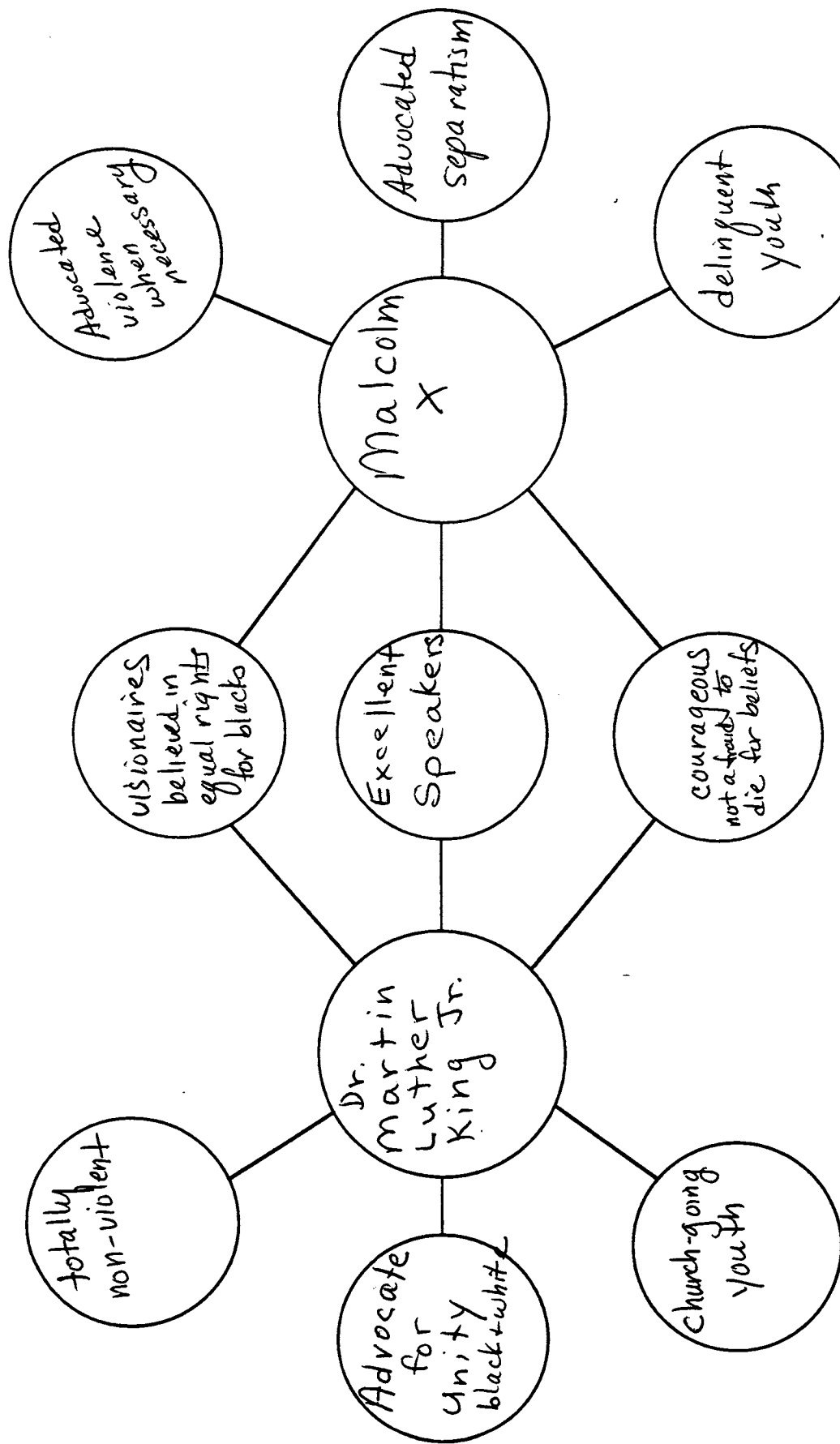
Learning Standard: ELC - student reads & comprehends and produces written work (2a, 4a, 4b)

Mr. Yosefiah Campbell P.S. 140 Class 4/5 MIS I  
 Social Studies Lesson: Standard 5a Respond to non-fiction using interpretation and critical processes.

Thinking Foundation. www.thinkingfoundation.org

**Double Bubble Map** was used to compare

and contrast the views of Martin Luther King Jr. and Malcolm X



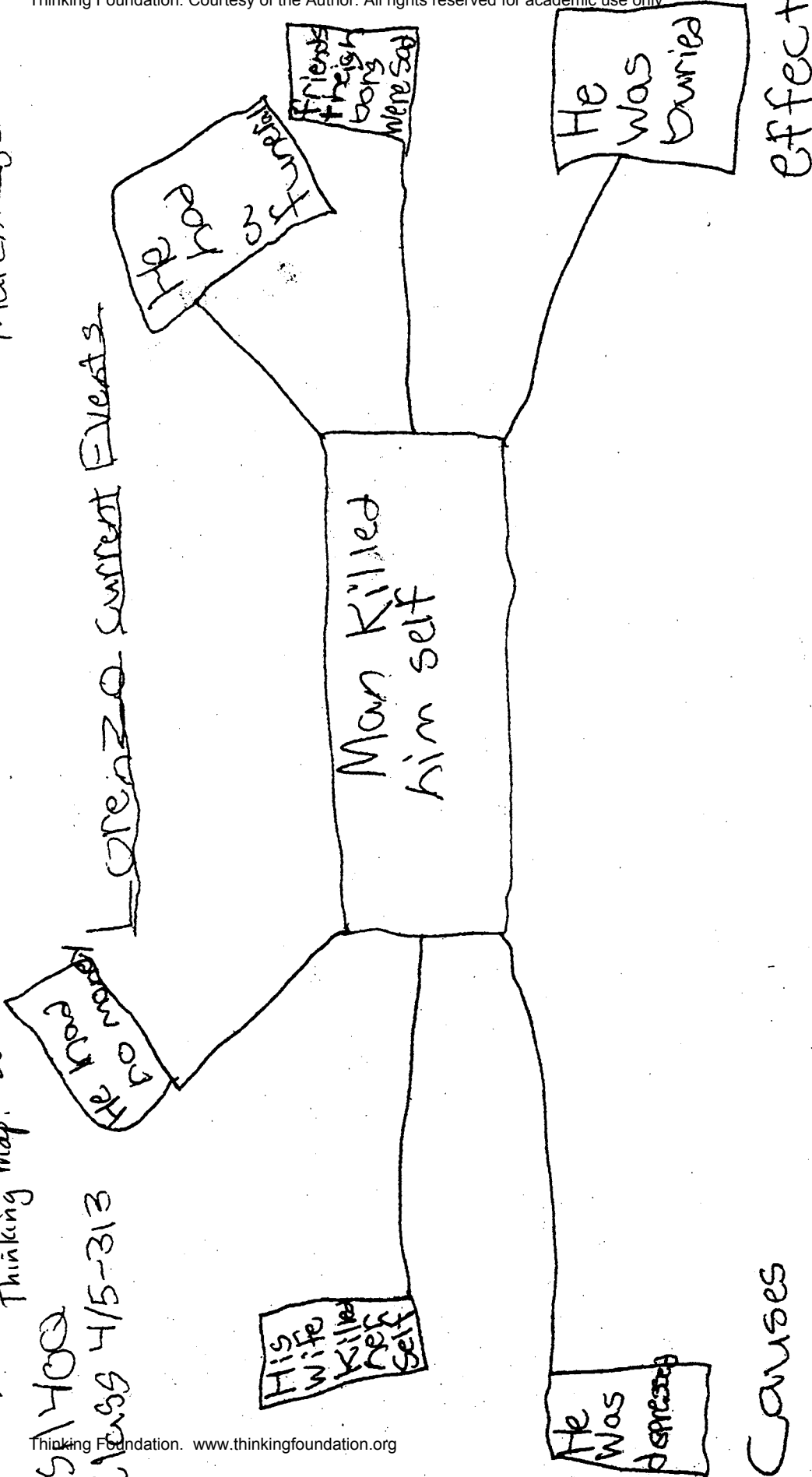
Principles of Learning: Academic Rigor in a Thinking Curriculum, High thinking demand.

**Double Bubble Map for Comparing (similarities) and Contrasting (differences)**

Thinking Skill: Cause Effect Relationships  
Thinking Map: Double Flow Chart

RS1400  
Class 4/5-313

ESTEVAN  
March 22, 2000



### Literacy Warm-up

quini to read about current events and take Notes using double flow chart Standards! I must prepare and give an oral report to my Class,

### Principles of Learning

Accountable Talk - standards of evidence and reasons,

Mrs. Y Campbell  
class 4/5-313 MIST

School Pen 1400

Name Charlotte

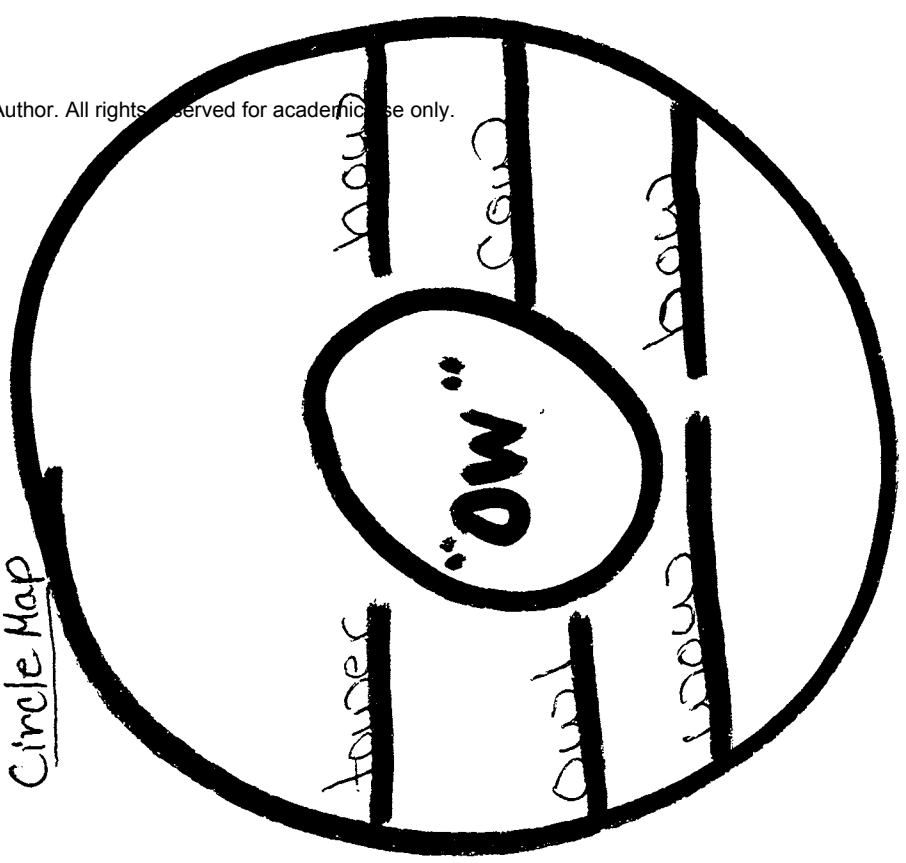
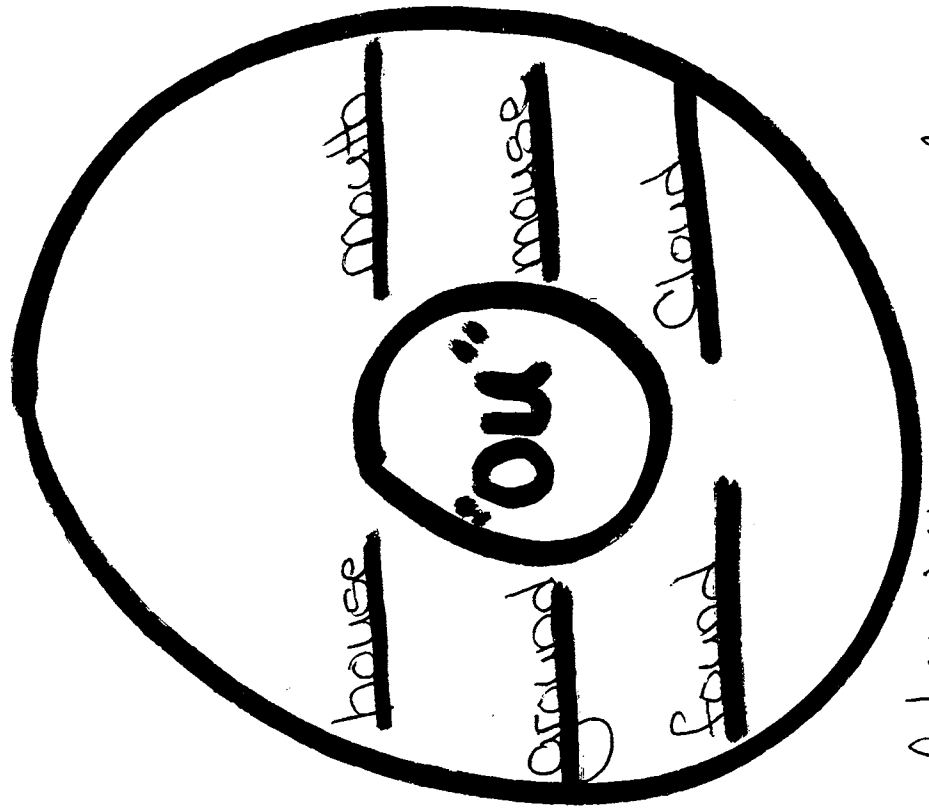
Class 10-323

Date Feb. 4, 2000

Thinking Skill -  
Brainstorming

# Phonics

Teacher - Dorothy Taylor  
Standard - (E4a) - The student demonstrates a basic understanding of the rules of the English language in written work.  
Circle Map



Principles of Learning: in a Thinking Curriculum  
Academic Rigor - "ou" in the middle of words  
Active use of Knowledge - "ow" at the end of words  
Same Sound



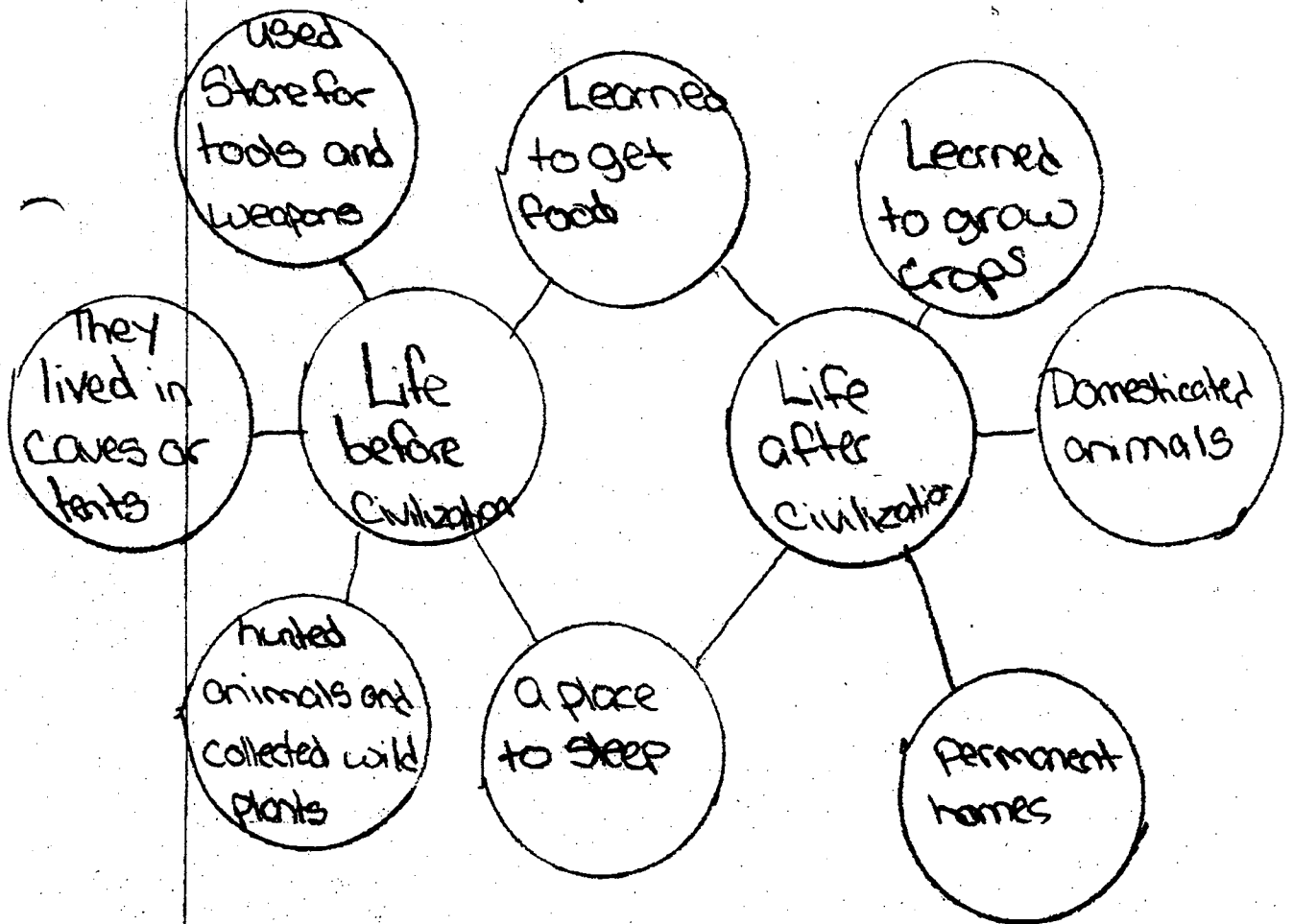
Teacher: Dorothy Taylor  
Standard: (ELC) The student reads and comprehends informational materials to develop understanding and produces written work.

P.S. 140 Queens  
Class 6-323

Felicia  
March 24, 2000

Literacy/Social Studies

Double Bubble Map  
Compare and Contrast



Learning Principle - Academic Rigor in a Thinking Curriculum  
A curriculum that deepens concepts,

Standard: (ELC) - The student reads and comprehends informational materials to develop understanding and produces written work.

Teacher: Dorothy Taylor

PS.1400

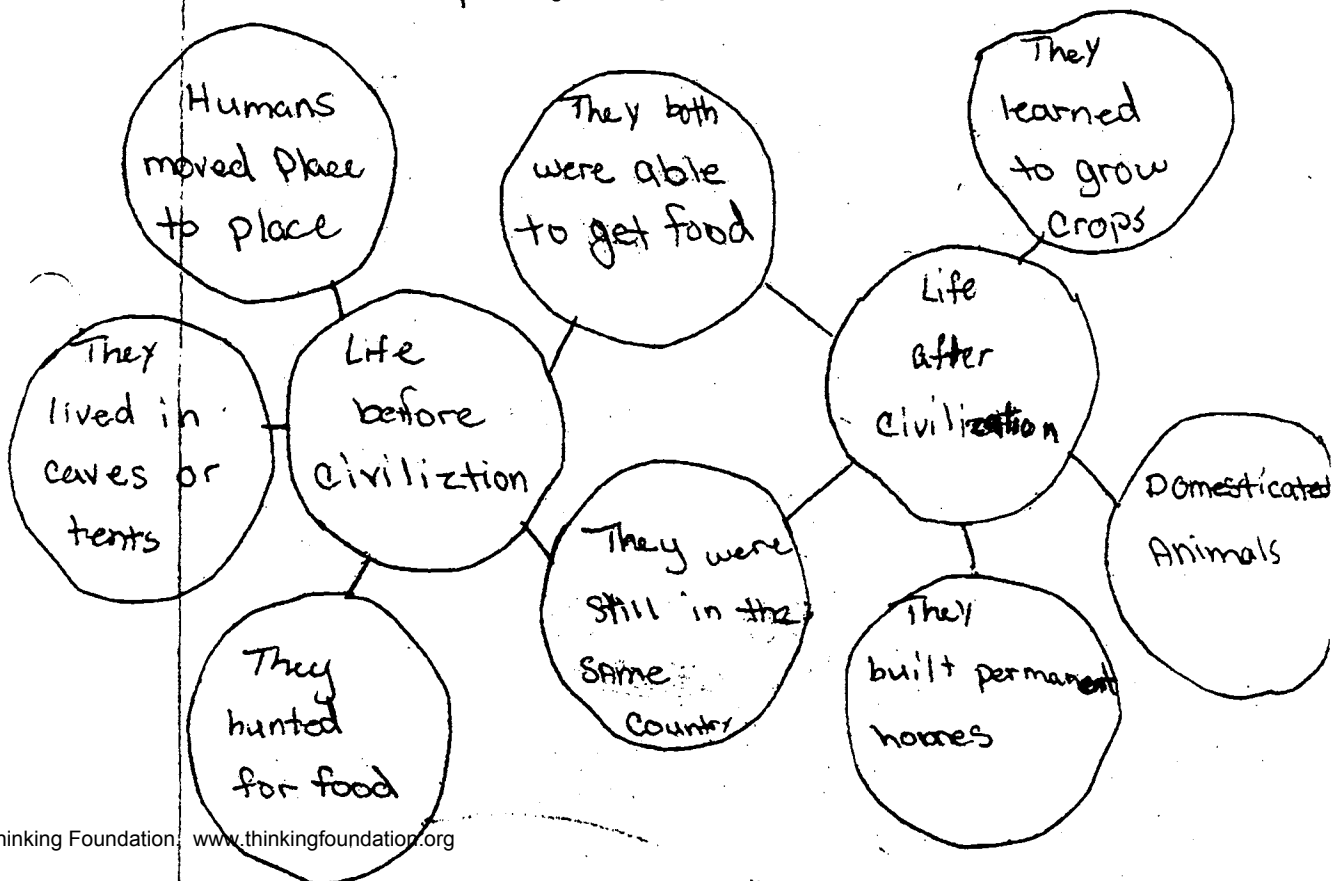
Class 5323

Tiffany

March 24, 2000

Literacy/Social Studies

Double Bubble Map  
compare and contrast



Teacher: Dorothy Taylor

P.S. 146, Q

CLASS 6-323

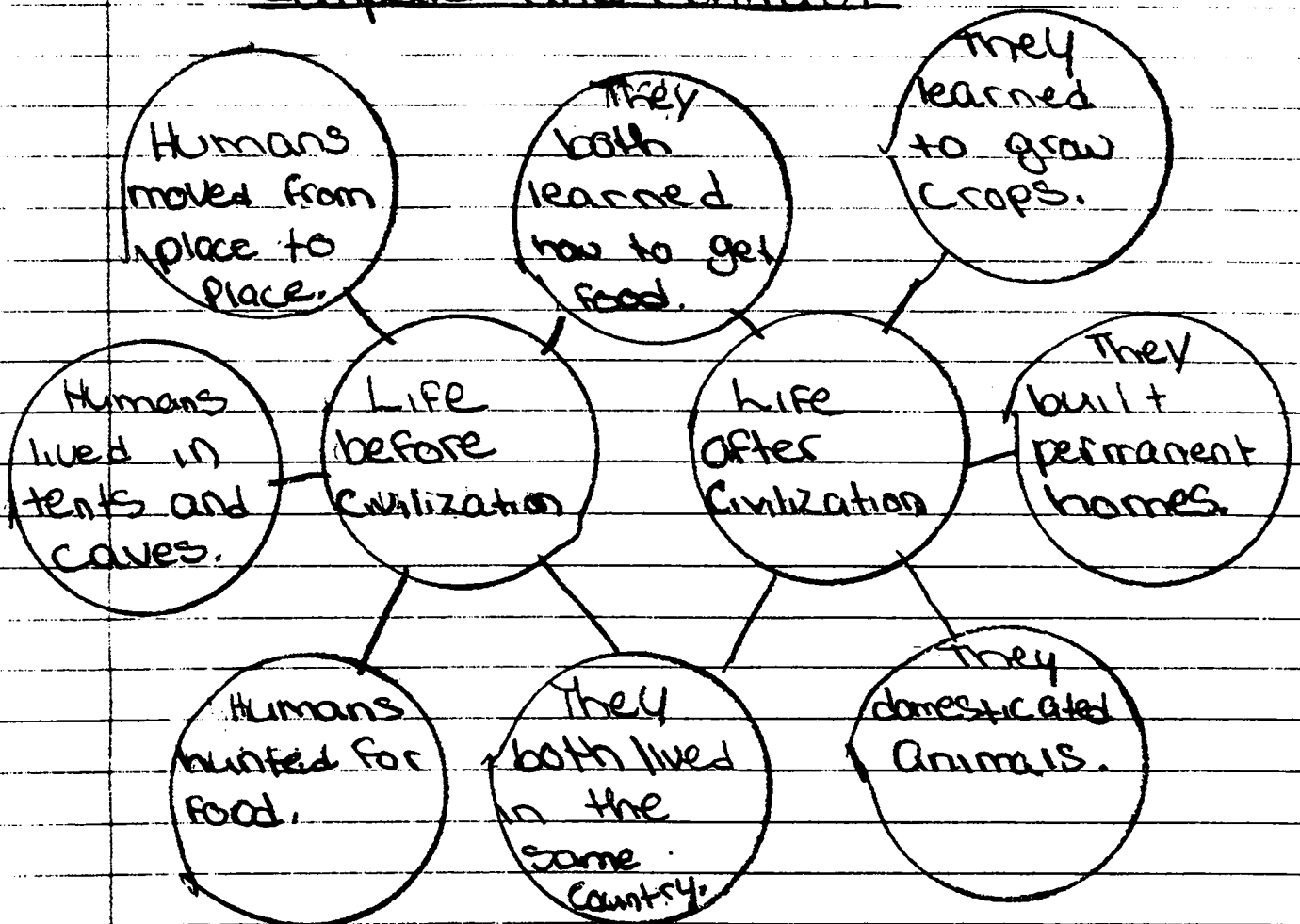
Labrina

March 24, 2000

12 yrs. Old

## Literacy / Social Studies

### Double Bubble Map Compare and Contrast



Standard: E1c - The student reads and comprehends informational materials to develop understanding and produces written work,

Principles of Learning - Academic Rigor in a Thinking Curriculum.  
An articulated curriculum that deepens concepts.

P.S. 140Q

D. Taylor  
Grades 5+6

Social Studies - The students used a "tree map" to classify Earth's resources. They listed "renewable resources" & "nonrenewable resources".

P.S. 140  
CLASS 5-323

Donald  
May 20, 2000

Literacy

AIM: To use a tree map to classify Earth's resources.

Tree Map

Earth's Resources



Renewable Sources

Nonrenewable

Water  
air

oil  
natural gas

Plants

metals

animals

coal

Principles of Learning - Academic Rigor

Learning Standard - E2a - creates an organizing structure appropriate to a specific purpose



Agnes Romeo	JHS 72
Resource Room	
Grade 7	13 years old
ELA Standard #2	Narrative Procedure
ELA Standard #3	Listening

## **ASSIGNMENT**

**The students listened to a reading selection on the process of mummification.**

**They were asked to make notes during the reading, using a flow map (a tool for sequencing).**

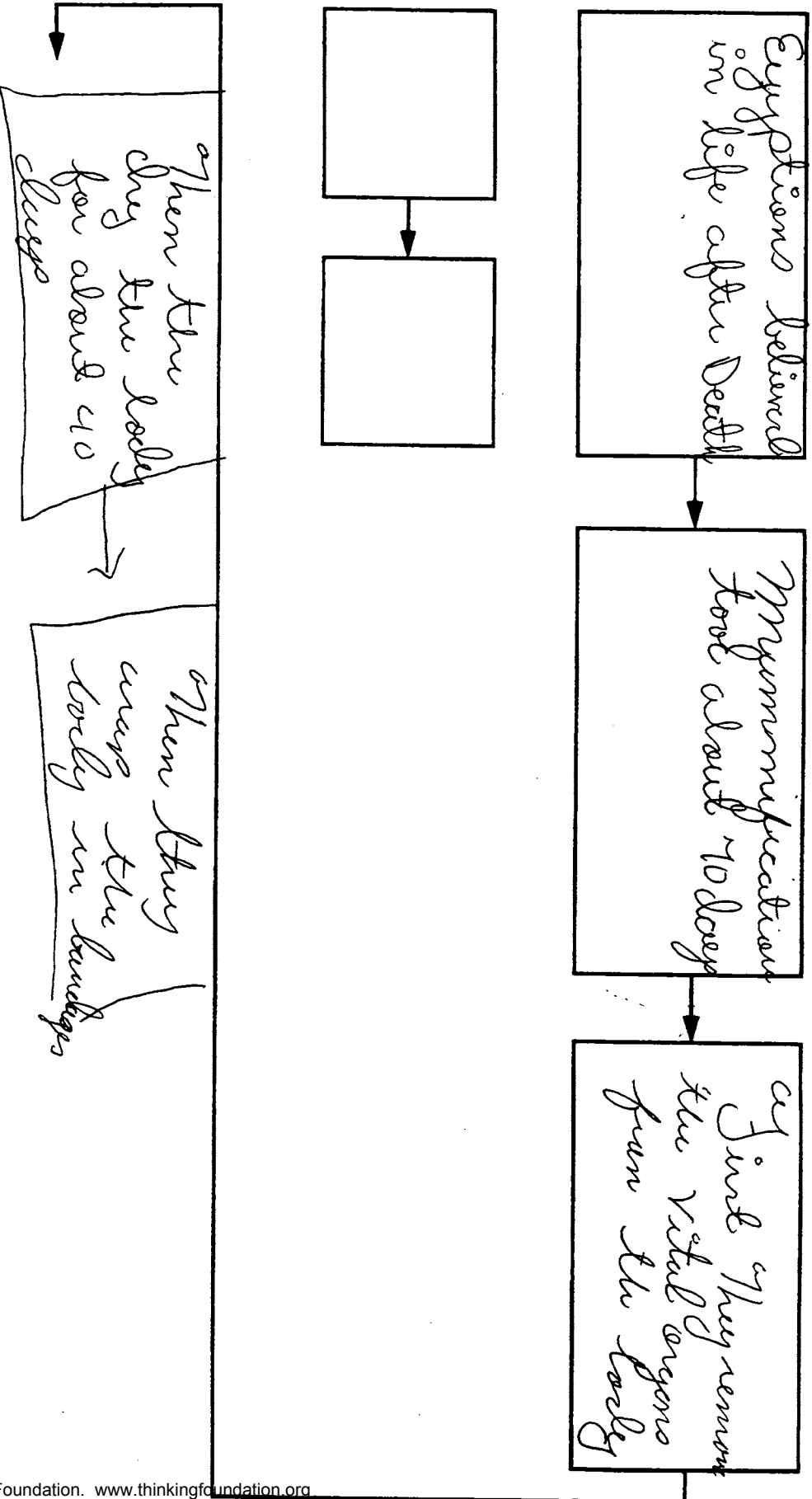
**They used the notes to write a paragraph describing the process.**

*Principles of Learning  
High Thinking Demand  
Challenging assignment*

# Flow Map

Name \_\_\_\_\_

Process of Mummification



J.H.S. 72  
Language Arts, Mrs Romeo

Pierre 7-6  
April 10, 2000

Process of Mummification

Draft

ELA Standard #3

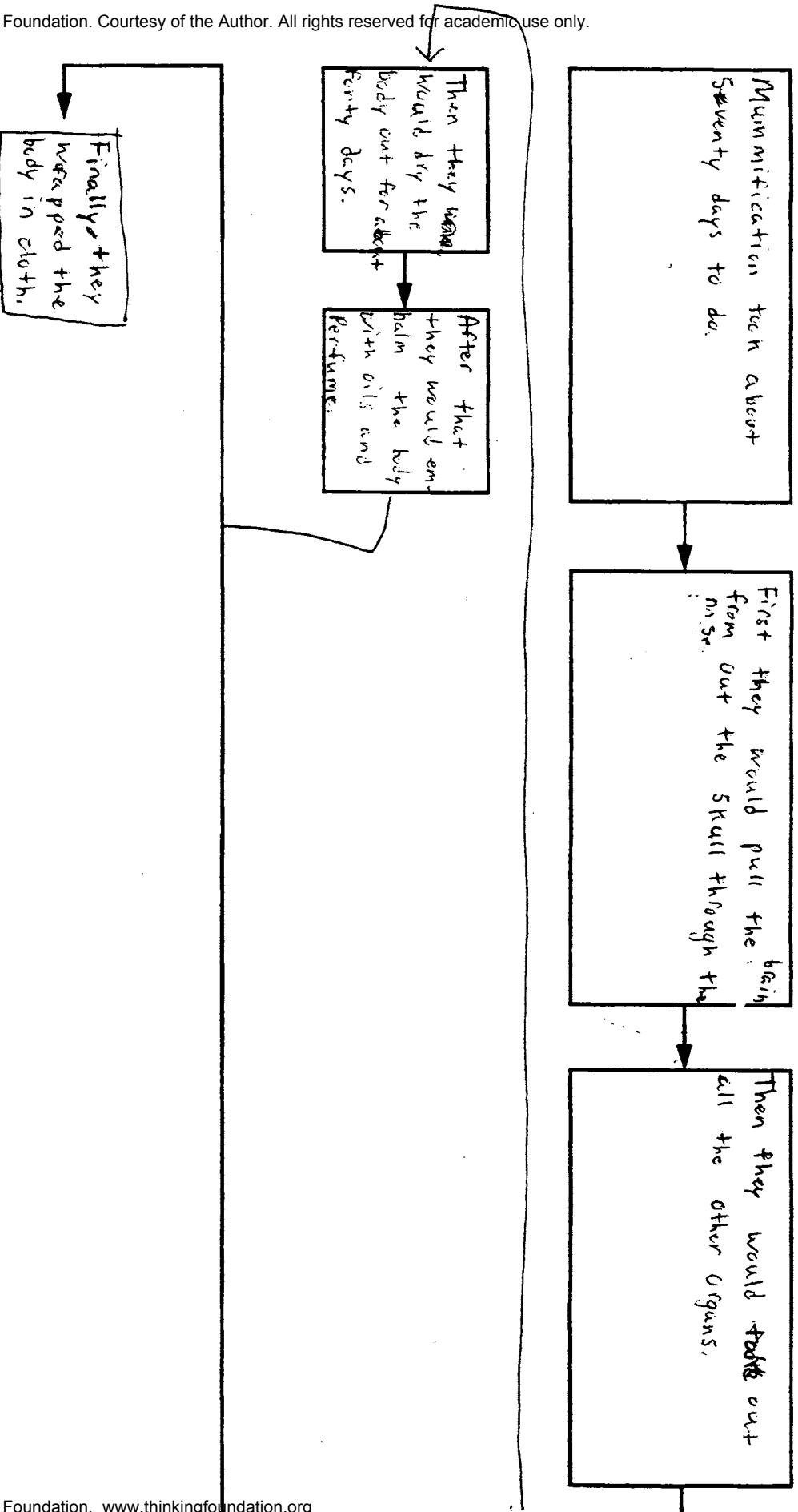
Aim: How do you recognize sequence of events?

Egyptians <sup>sl</sup>beleived in many things like life after death. In order prepare for life after death they had to use mummification.

This process of mummification took about 70 days. First they removed the brain through the nostrils. Then they removed the vital organs and put them in tightly sealed jars. Third they would let the body sit for 40 days. Then they embalmed the body. Last they rap the body in bandges.  
wrap

# Flow Map

Name Kyle 7-3



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Thinking Foundation. [www.thinkingfoundation.org](http://www.thinkingfoundation.org)

2-29

## Flow Map for Sequencing Stages and Substages of Events



J.H.S 72  
Language Arts Ms. Romeo

Kyle 7-3  
April 3, 2000

E.L.A Standard #5

Aim: How do you recognize sequence of events ?

### **Process of Mummification**

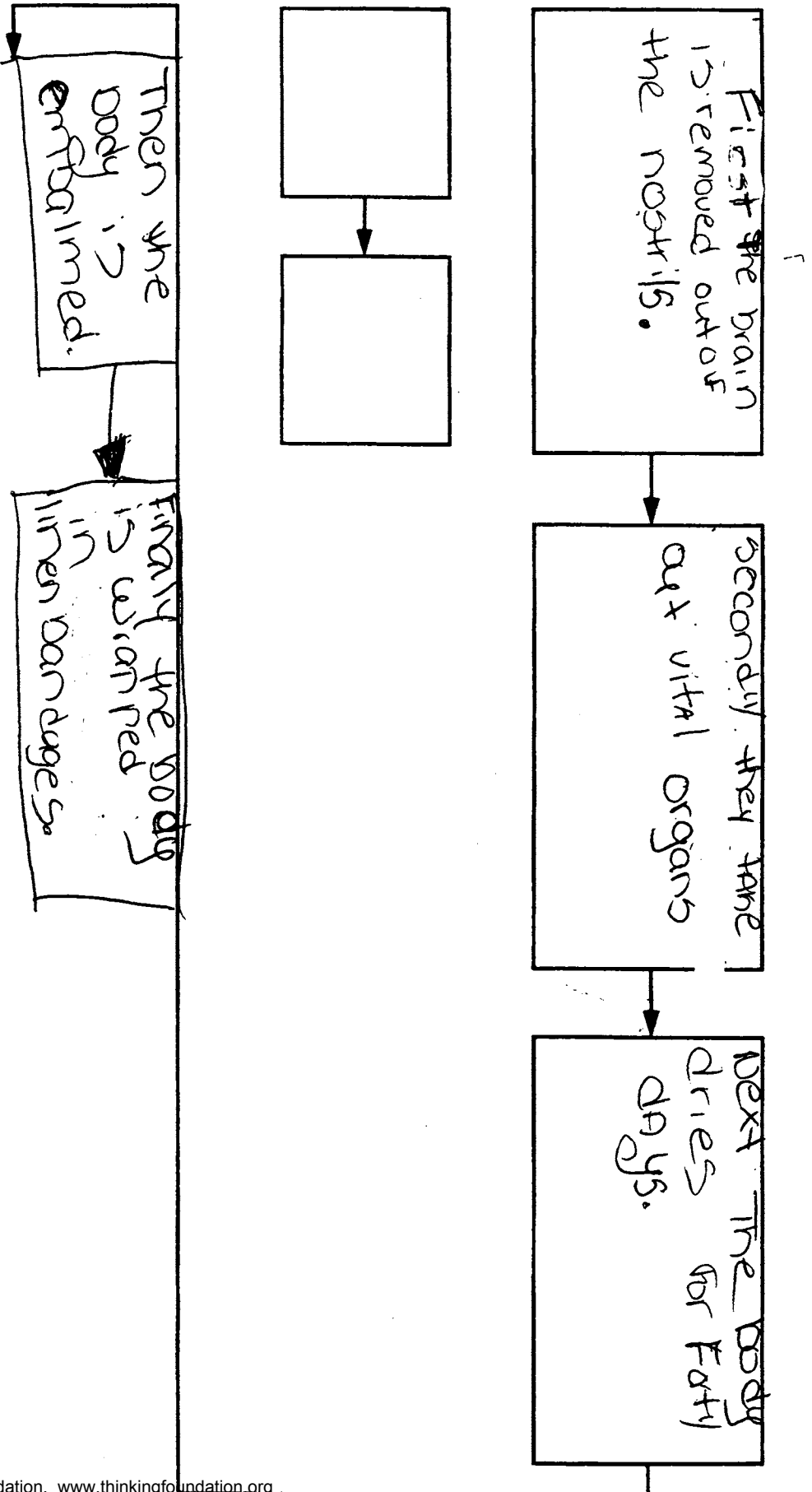
Many years ago Egyptians believed in life after death. Egyptians came up with a process called mummification that prepared the body for life after death.

Mummification took about seventy days. First, they would pull the brain from out the skull through the nose. Then they would take out all the other organs. Next, they would dry the body out for about forty days. After that they embalmed the body with oils and perfume. Finally, they wrapped the body in cloth.

# Process of mummification

## Flow Map

Name Shante 7-6



JHS 72

Shante 7-6

Language Arts, Mrs Romeo

March 30, 2000

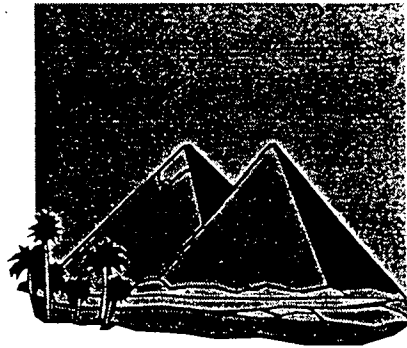
ELA STANDARDS #3

Aim: How do you recognize sequence of events ?

### Process of Mummification

Egyptians used mummification to preserve the dead. Mummification usually takes at least seventy days. There were five steps to the mummification process.

First, they removed the brain from the body through the nostrils. Secondly, they took the vital organs out and put them in a tightly seal jar. Next, they let the body dry for forty days. They used natron, a type of salt to do that process. After that, the body was then embalmed. Finally, they wrapped the body in linen bandages. Those are the 5 steps in the mummification process.



# Circle Map and Frame

Name Charles

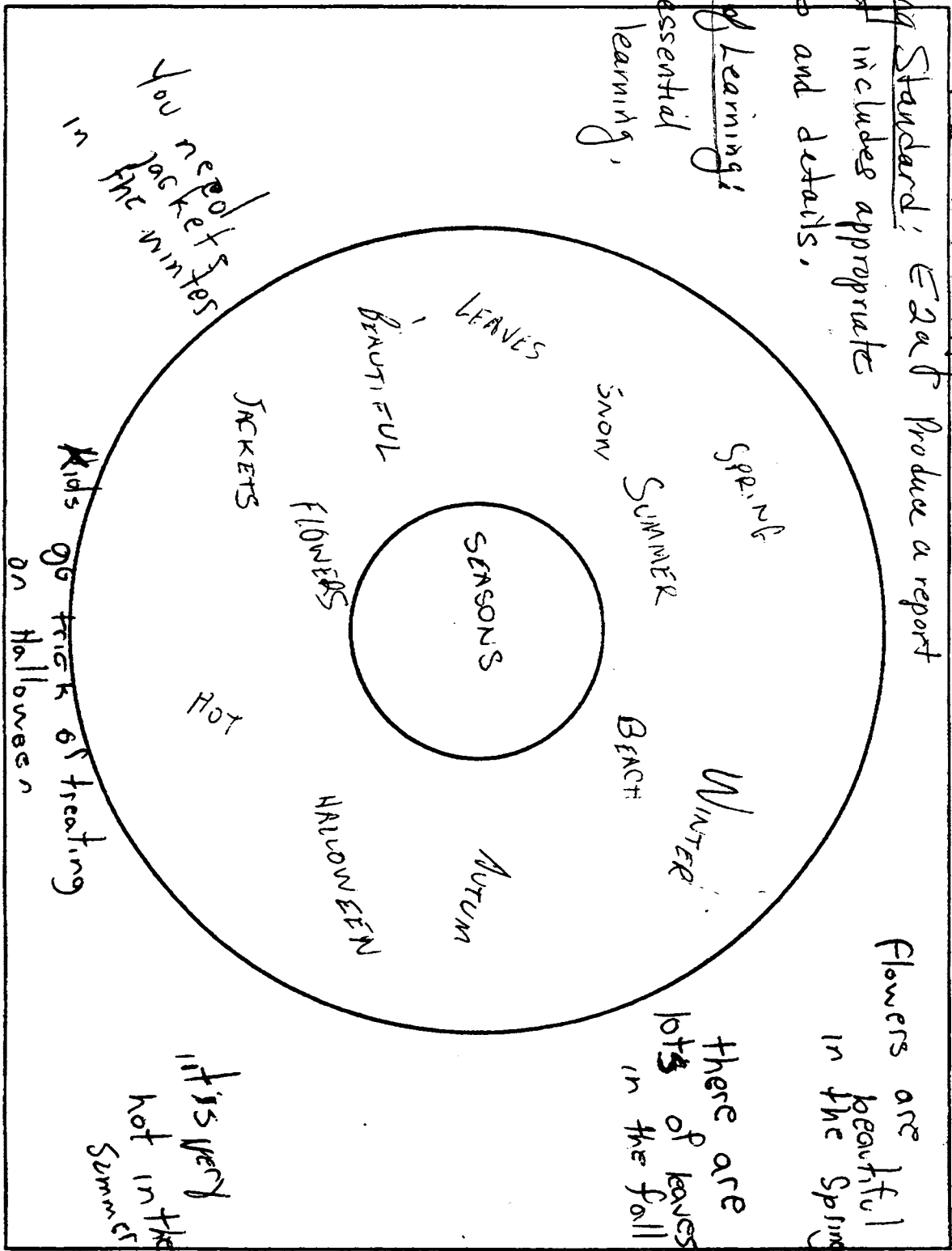
Thinking Skill: Brainstorming

Learning Standard: E2a1 Produce a report

that includes appropriate facts and details.

Principles of Learning:

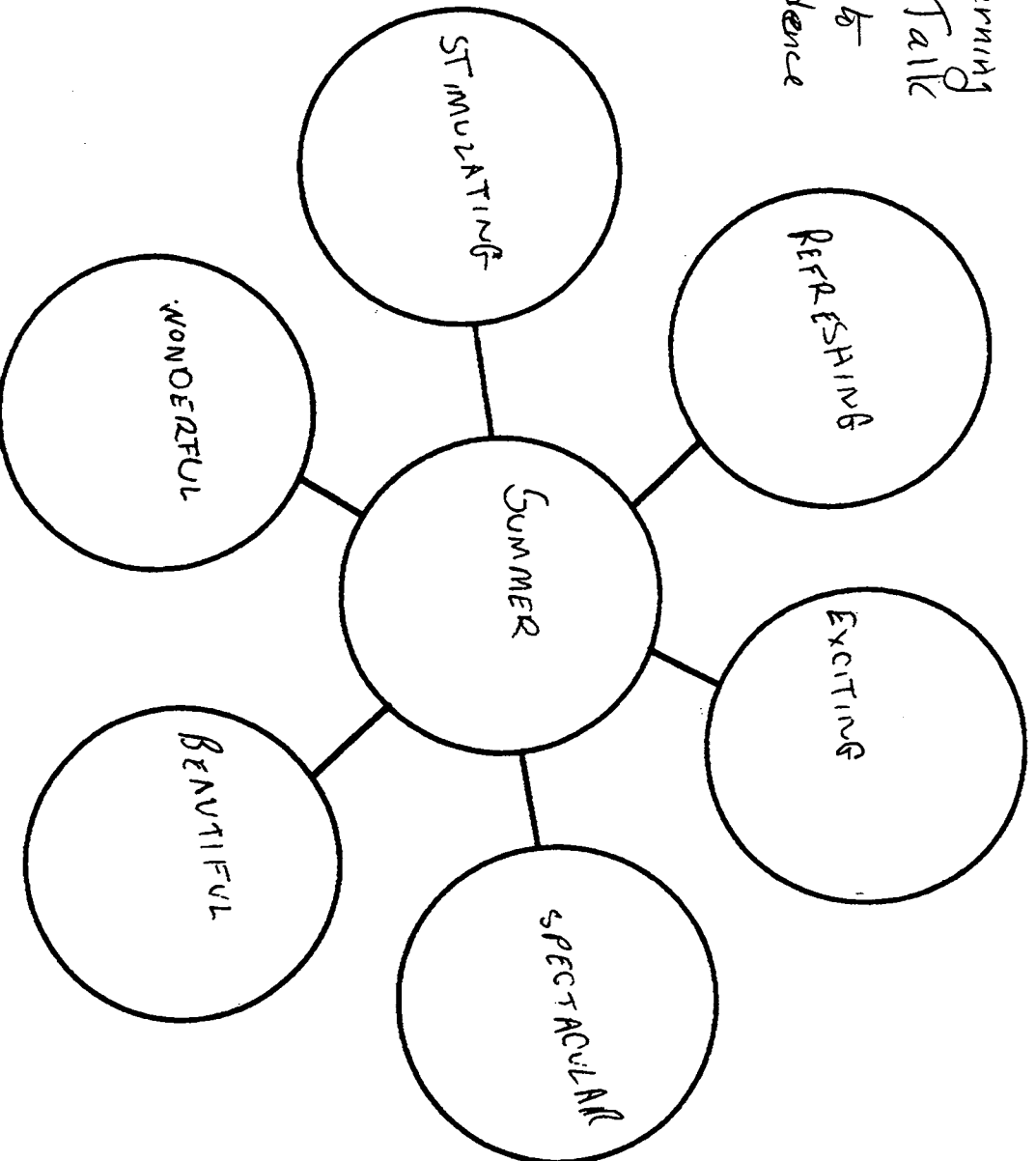
Talk is essential to learning,



## Bubble Map

Name CHARLES

Learning Standard - E4a Demonstrate a basic understanding of the rules of English language.  
 Principles of Learning  
 Accountable Talk  
 Talk is accountable to standards of evidence



## Bubble Map for Describing Using Adjectives and Adjective Phrases



JHS 72  
Language Arts, Mrs. Romeo

Charles 7-5  
December 6, 1999

### The Seasons

I like the activities that come with the seasons. In the winter I can go to the park and throw snow balls at kids, or I can build a wonderful snowman. In the spring I can plant a beautiful garden with flowers and watch them grow all day long. How exciting it is to play in the leaves in the fall? On Halloween you can put leaves in Halloween bags to make decorations for your homes. Many kids go from house to house and collect candy.

I love summer better then the rest of the seasons. In the summer there are spectacular things you can do. You can go to the beach with your friends and have a wonderful time. You can go on exciting rides on our bikes through the woods. How spectacular it is to watch the beautiful sunset in the summer! On the Fourth of July people go to the parks and have barbecues. Some people watch the fireworks all night long. I go to my mother's house to see all my friends and we light fire crackers to celebrate Independence Day. Since there are so many things you can do in the summer, that is why it is the best of all the seasons.

Standard E2c Produce a narrative account,  
E3c Prepare and deliver an individual presentation

Principles of Learning - Organize for Effort  
• expert instruction  
• student responsibility for work

9908-72  
Language Arts, Mrs. Romeo

Charles  
May 9, 2000 7-5

it is from Japan

HAIRU

it has three sentences

it as a set pattern

first line has 5 syllables  
second line has 7 syllables  
third line has 5 syllables

Thinking Skill - Defining Haiku

Principle of Learning: Recognition of Accomplishment

- Frequent recognition of student work

*J.H.S72*  
*Language Arts, Mrs. Romeo*

*Charles*  
*April 10, 2000*

*ELA Standards #5*

*Aim: How do you write poetry?*

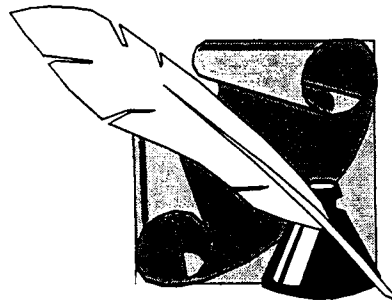
*Haiku*

*People hate the rain.*  
*There is nothing to do then*  
*You can't go outside.*



*My mom is pretty.*  
*She is real special to me.*  
*She is very smart.*

*I like to read books.*  
*My favorite is a novel.*  
*Some books are real good.*



JHS 72  
Class 8-3  
Language Arts

Kristopher  
4/5/00

The rain falls all day.  
thick black clouds cover the sky.  
Hail falls thunder roars.



Bee's fly and ants run  
Birds sing while butterflies ring  
Spring is good for all.

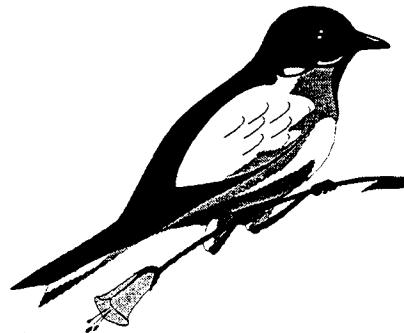
When it's cool you rule  
When everything is "Hot" ,Rock!  
When it's warm you storm.



When you see pigs fly.  
When you see snakes run you think.  
Now how does this happen?

The sea is blue right!  
The sky is a very light blue.  
but, the dirt is not.

The sheep eat all day  
Mountain goats run and play OK!  
lamb sleep but really eat.



JHS 72

Language Arts Mrs. Romeo

Shante

April 7, 2000

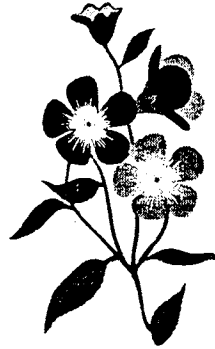
ELA Standards #5 The student produces work in a literary genre that follows the conventions of the genre.

Aim: How do you write poetry?

### Haiku

Roses are lovely.  
People like to get roses.  
They like to smell them.

Daisies are very yellow.  
They are the color of sun.  
Daisies make me glad.



Summer is coming.  
Lots of green grass is growing.  
Flowers are blooming.

### Principles of Learning

Recognition of Accomplishment

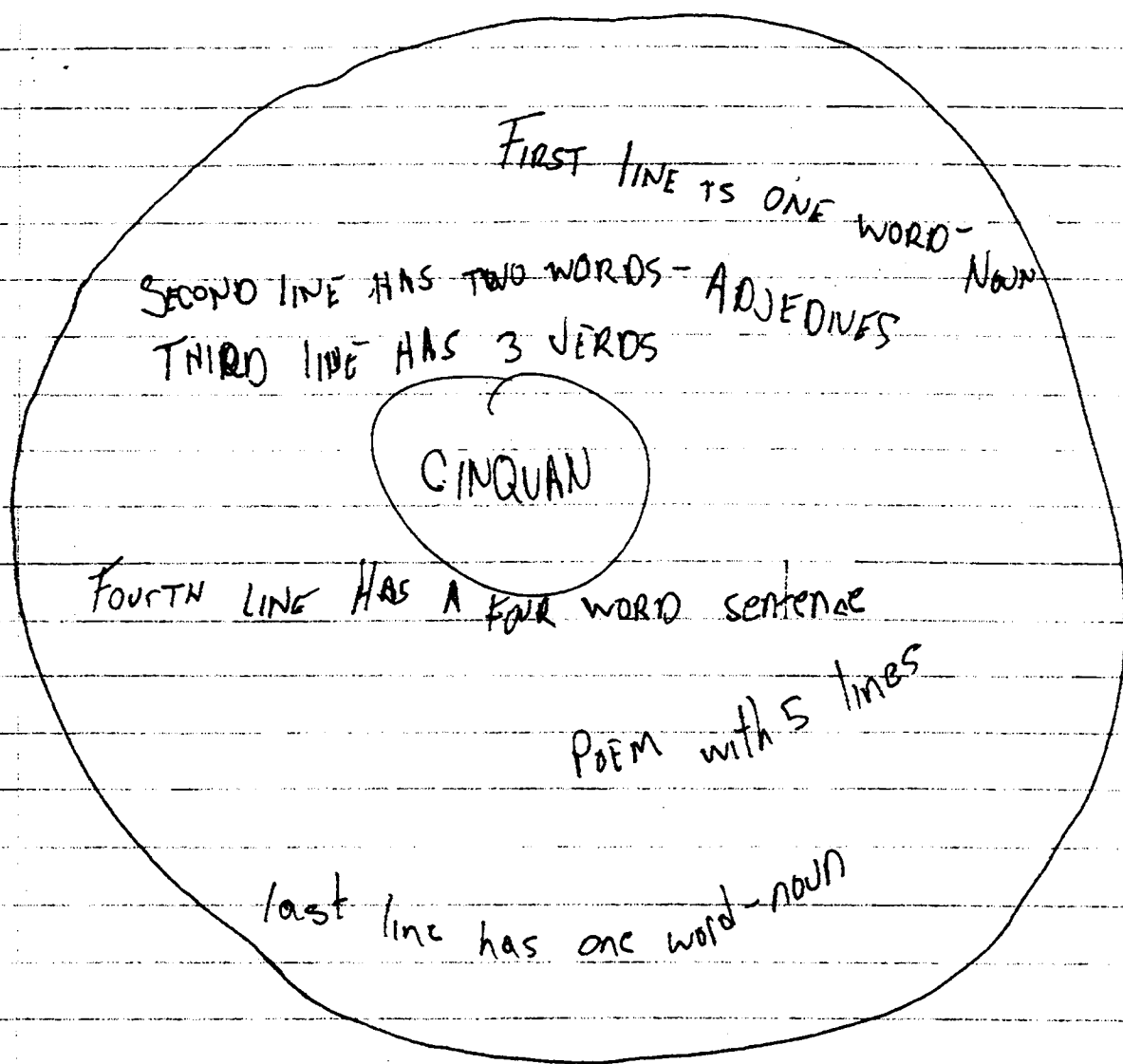
- Recognition for real accomplishment, not just trying hard.
- Celebration with family and community.



Charles

7-5

JHS 72  
Ms. Romeo



Circle Map

Thinking Skill - Defining Cinquain

Principle of Learning - Academic Rigor in a  
Thinking Curriculum:

High Thinking Demand:

Extended Projects

J.H.S. 72  
Language Arts, Mrs.Romeo

Charles - 7-5  
June 1, 2000

ELA Standards 5

Aim: How do you write poetry ?

### Cinquain

Mother  
Pretty, brilliant  
Plays, sings, cleans  
She cares for me  
Ma

Family  
Smart, clever  
Jokes, fights, exercises  
We have fun together  
Relatives

Trees  
Pleasant, delicate  
Grows, falls, breaks  
I like big trees  
Wood

J.H.S. 72  
Language Arts, Mrs. Romeo

Charles Class 7-5  
June 5, 2000

Principle of Learning: Academic Rigor in a Thinking Curriculum  
Progressively Deepens Concepts

ELA Standard #5

Aim: How do you identify parts of speech in sentences?

Thinking Skill: Classifying Parts of Speech

Thinking Map: Tree Map

Parts of Speech

Adjectives  
(Describe)

Nouns  
(Names)

Verbs  
(Action Words)

Adverbs  
(Modifying Words)

The	playful	dog	runs	quickly
beautiful	mall	jogs	slowly	
fabulous	John	plays	rapidly	
kind	Manhattan	fights	quietly	
wonderful	Toys R Us	sings	softly	
marvelous	school	works	constantly	
elegant	supermarket	researches	perfectly	
	lettuce			
	Gymnasium			
	cafeteria			
	precinct			
	laptop			

Sharon Feldman      SIE I  
Class 756              18 years old

The students have severe mental and physical disabilities. Therefore, varying degrees of assistance are required by students in accordance with their IEP goals. Along with academic goals, many fine motors goals can be addressed during activities. Much modeling, verbal and physical prompting may be necessary as well. The pictorial organization that "Thinking Maps" provide correlates well with the type of instruction that our students require for learning since only a small percentage can read even "functional words" like "stop" and "go". The map is either the summary activity or describing an ongoing process rather than the one that leads to independent creativity.

Students will choose from Mayer Johnson picture symbols provided to complete the task.

#### **Thinking Skill: Classification -Tree Map**

Purpose: This type of map was used so that the students could identify those snacks that were healthy and those that were not.

#### **Standard 1 -Personal Health and Fitness**

Students will develop, demonstrate and practice positive health behaviors, skills and choicemaking.

#### **Thinking Skill: Classification -Tree Map**

Purpose: This type of map was used so that the students could record the results of hands on experimentation with a large magnet and various functional items. The columns were labeled "Yes" or "No" to record magnetic attraction.

#### **Standard 4 – Science**

Energy and matter interact through forces that result in changes in motion. Students investigate the use of common forces on objects, such as those caused by gravity, magnetism, and mechanical forces.

Principles of Learning  
Organize for Effort

Everything is organized for students to work as hard as they need in order to reach high standards.

### **Thinking Skill: Brainstorming -Circle Map**

Purpose: This type of map was used so that the students could choose any of the symbols given to relate to the happenings and the characters involved in the adapted book read, ALICE IN WONDERLAND.

### **Standard 1- Language for Information and Understanding**

Students will use information from books, magazines newspapers, textbooks, audio and media presentations, and from such forms as basic charts, graphs maps and diagrams.

### **Thinking Skill: Comparing and Contrasting – Double Bubble**

Purpose: This type of map was used so that the students could compare and contrast characteristics describing Presidents Lincoln and Washington. Prior to assignment, students were able to view a large poster classifying the descriptives that pertain to each of the Presidents. Two students were chosen to act out the parts and receive the pictorial representations of the descriptives in object form.

### **Standard 1 Language for Information and Understanding**

Communication and writing to acquire and transmit information requires asking questions, applying information from one context to another and presenting the information clearly.

Students use verbal communication, including alternative communications systems, to convey information, needs, and wants.

### **Thinking Skill: Sequencing –Flow Map**

Purpose: This type of map was used so that the students could chart the metamorphosis of a frog. After viewing a film on topic students were asked to put the pictures in the order that they happened. What came first, etc.? Afterward, students will be able to view the process in class with live tadpoles while creating a more detailed flow chart to document the process.

### **Standard 4-Science**

Living things are both similar to and different from each other and nonliving things.

Students observe the major stages in the life cycles of selected plants and animals.



**Thinking Skill: Seeing the Analogies-Bridge Map**

Purpose: This type of map was used so that the students could relate the different types of homes occupied by the different people or groups of persons we had studied this term.

**Standard 1-Language for Information and Understanding**

Students organize and categorize information/materials.

**Thinking Skill: Sequencing-Flow Map**

Purpose: The book entitled TREE OF LIFE, a story about the African Baobab tree, was the basis for the lesson. The map was used so that the students could better understand the interdependence of different forms of life.

**Standard 4-Science**

Plants and animals depend on each other and their physical environment.

**Thinking Skill: Cause and Effect-Multiflow Map**

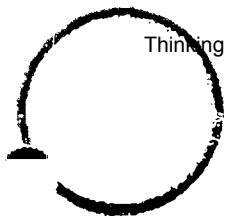
Purpose: This type of map was used to as a sequel to the above map to help to further explain the continuation of the circle of life as shown in the TREE OF LIFE. The interdependence of life is more clearly shown by use of the map.

**Standard 4-Science**

Plants and animals depend on each other and their physical environment.

# THE CIRCLE

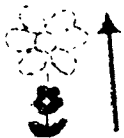
Thinking Found



tree



grows



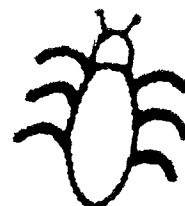
leaf



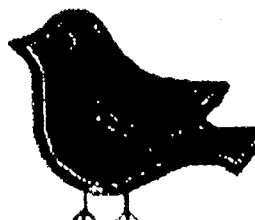
eat



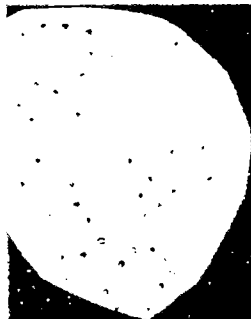
insect



bird



eat



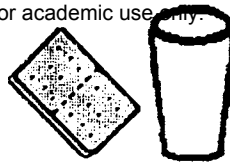
FROGS





snack

ed for academic use only



healthy



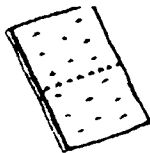
nuts



applesauce



crackers



fruit



yogurt



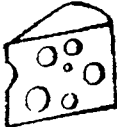
juice



vegetables



cheese



ice cream cone



pudding



cake



cookies



chips



yes



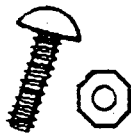
magnet attracts



no



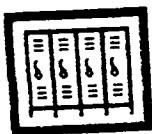
nuts bolts



paper clip



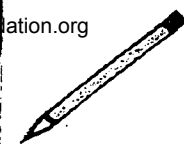
metal door



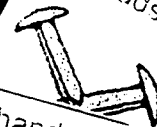
refrigerator



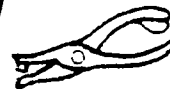
pencil



nails



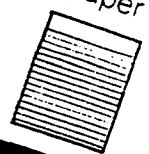
hand punch



plastic cup



paper



rubber bands

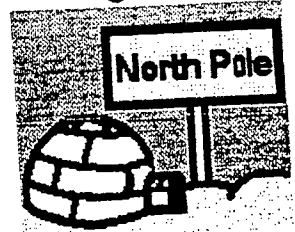


Eskimo

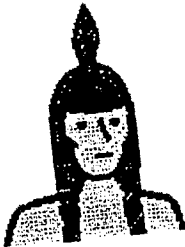
Thinking Foundation. Courtesy of the



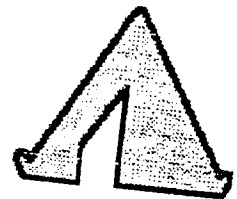
igloo



Native American



tepee



Washington



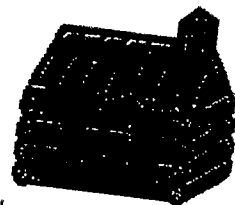
home



Lincoln



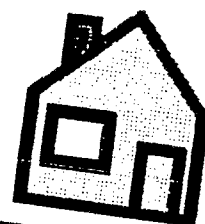
cabin



I,



house





## THINKING MAPS IN THE ART CLASS

Anita Dottin, Art Teacher    P.993@J72Q Sie VI

New York State Learning Standards, Thinking Maps and lessons in the Visual Arts have been combined in the following tasks. The tasks were designed to engage the students in the types of hands-on activities that would help to expand their knowledge in the content area and to attain desired student outcomes for successful futures.

The Thinking Maps were used as tools to elicit prior knowledge of a subject as well as to introduce new ideas and concepts. The maps aided in guiding the students' thinking while helping with the formation of concrete ideas and images.

Results showed that with the use of the maps, there was greater participation on the part of students and a need for more thoughtful planning on the part of the teacher. The desk maps tended to generate dialogue among classmates, who treated the maps like "Board Games". This created a more relaxed and fun-filled way to learn, but teachers are cautioned to carefully link the most appropriate map to the task at hand.

The following tasks and their related "Thinking Maps" were presented to students who have limited proficiency in reading, speaking and cognitive abilities. The students in this SIE VI program range in age from 10 to 14, are mildly retarded, emotionally disturbed and function on an elementary level. They often need help in completing a task.

### Contents

Map	Task	Thinking Skill	Standard
Flow Map	Making Stamobiles	Sequencing	Creating, Performing and Participating in art
Bridge Map	Art tools and their Uses	Seeing Analogies	Knowing and Using Art Marerials
Bubble Map	Sculpture: Statue of Liberty	Describing Qualities	Responding to and Analyzing Art
Circle Map	Self Portraits	Defining in Context	Understanding Cultural Dimensions of art

## Assessment Activity

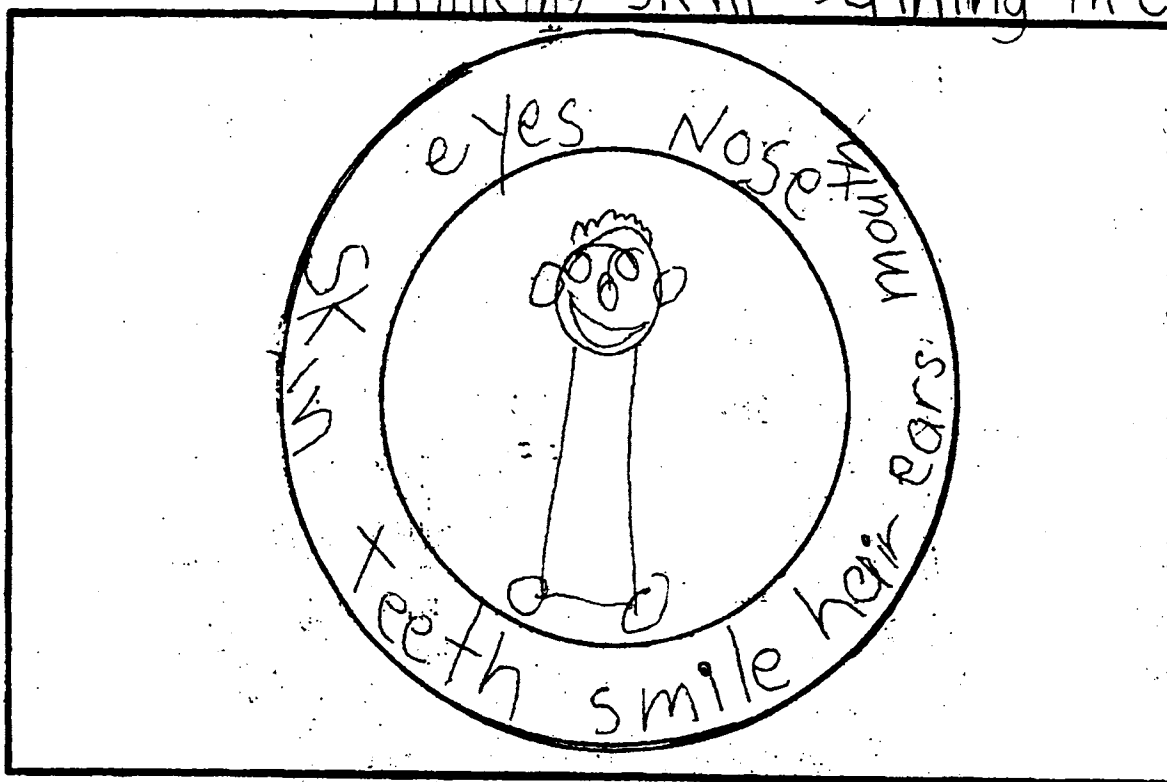
## Assessing Thinking Maps

Name: Kevin

Class: 5/2

Circle Map

Thinking Skill - Defining in Context



The Arts: Standard 1 Creating and Participating in the arts,  
Students will create works of art based on their personal experiences and their imagination. They will draw and name parts of their bodies.

Principle of Learning: Academic Rigor in a Thinking Curriculum. Prior knowledge of the body and its parts are used to define oneself in context.

### SELF PORTRAITS

1. Draw a picture of yourself in the small circle above.
2. In the large circle, draw pictures or write the words; eyes, nose, mouth, ears, hair, smile, teeth, skin, etc..
3. In the space around the large circle, draw pictures or write names of people or things that make you look the way you do. (e.g., brown eyes from mom; clear skin from carrots, etc..)
4. Join the rest of the class in making a graph that shows which one of their features they like best.

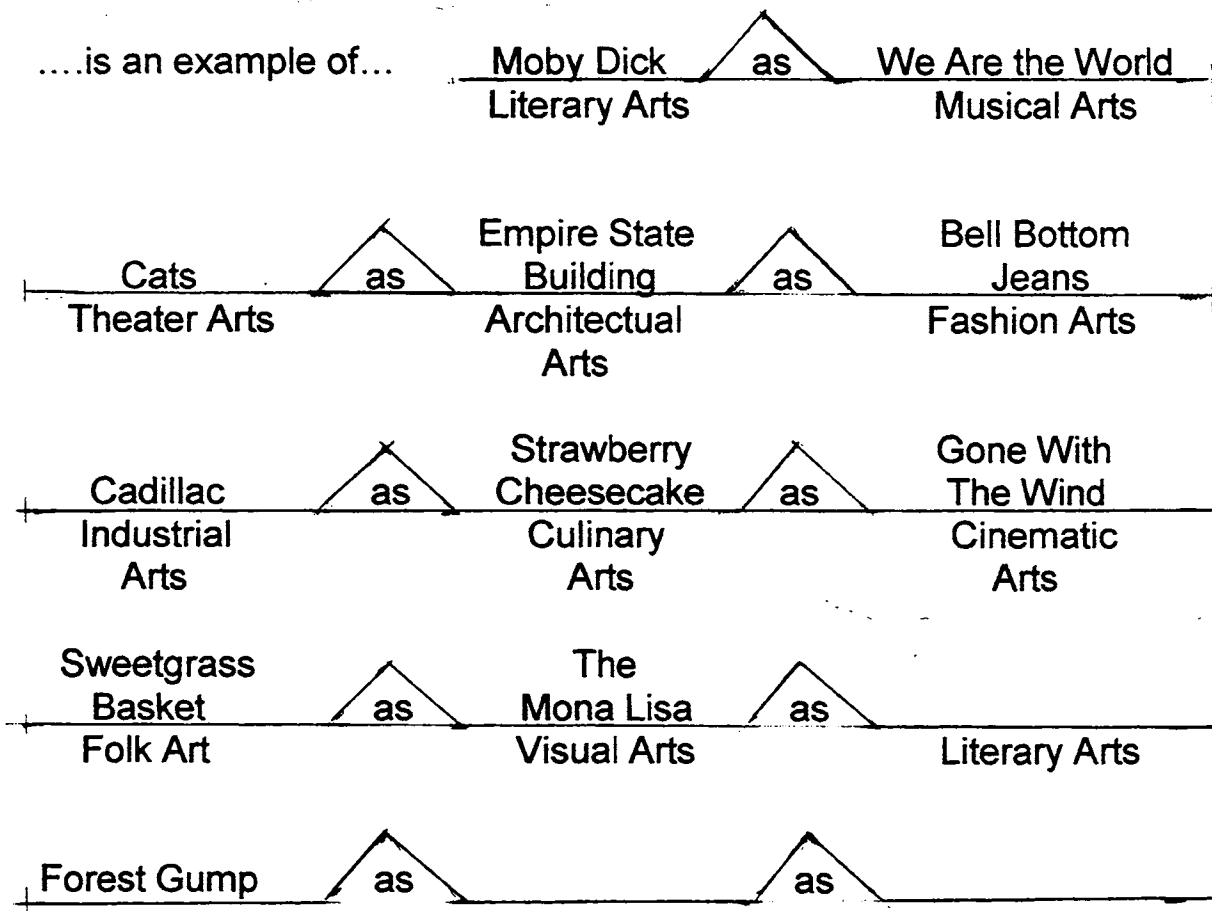
## FORMS OF ART AND BEST EXAMPLES

When People dance on a stage the audience is seeing a form of art called Performing Arts. The person who creates the dance is called a Choreographer. "The Nutcracker" is one of the best examples of an artistic dance creation.

Below is a Bridge Map that shows how different artistic creations relate to each other in terms of their art form.

**Activity:** Fill in the missing art form or the artistic creation.

Thinking Skill - Seeing Analogies



Musical Arts

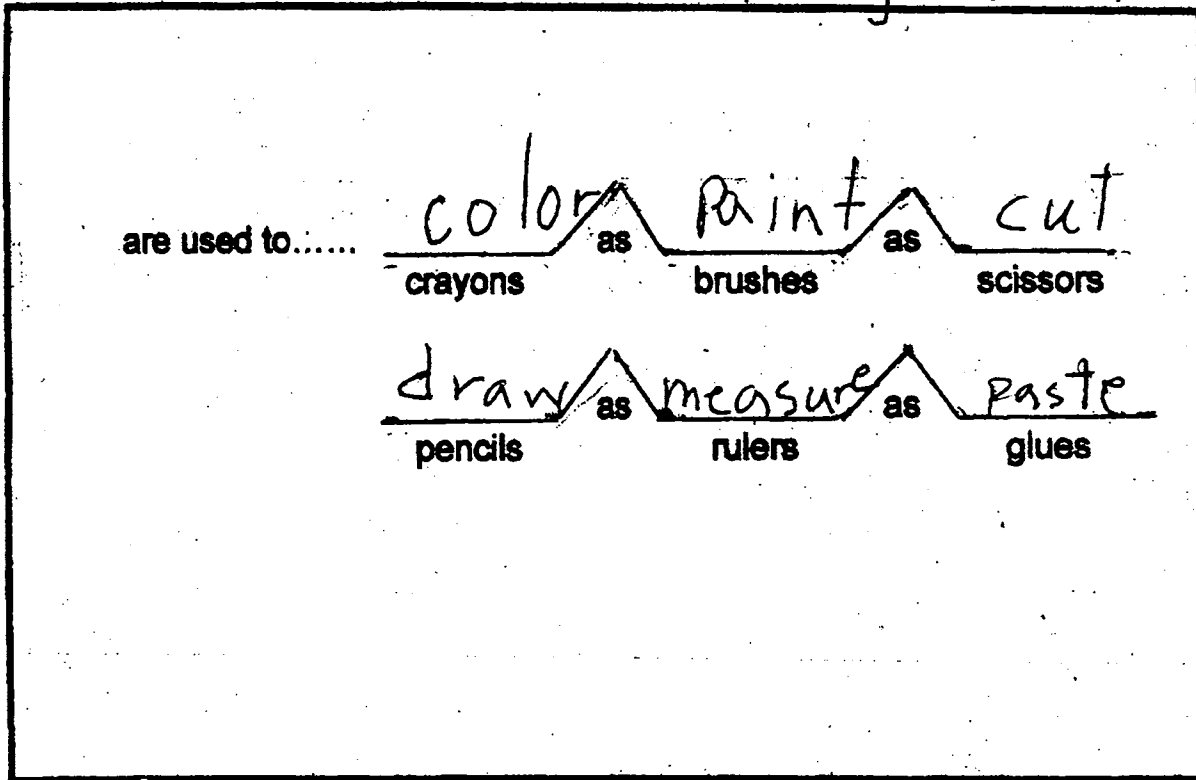
Principles of Learning - Academic Rigor in a Thinking Curriculum,  
Thinking Map - Seeing Analogies progressively deepens concepts

Goal: To give myself practice in using a bridge map.

Standard 2 - Knowing and Using the Arts  
Student will be knowledgeable about various forms of art and what is produced.

Name: Alberto C. class 512

Bridge Map thinking skill - Seeing analogies skill



The Arts Standard 2 Knowing and Using Art Materials  
Students will name various art materials and state what they are used for. They will create simple works of art using the materials.

### ART TOOLS AND THEIR USES

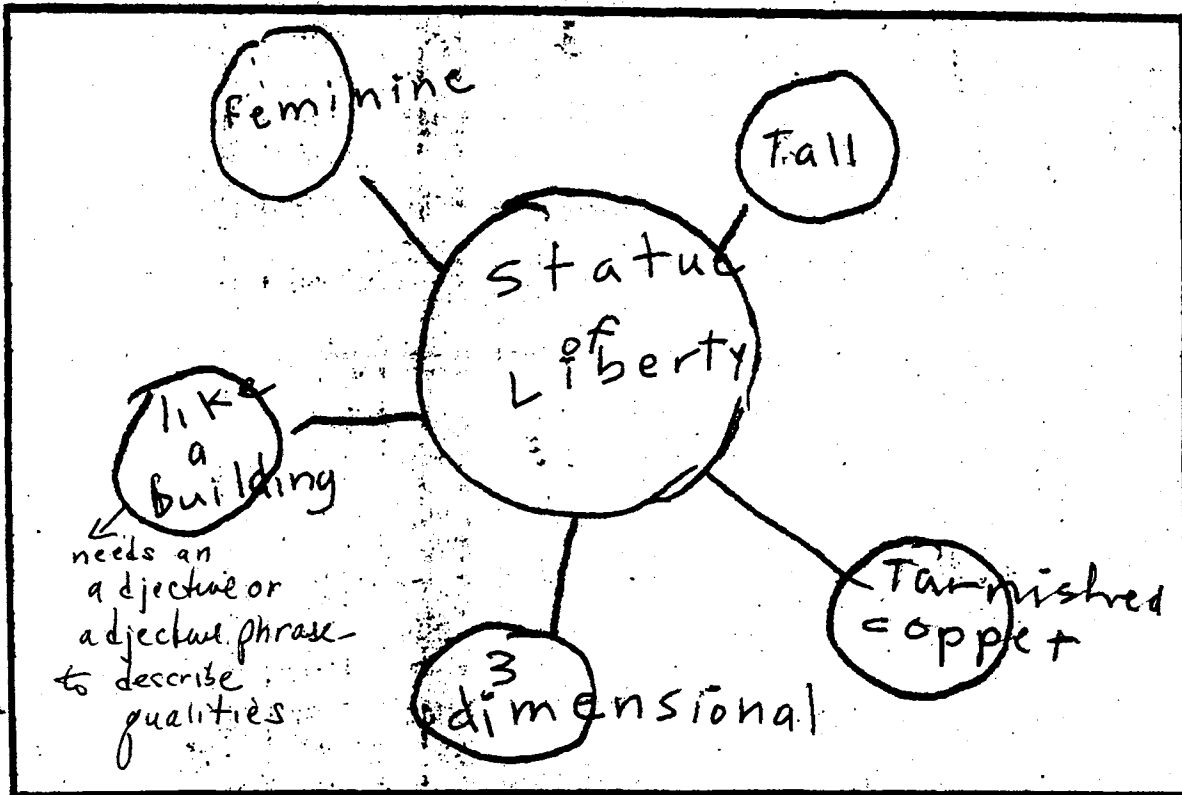
The Art class has many tools and materials that are used to perform different tasks. When deciding on a project, teachers and students should be sure that the tools they gather are appropriate for the task.

Fill in the Bridge Map above to show that you know what each tool is used for and that you understand how these things are related.

Principles of Learning: Academic Rigor in a Thinking Curriculum.  
Students are encouraged to see relationships/analogies when using art tools,

Name: Freddie

Bubble Map: Thinking skill - Describing Qualities

**SCULPTURE: DESCRIBING the STATUE OF LIBERTY**

1. Working in groups of 5, decide on one person who will draw a Bubble Map in the space above.
2. Choose another person to write the words, "Statue of Liberty", in the center bubble.
3. Elect another member to distribute photos of the statue. Study the picture then have a discussion about what you see in the picture or what you already know about the Statue of Liberty.
4. Each member in the group will give a word or words that describe the statue, while a fourth member records those adjectives in the outside bubbles.
5. The last member will list the characteristics of the statue and share the information with the rest of the class.
6. Compare the descriptive words used by each group. Are there any similarities or differences? Draw a double bubble to illustrate.

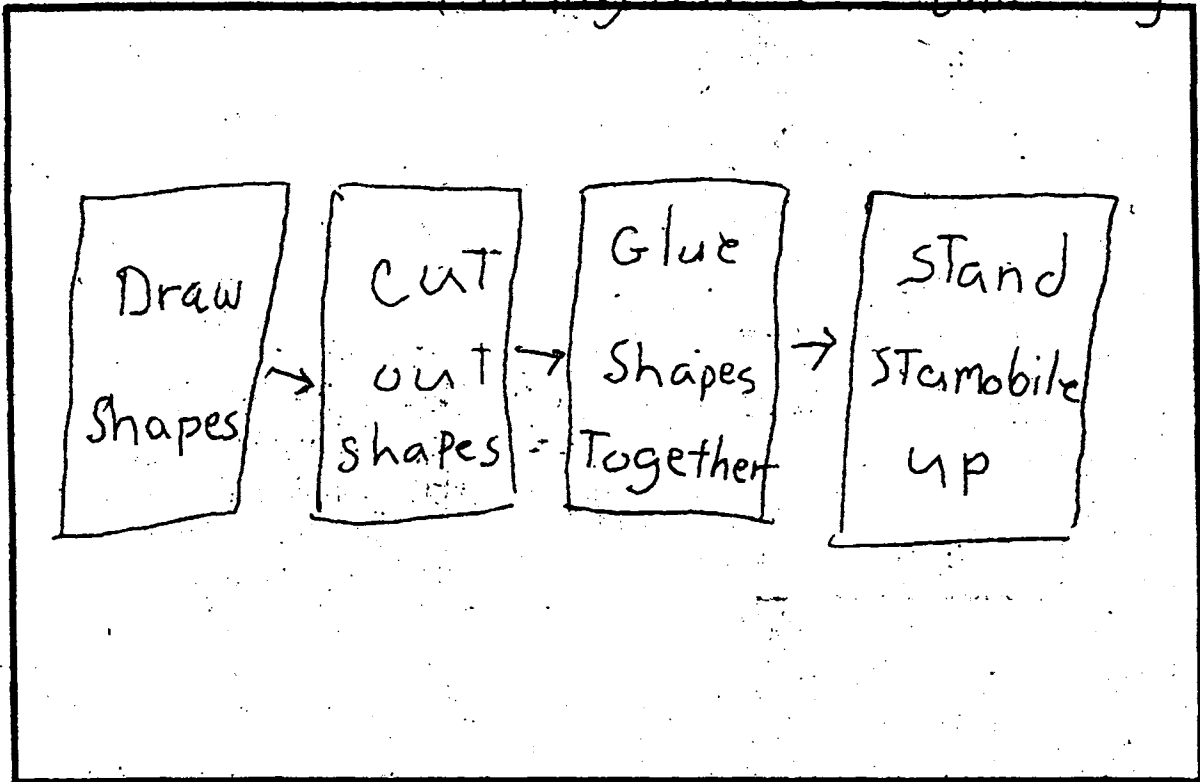
The Arts Standard 3 Responding to and analyzing works of art,  
 Principle of Learning: Organize for Effort - Students work together  
 ANITA DOTTIN P 993 @ 7L and know what is expected.

Name: Gerry

Class 511

Flow Map

Thinking Skill - Sequencing



The Arts

Standard 1 - Creating, Performing and Participating in the Arts.  
Students will follow sequenced directions and demonstrate basic drawing, cutting and glueing skills to produce a product.

### MAKING STAMOBILES

**Materials:** Glue, scissors, pencil, oaktag.

1. Using these materials, create a freestanding Stamobile.
2. Draw a Flow Map in the space above.
3. In each rectangle, write the steps you took to make your Stamobile.
4. Write the words, "How to make a Stamobile", on a piece of paper.
5. List the steps on the paper and place it next to your Stamobile.

Principles of Learning - Learning as Apprenticeship  
Students produce products based on models



Look at our  
Stamobiles!

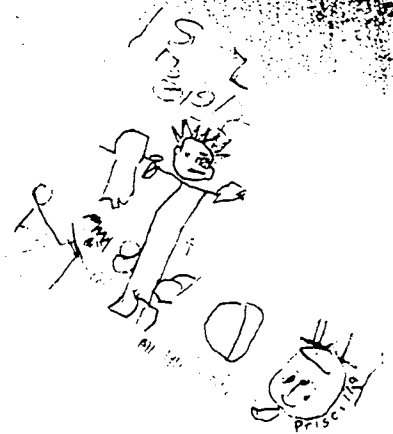


How to Make a Stamobile

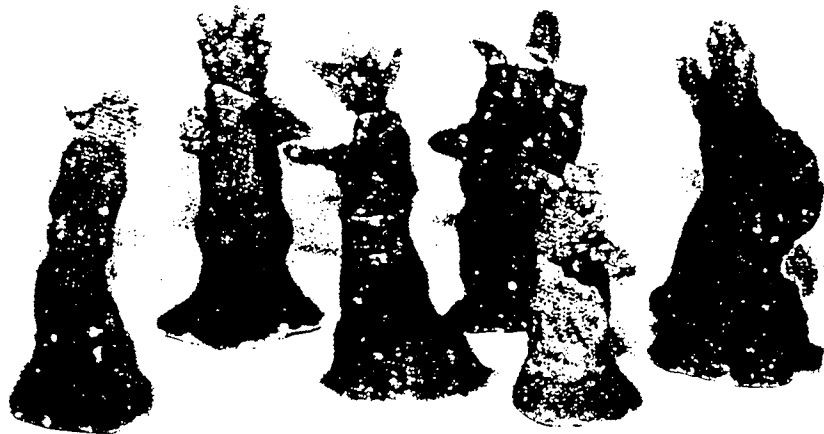
1. Draw shapes.
2. Cut out shapes.
3. Glue shapes together.
4. Fold stamobile up.



Anthony



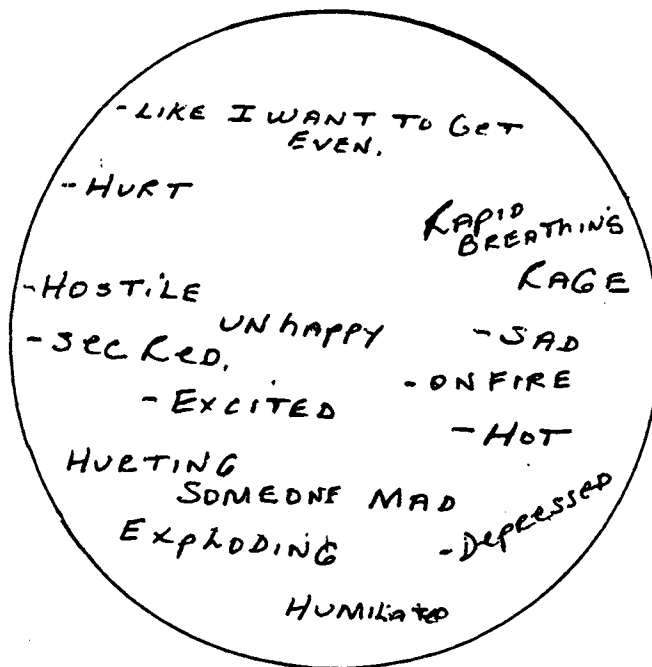
Look at our  
Statues of Liberty!



# WHEN I GET ANGRY...

Thinking Foundation. Courtesy of the Author. All rights reserved for academic use only.

I FEEL...



## CIRCLE MAP

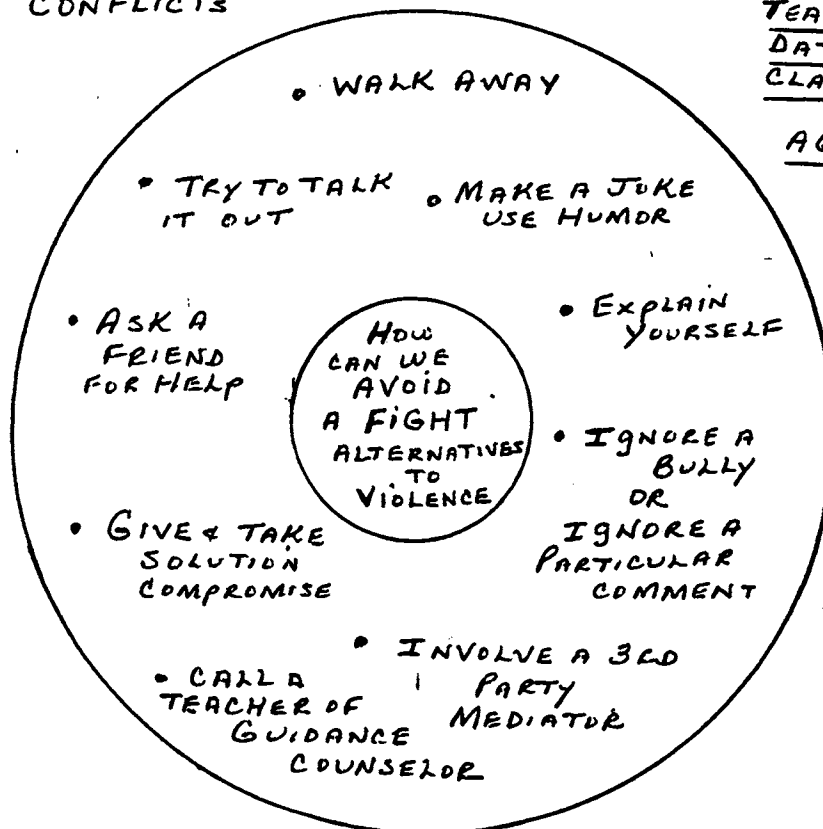
SKILL: BRAINSTORMING  
SOCIAL SKILLS:  
CONFLICT  
RESOLUTION

Standard 3 - Universal  
Foundation Skills

Students will demonstrate awareness of how they feel when they get angry,

Principle of Learning:  
Socializing Intelligence

## RESOLVING CONFLICTS



## THINKING SKILL:

BRAINSTORMING

TEACHER: MR. S. MUELLER

DATE: 3-7-00

CLASS: 1A - GRADE

7-9

AGES: SIE IV AND VII

STANDARD: 3

SOCIAL SKILLS

Interpersonal Qualities

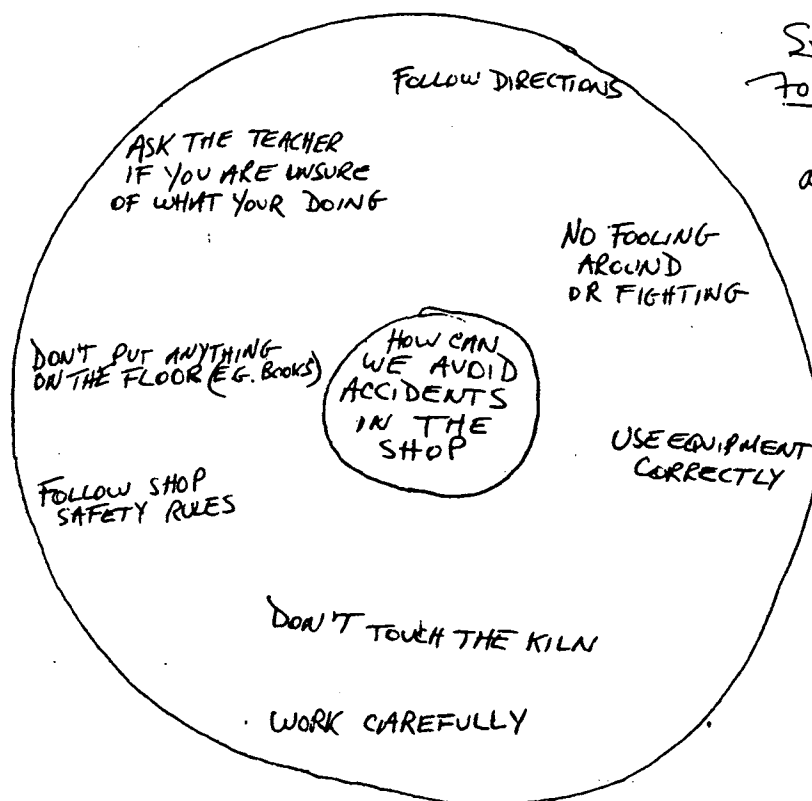
Students will brainstorm way to resolve conflicts in order to work cooperatively as a team.

Principle of Learning:  
Socializing Intelligence

## CIRCLE MAP

SKILL: Brainstorming

## (SHOP SAFETY)



V. BORN  
CERAMICS

QSCD - GRADE 7-9  
SIE IV & SIE III

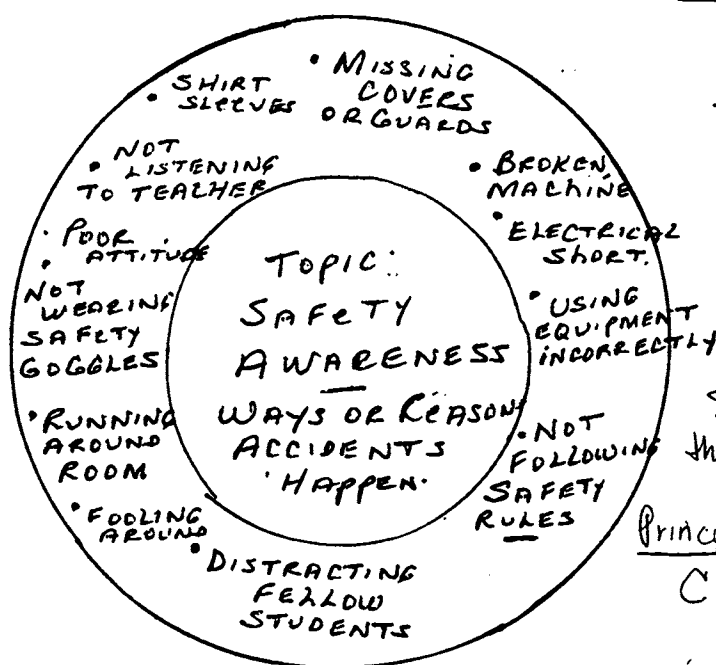
Standard 3 - Universal  
Foundation Skills -

Students will demonstrate  
awareness of safety  
procedures in a shop  
class,

Principle of Learning:  
Clear Expectations.

## SAFETY CIRCLE MAP

SAFETY AWARENESS.  
BEGINNING OF THE YEAR



CIRCLE MAP  
IA / TECHNOLOGY  
EDUCATION

SKILLS:  
BRAINSTORMING

LEVEL: JHS  
SPECIAL ED. OR  
REGULAR ED.

LEARNING  
STANDARD

P 25 5

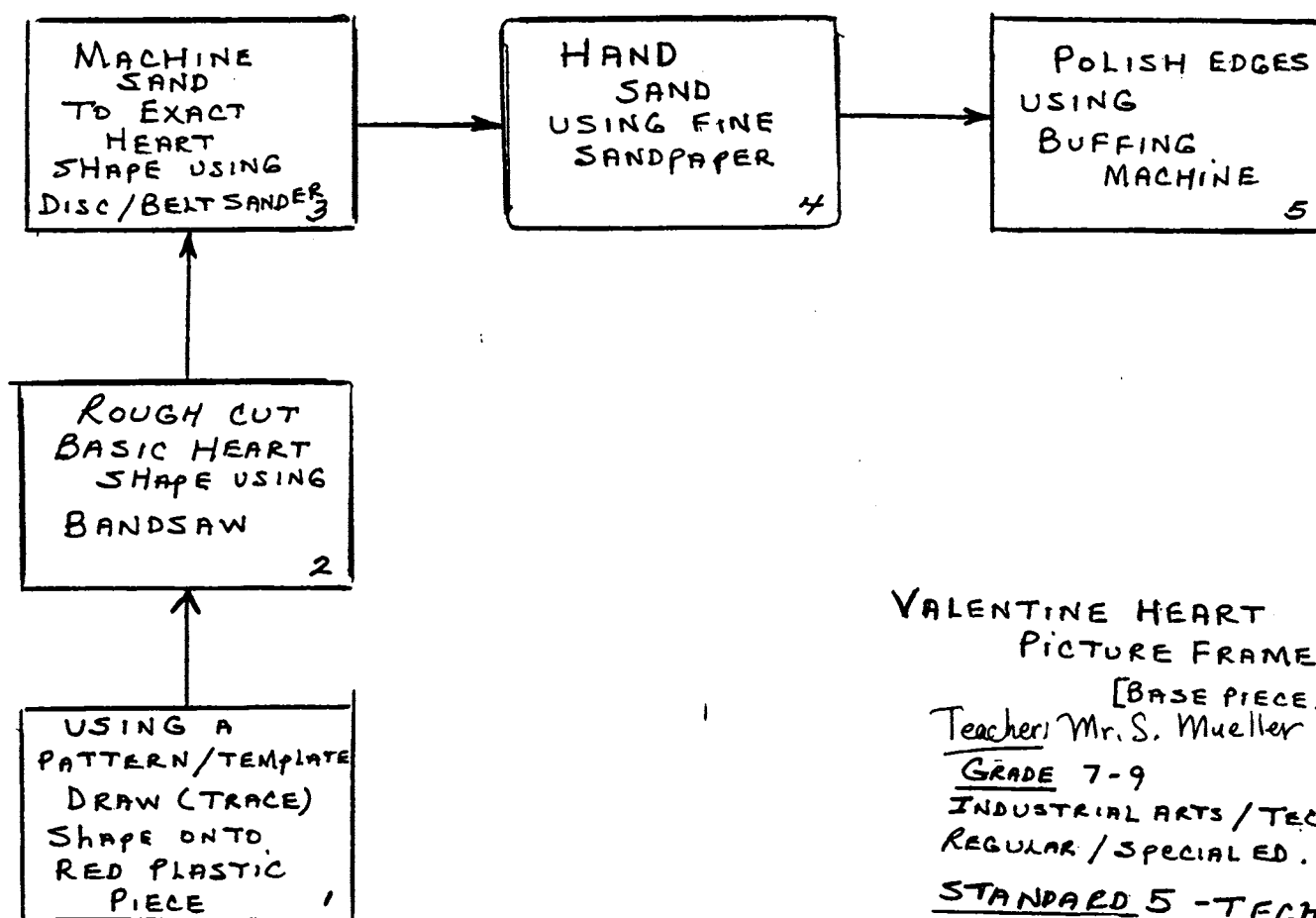
TECHNOLOGY

Students will understand  
the importance of safety.

Principles of Learning:  
Clear Expectations

STEVE MUELLER

## FLOW CHART



VALENTINE HEART  
PICTURE FRAME  
[BASE PIECE.]

Teacher: Mr. S. Mueller

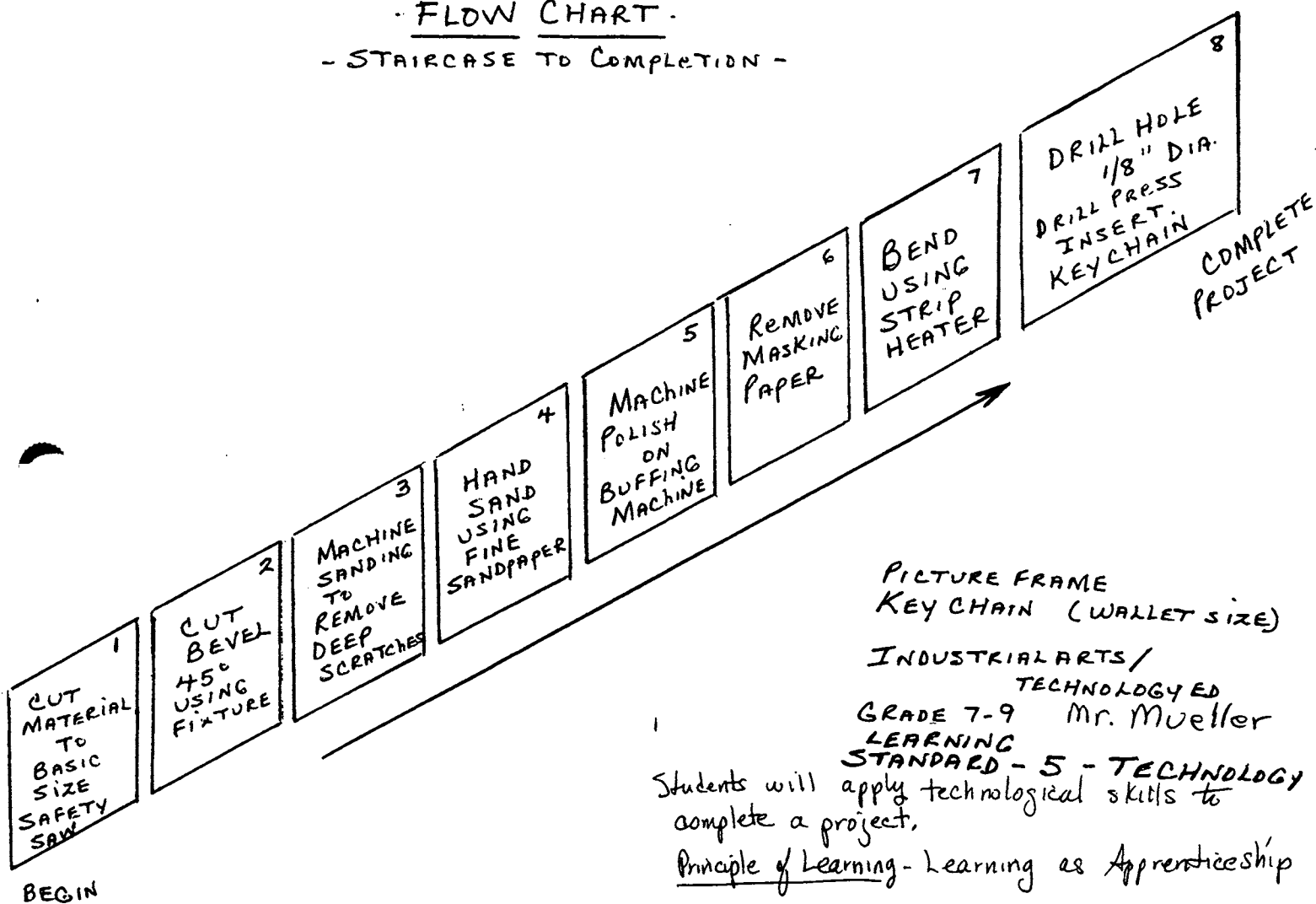
GRADE 7-9

INDUSTRIAL ARTS / TECHNOLOGY  
REGULAR / SPECIAL ED.

STANDARD 5 - TECHNOLOGY  
EDUCATION

Students will follow sequenced directions,  
applying technological skills to complete a project.  
Principle of Learning: Learning as Apprenticeship

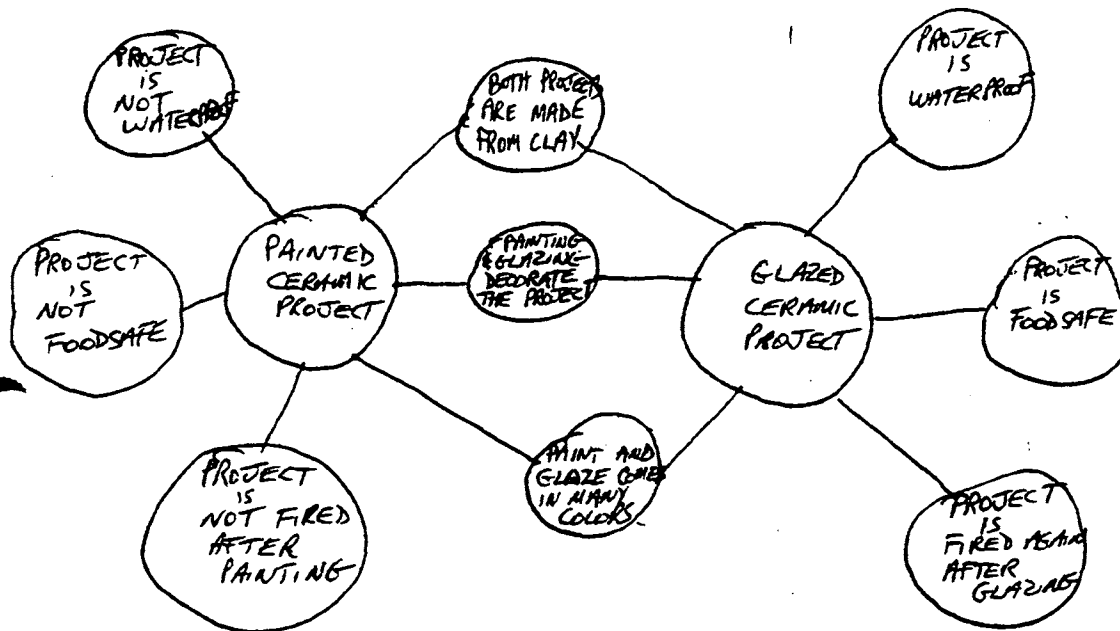
- FLOW CHART -  
- STAIRCASE TO COMPLETION -





## DOUBLE BUBBLE MAP (CERAMICS) (COMPARING PAINTED PROJECTS WITH GLAZED PROJECTS)

V. BORN  
SIEM #VII  
QSCD  
High School



### Standard 3 - Universal Foundation Skills

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

Thinking Skills - Compare and Contrast products made in shop class.  
Choose how to use each product

Learning Principle - Accountable Talk - Press for clarification and explanation

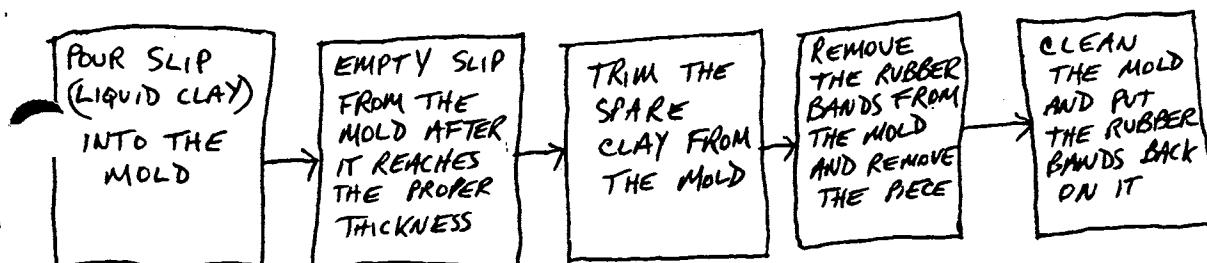
# FLOW CHART

## CERAMIC (SLIP CASTING) SHOP

### STANDARD 5 - TECHNOLOGY

Alternate Level: Tools, Resources, and Technological Processes (p. 25 in Learning Standards for Students with Severe Disabilities)

Students will process materials into more useful forms,



### Principle of Learning- Learning as Apprenticeship-

Students are engaging in "authentic" work.

QSCD  
V. BORN  
GRADES 7-9  
INDUSTRIAL ARTS/TECHNOLOGY ED

# MULTI-FLOW MAP (CAUSE & EFFECT)

V. BORN

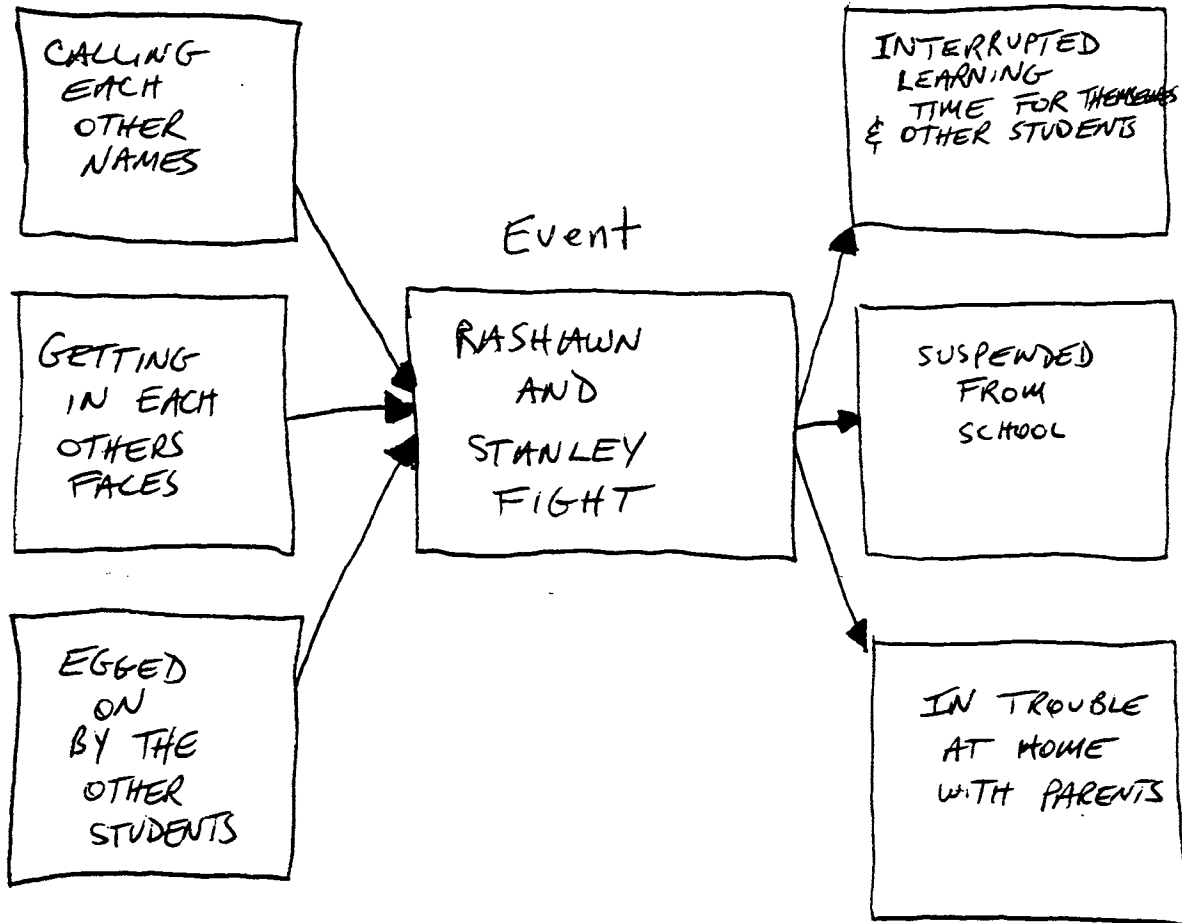
QSCD SIE VII  
GRADES 7-9

Standard 3 - Universal Foundation

Skills

Interpersonal Qualities -  
Students develop an awareness of  
consequence of their behaviors,  
Effect

Cause



Principle of learning:

Socializing Intelligence -  
Students are using cause/effect  
thinking to make sense of the  
world.

# FETTLING FLOW CHART

(CERAMIC SHOP  
V. BORN  
QSCD)

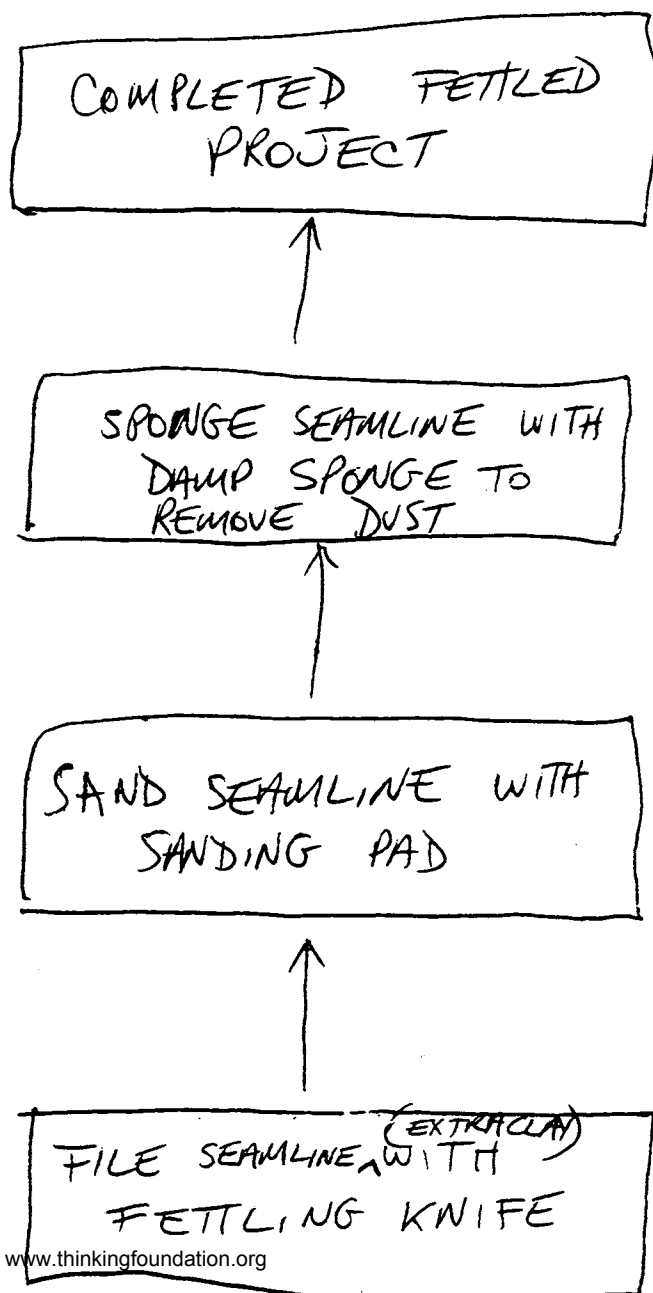
Based on  
Standard 5-  
Technology

Alternate Level:  
Tools, Resources,  
and Technological  
Processes (pg. 25 in  
"Learning Standards  
for Students with  
Severe Disabilities")

Students will develop  
basic skills in the use  
of hand tools,

Learning as Apprenticeship

Learning strategies  
are overtly modeled  
and discussed,



**Suggestions for Taking Shop Lesson Further**  
**Possibilities for using other maps.**  
**by Judy Goldstein**

**Planning Learning Experiences**

- Know what you want to teach and why. What is the purpose for this learning experience?
- Refer to the Learning Standards and Principles of Learning.
- Plan learning experiences using Thinking Maps where they can support student learning.
- At first the teacher needs to connect the Thinking Skill to the Map. After enough practice the goal is for the students to be able to see the map and state the thinking skill or state the thinking skill and choose the correct map. The ultimate goal is for the students themselves to use the maps to support their own learning.

**Effective Pedagogical Practice for Teaching Lessons:**

Begin with an opening statement that tells the students: This is what we are going to do and why. Relate it to their lives.

E.g. Today we are going discuss safety procedures in shop class so that we can all work together in a safe way. Following safety rules are important in all jobs.

**Learning Standards**

**CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES**

**Standard 3 - UNIVERSAL FOUNDATION SKILLS**

Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace.

**3. Personal Qualities -**

- Include positive behaviors for success in the workplace
  - listening
  - stating rules and purpose for rules
  - reading rules
  - following rules

**Principles of Learning**

**Clear Expectations**

- Safety standards available and discussed.

**Learning Experiences Using Thinking Maps**

- Students will demonstrate awareness of safety procedures in a shop class.

**Thinking Skill - Brainstorming**

**Thinking Map - Circle Map**

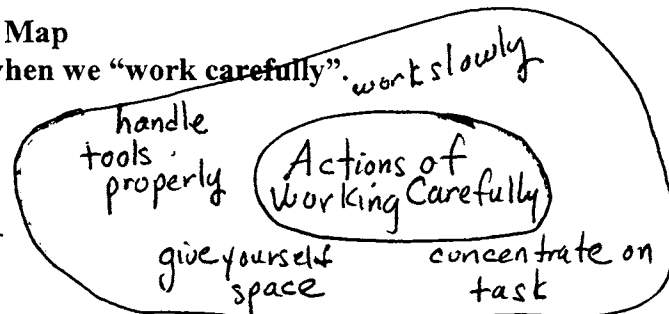
**Question for Inner Circle: How can we avoid accidents in the shop? (See Brainstorm Map - Shop Safety - Vinnie Born.)**

- Students will clarify any vague statements in “Brainstorming” map such as what it means to “work carefully”.

### Thinking Skill - Defining in Context - Circle Map

Question for Inner Circle - What do we do when we “work carefully”.

Working carefully means being aware of what you are doing, paying attention, working slowly and handling tools properly. Be aware of other people and give yourself space.



Creating things from available resources to satisfy personal and societal needs and wants.

Following directions

Using Tools

Creating a finished product

### Principles of Learning

#### Learning as Apprenticeship

- Students make products that meet quality standards.

#### Learning Experiences Using Thinking Maps

- Students will follow sequenced directions applying technological skills to complete a project.

Thinking Skill - Sequencing

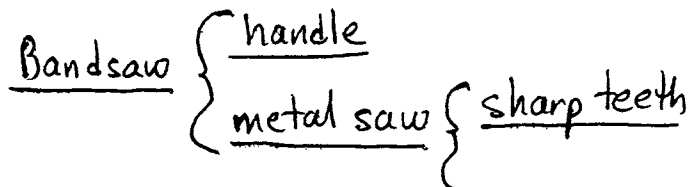
Thinking Map - Flow Map

(See Flow Chart for Valentine Heart Picture Frame)

- Students will name the tools and the parts of the tools used to make the picture frame.

Thinking Skill - Part-Whole

Thinking Map - Brace Map



### 1. Basic Skills

- Include the ability to clearly communicate.

#### Principles of Learning

##### Accountable Talk

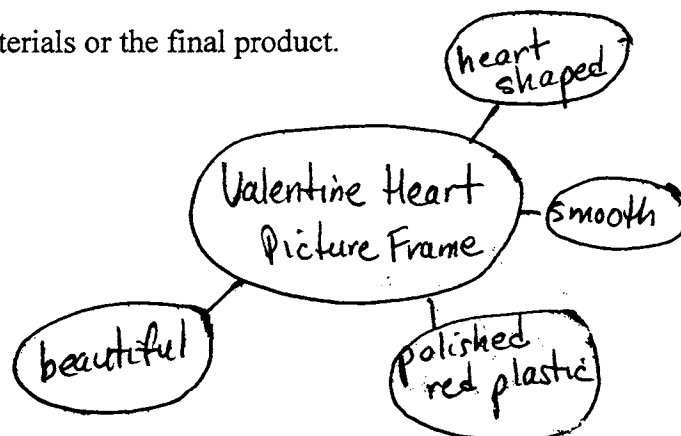
- Talk is essential to learning

#### Learning Experiences Using Thinking Maps

- Students will describe the qualities of the materials or the final product.

Thinking Skill - Describing Qualities

Thinking Map - Bubble Map





## 6. Managing Information

- focuses on the ability to access and use information

### Principles of Learning

Academic Rigor in a Thinking Curriculum

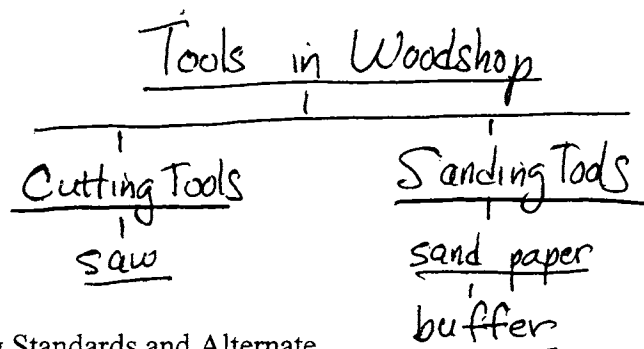
Teaching focuses on mastery of core concepts.

### Learning Experiences Using Thinking Maps

- Students will classify tools used in the shop class.

Thinking Skill - Classifying

Thinking Map - Tree Map



Note: The above standards come from: The Learning Standards and Alternate Performance Indicators for Students with Severe Disabilities. New York State Education Department. Office of Vocational and Educational Services for Individuals with Disabilities. 1998

# QSCD Math/Literacy Newsletter....

Teacher: Pat Gatuso

SIE IV

Twenty-two students toured Rikers Island on Tuesday, November 16th. When asked to describe Rikers Island, the students in classes 504 and 510 gave the following responses:



Thinking Skill -

Thinking Foundation. [www.thinkingfoundation.org](http://www.thinkingfoundation.org)

Brainstorming - Circle Map

\*\*\*\*\*

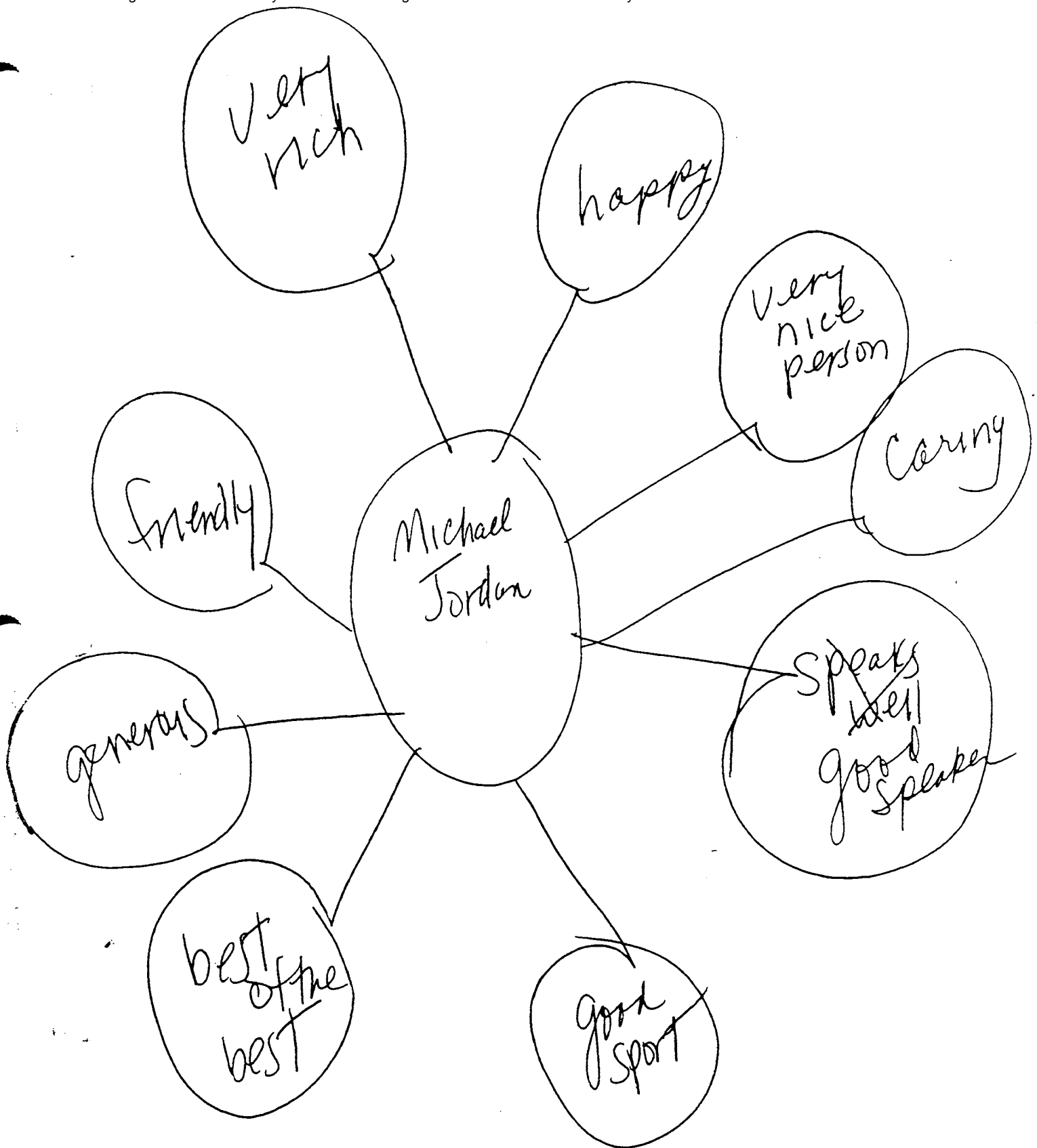
**Ms. H. Burger**  
**Queens School for Career Development**  
**High School SIE IV District 75**  
**Map: Bubble Map**  
**Thinking Skill: Describing Qualities**  
**Fall - 1999**

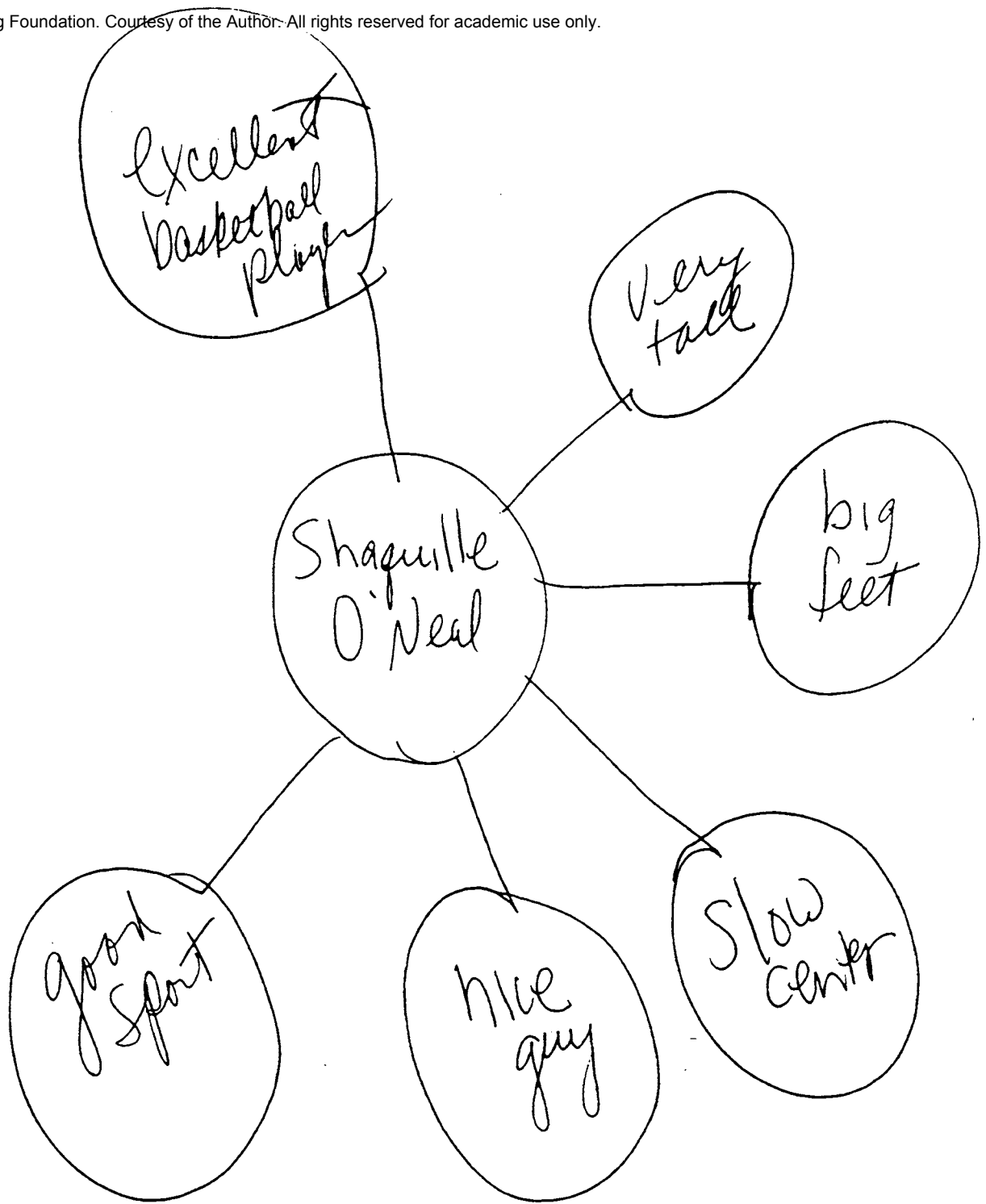
### **Basic Literacy**

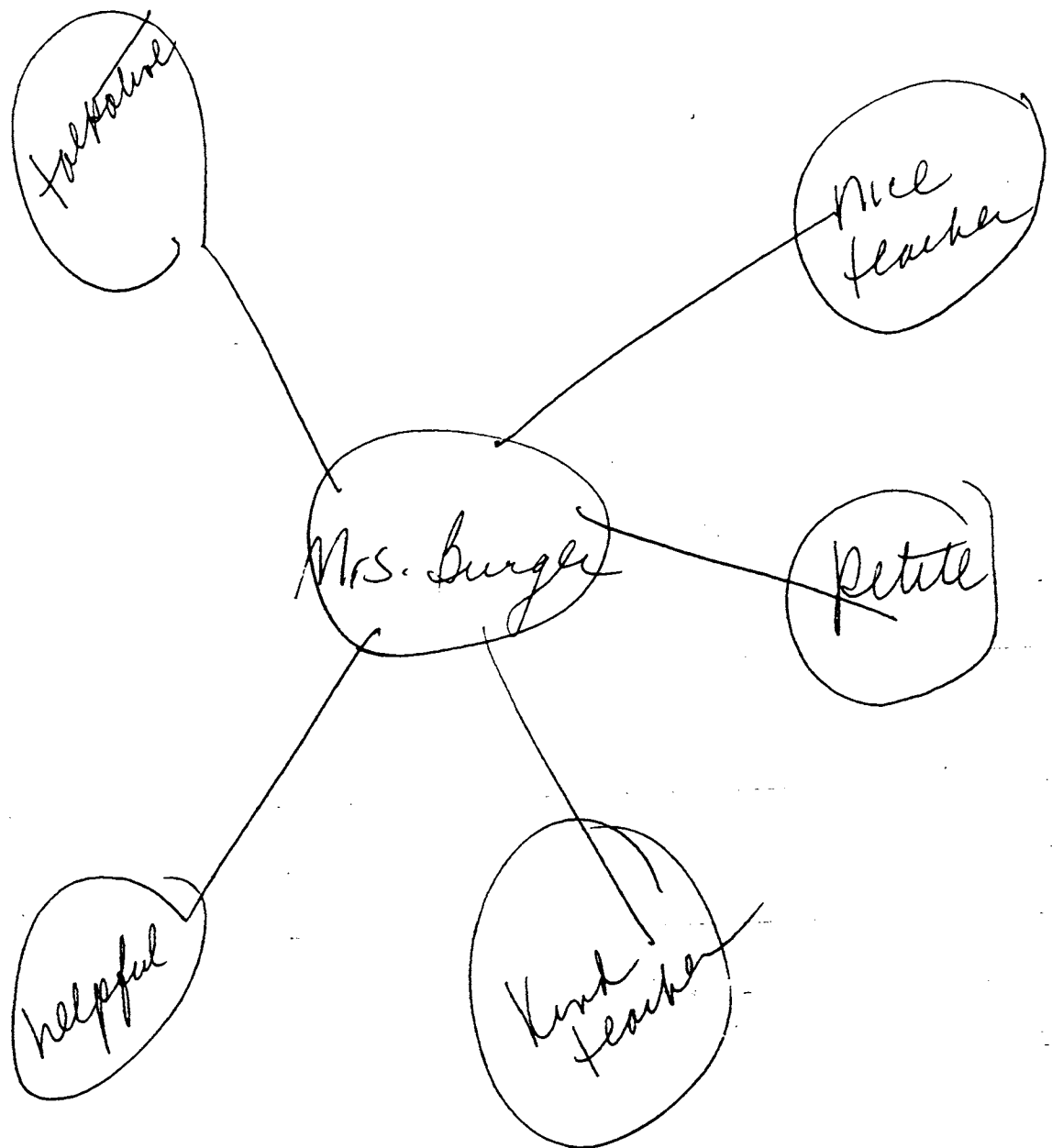
Following class discussions, students used the *Bubble Map to Describe Qualities* of some famous people, characters in stories and staff. Here is the result of some of our discussions. This work was done with the students as a group.

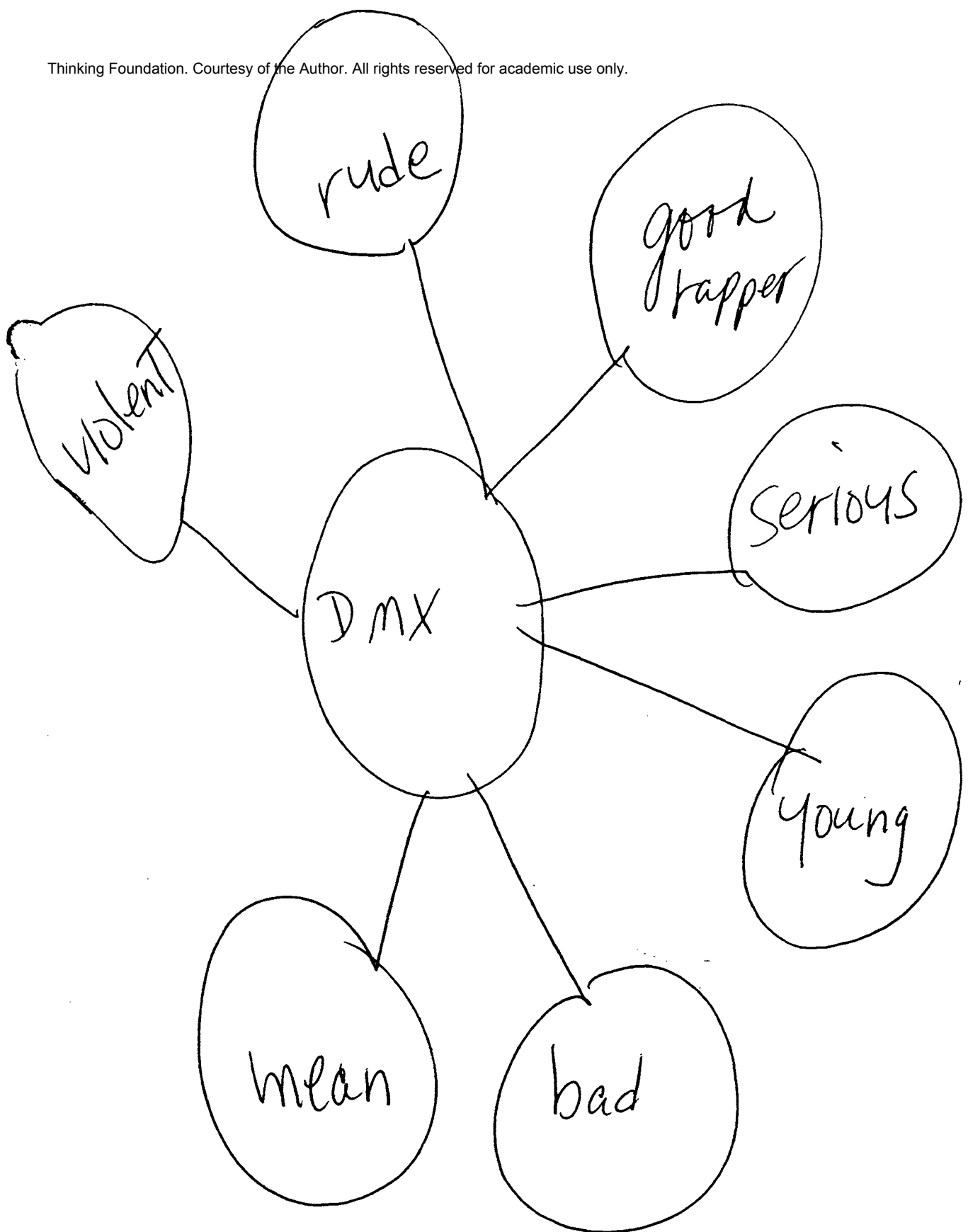
English Language Arts  
Learning Standard E4 a Demonstrate a basic understanding  
of the rules of the English language.  
• Students will use adjectives to describe people.  
• Students will build a vocabulary using adjectives and  
adjective phrases,

Principles of Learning  
Clear expectations - Standards Modeled and Discussed,





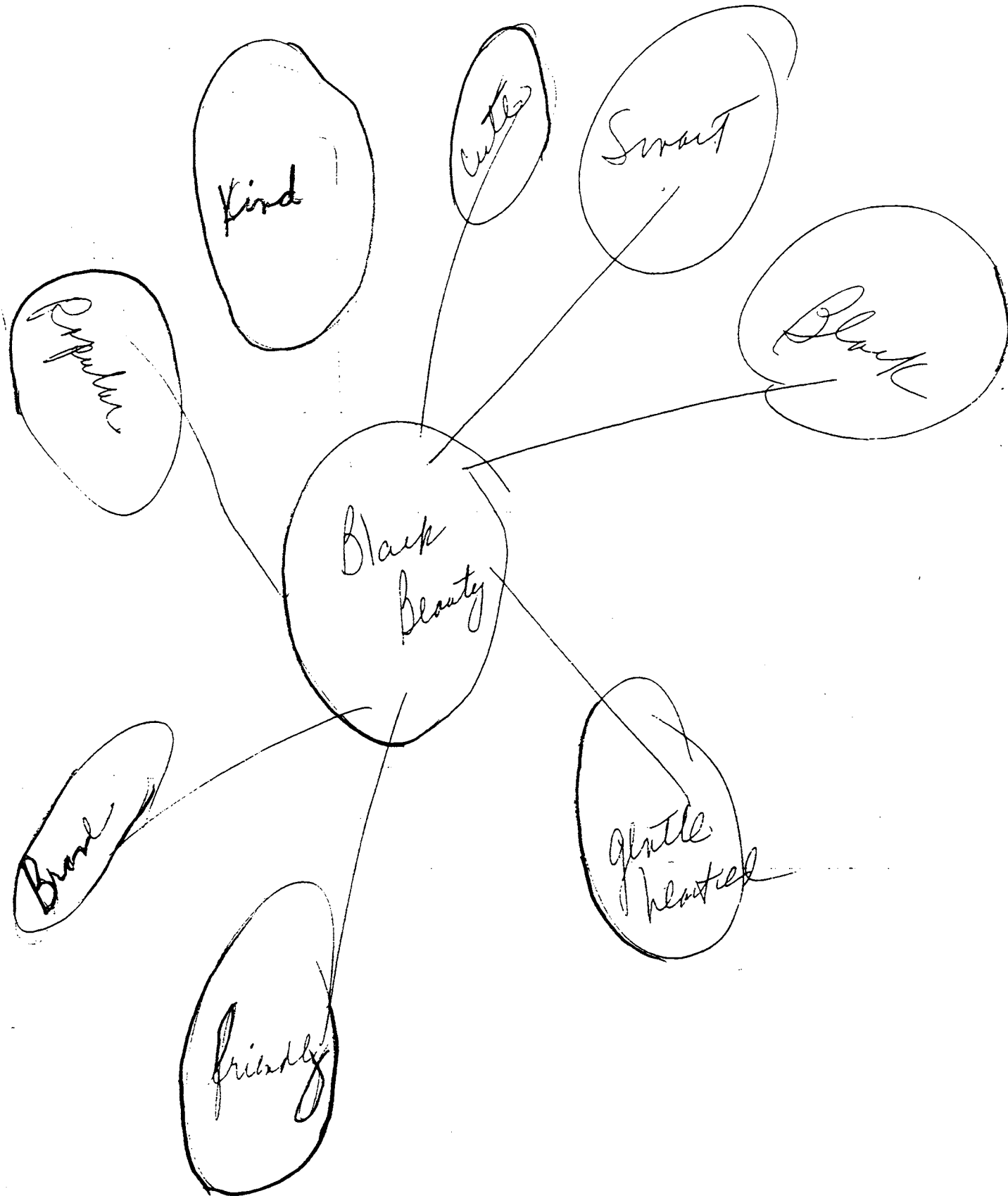


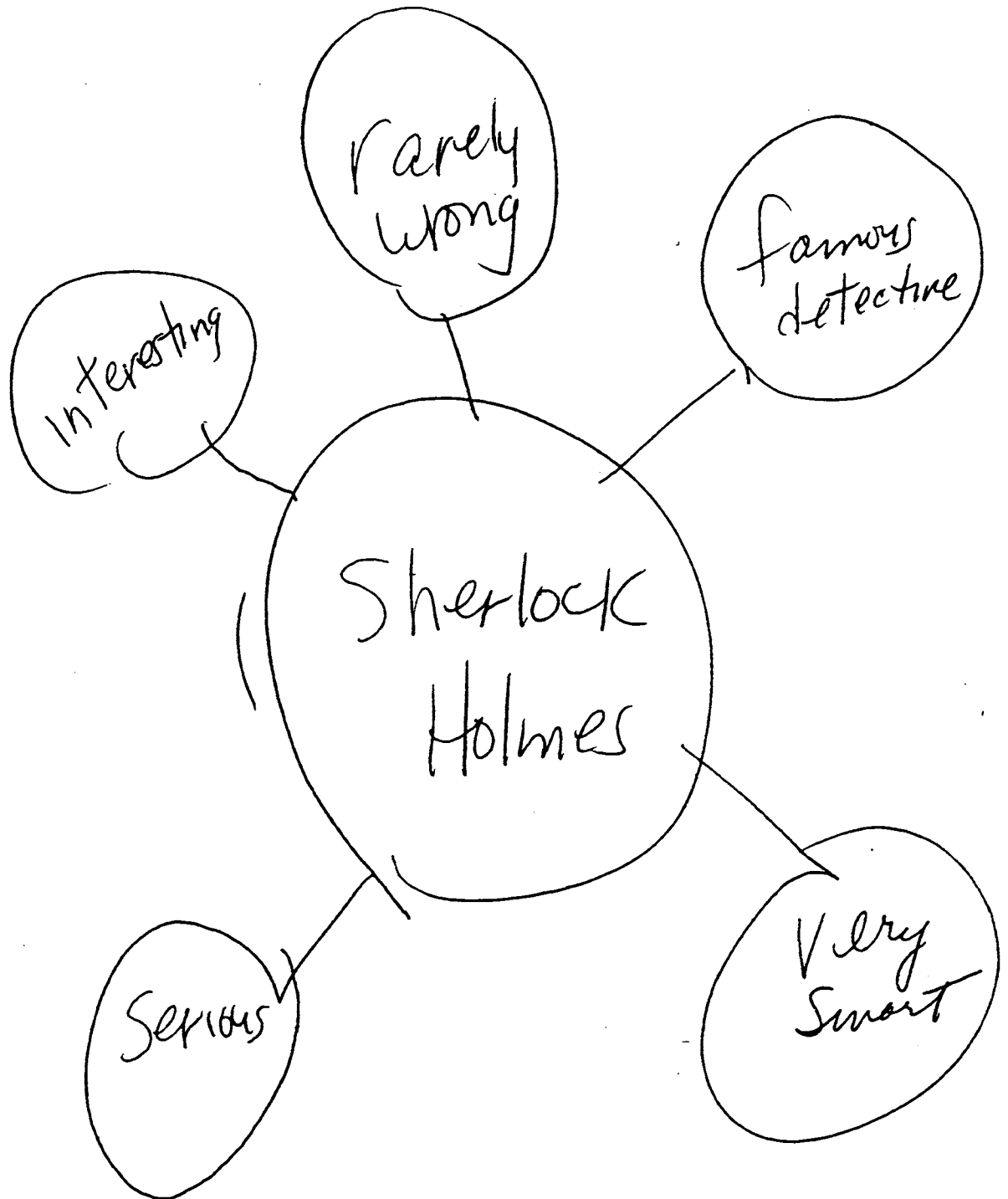




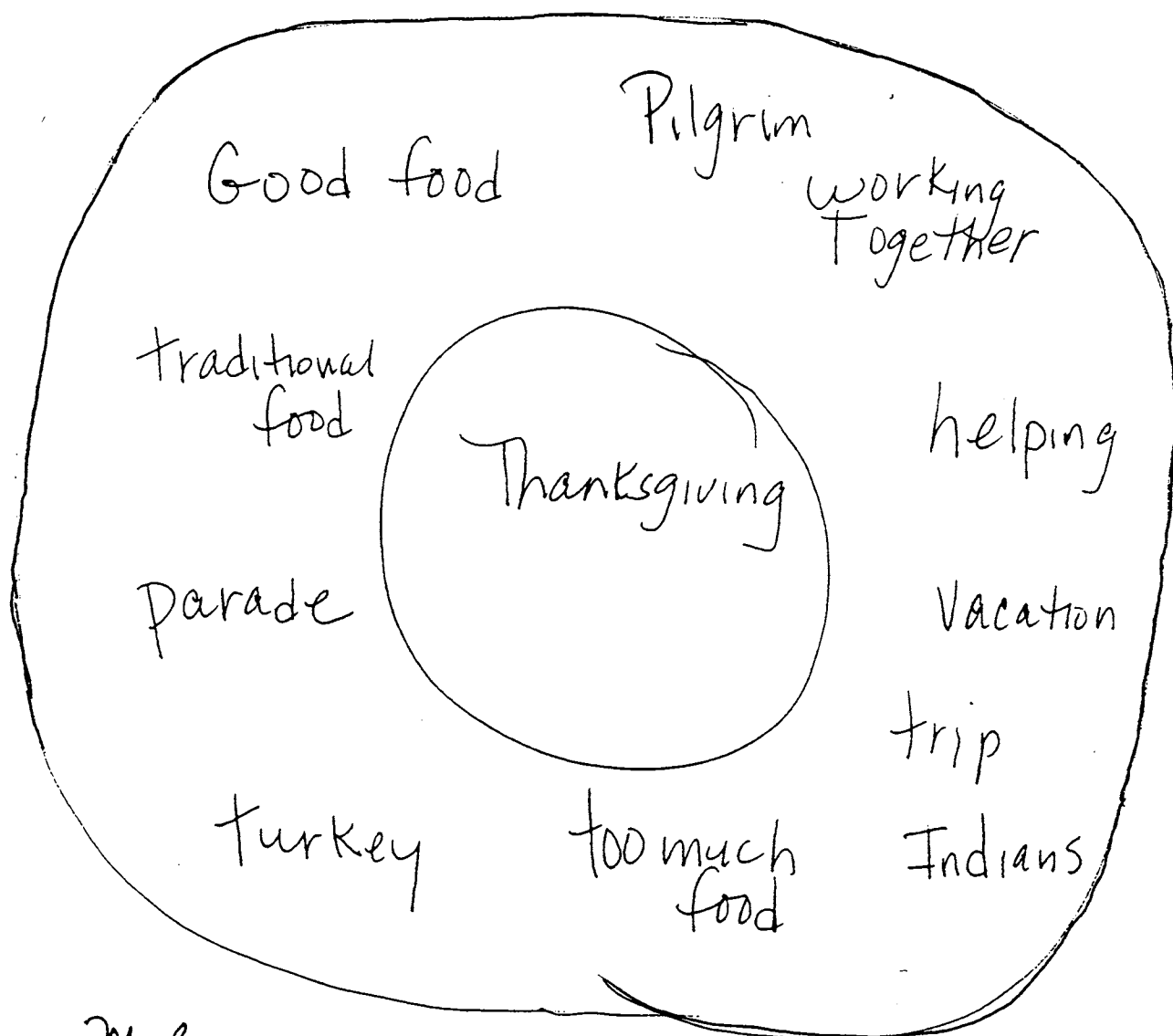
# Black Beauty

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## Circle Map



Ms. Burger

12/11/2000

SIE IV

Basic Literacy

Circle map - Brainstorming

Idea and what students know and remember about Thanksgiving.

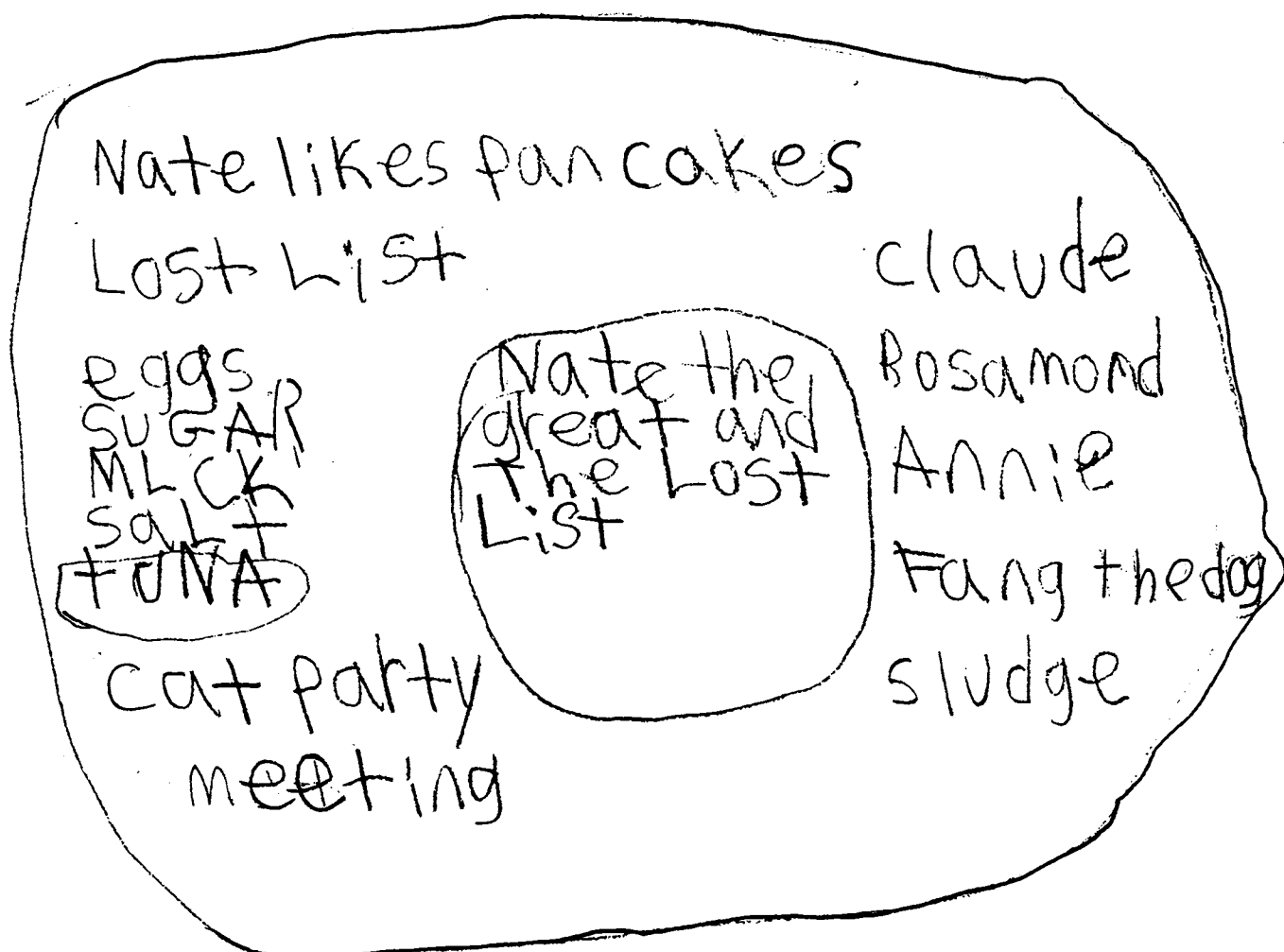
Standard 1 - Language for information and understanding.

Students brainstorm to convey information.

Principles of Learning: Academic Rigor in a Thinking curriculum. Students are engaged in thinking about prior knowledge.

Buddy

January 5, 2000



Mrs. Burger  
Basic Literacy  
December 1999  
SIE. IV Q.S.C.D.  
16 years old  
Brainstorming  
Circle Map

Students will brainstorm using circle map  
to recall information from a story.

Students will write 3-4 sentences using  
Circle Map as support

Principles of Learning - Academic Rigor

2A Independent practice with help  
Produce a report of information

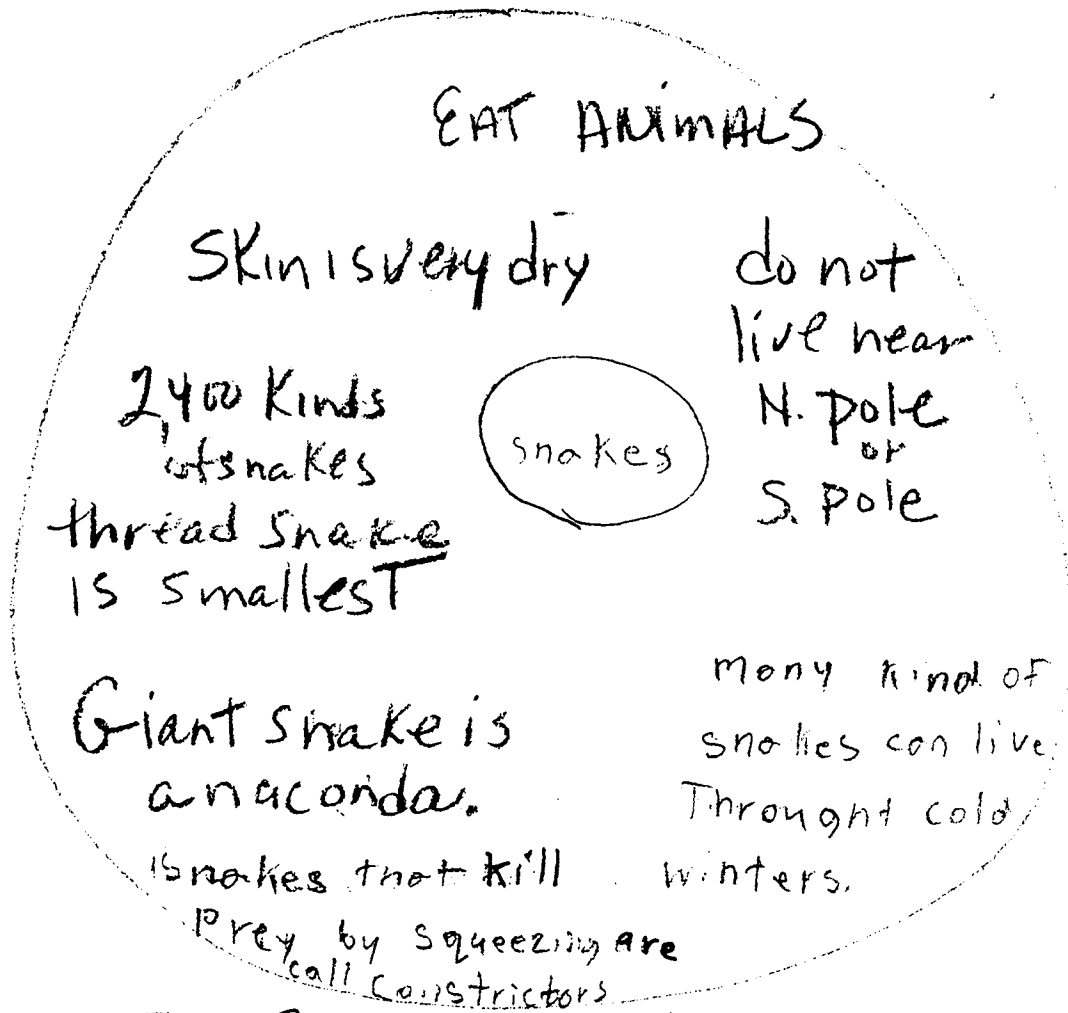
Buddy

The Name of the book is  
Nate the great and the  
Lost List.

Nate likes pan cakes  
his pet dog is Fang.  
Claude Lost List.  
Nate finds List at Rosamond's  
cat party.

Tony

## Circle Map



Mrs. Burger  
Basic Literacy  
December 1999  
S.E. IV Q.S.C.D.  
17 years old

Brainstorming  
Circle Map

Students will brainstorm using circle map, to recall information from a story.

Students will write 3-4 sentences using Circle Map as support.

Principles of Learning - Academic Rigor in a Thinking Curriculum

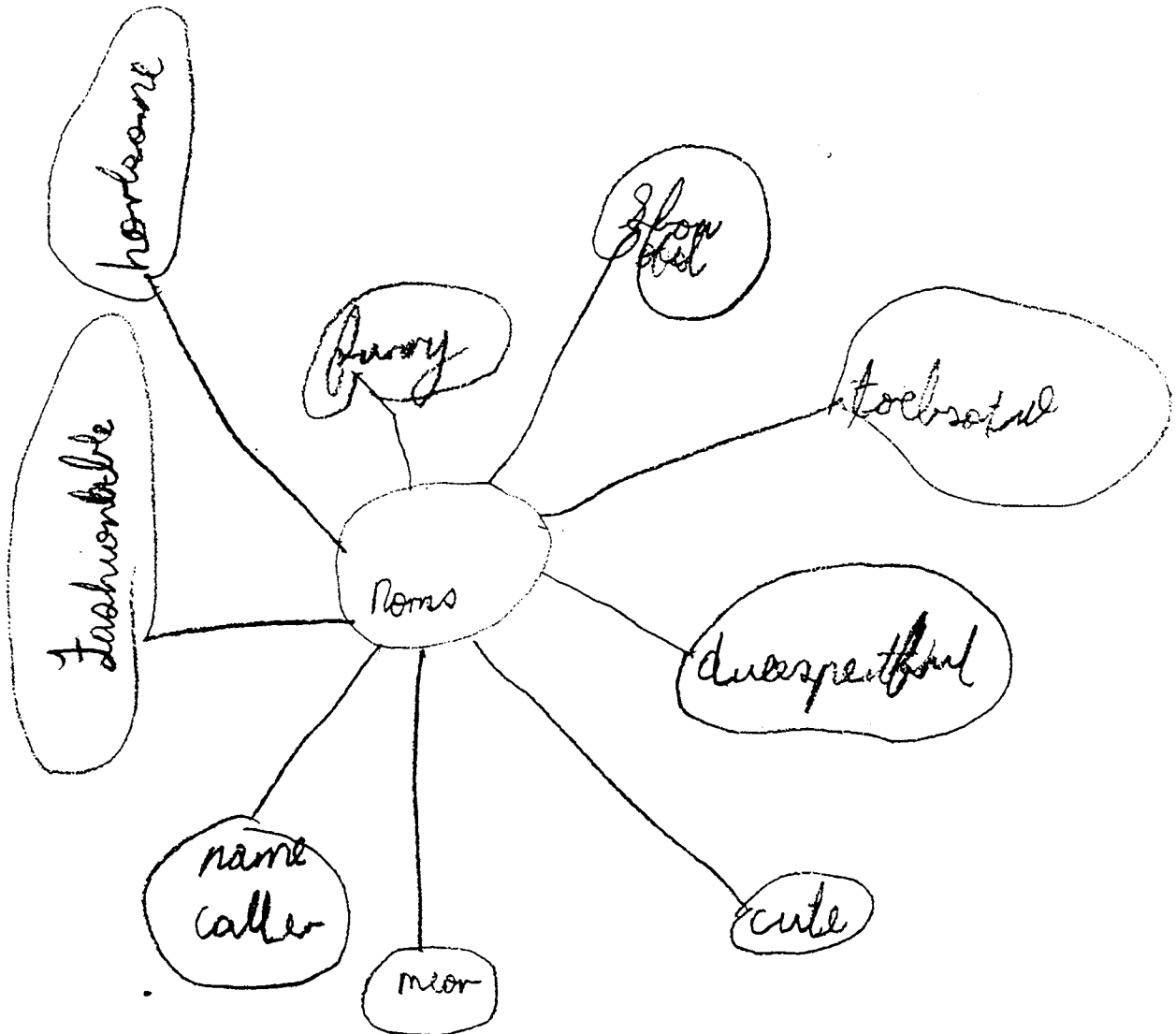
E 2 A - Guided practice will help

Produce a report of information

Tony

6/12/00

1. A snakes skin is very dry.
2. There are 2,400 kinds of Snakes.
3. The smallest snake is the Thread Snake.



Mrs. Burger

January 2000

SIE IV

Q.S.G.D.

16 years old

Basic Literacy

Describing using adjectives + adjective phrases

Bubble Map

Students will describe qualities of classmates

Learning Standard E<sup>1</sup>4a. Demonstrate a basic

understanding of the rules of the English language.

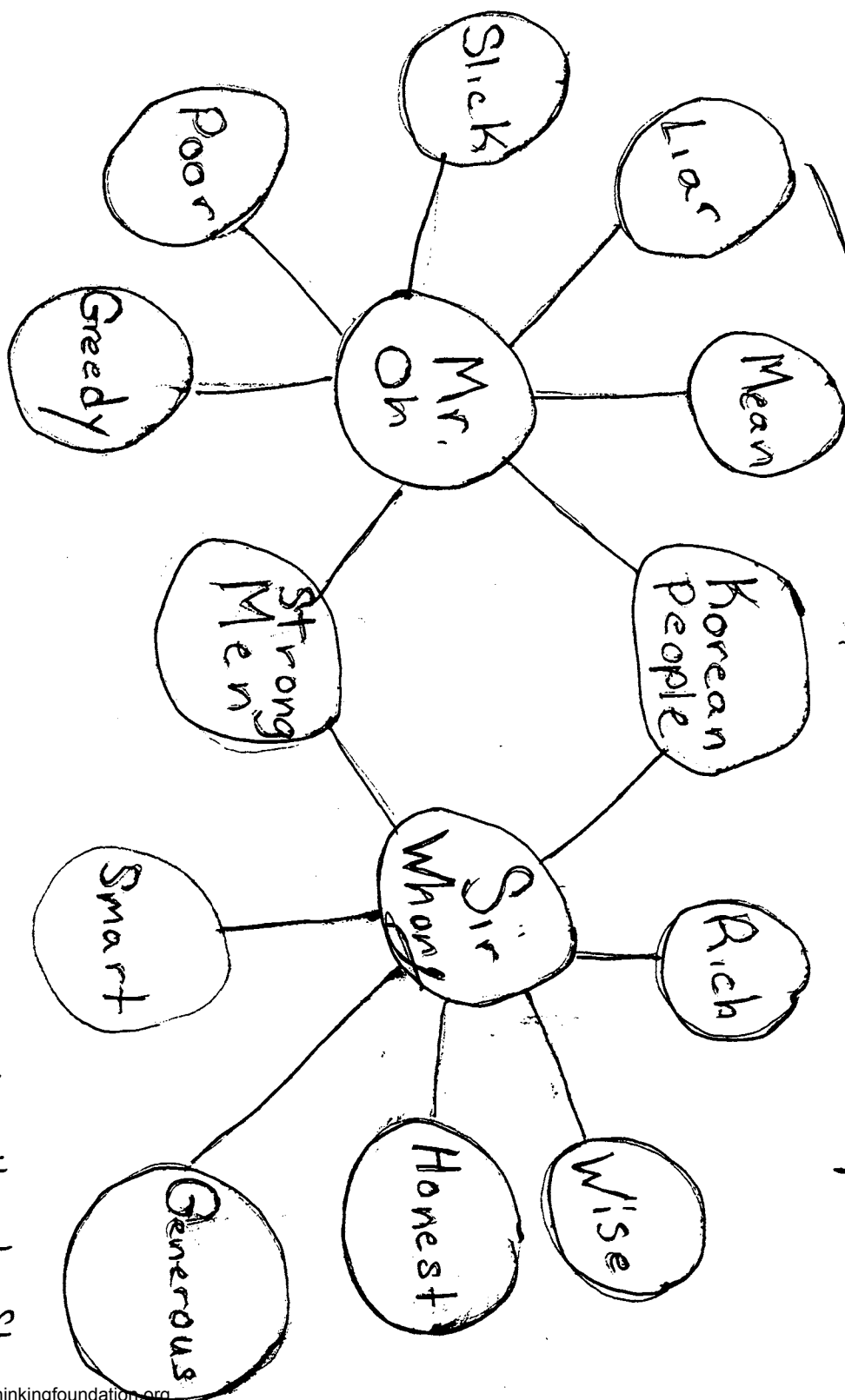
- Build vocab. day by day using adjectives to describe qualities of people.

Principles of Learning: Clear Expectations

- Models of student work,



# Bubble Map



Written by Steven

# Sir Whong And The Golden Pig

Flow MAP

Mr. Oh asked Sir Whong to borrow money for medicine for his sick mother

Sir Whong let Mr. Oh borrow the money

Mr. Oh said Sir Whong could hold his treasure "A Golden Pig" until he returned his money

Mr. Oh tricked Sir Whong and spent the money on Parties, Dinners and lazy friends

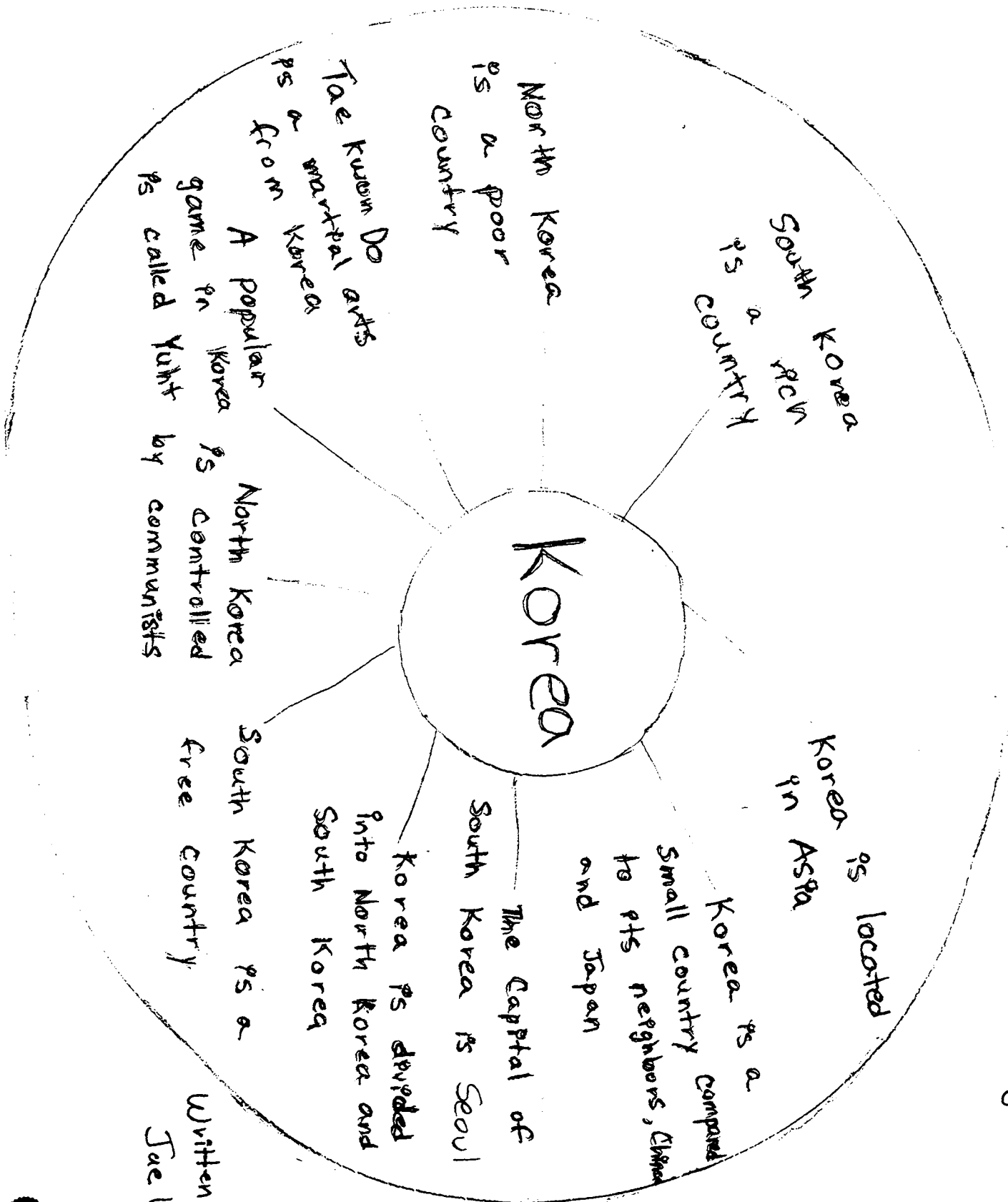
Sir Whong planned to outsmart Mr. Oh and get his money back

Sir Whong's plan worked and Mr. Oh left town never to be seen again

Written by Steven

# CIRCLE MAP

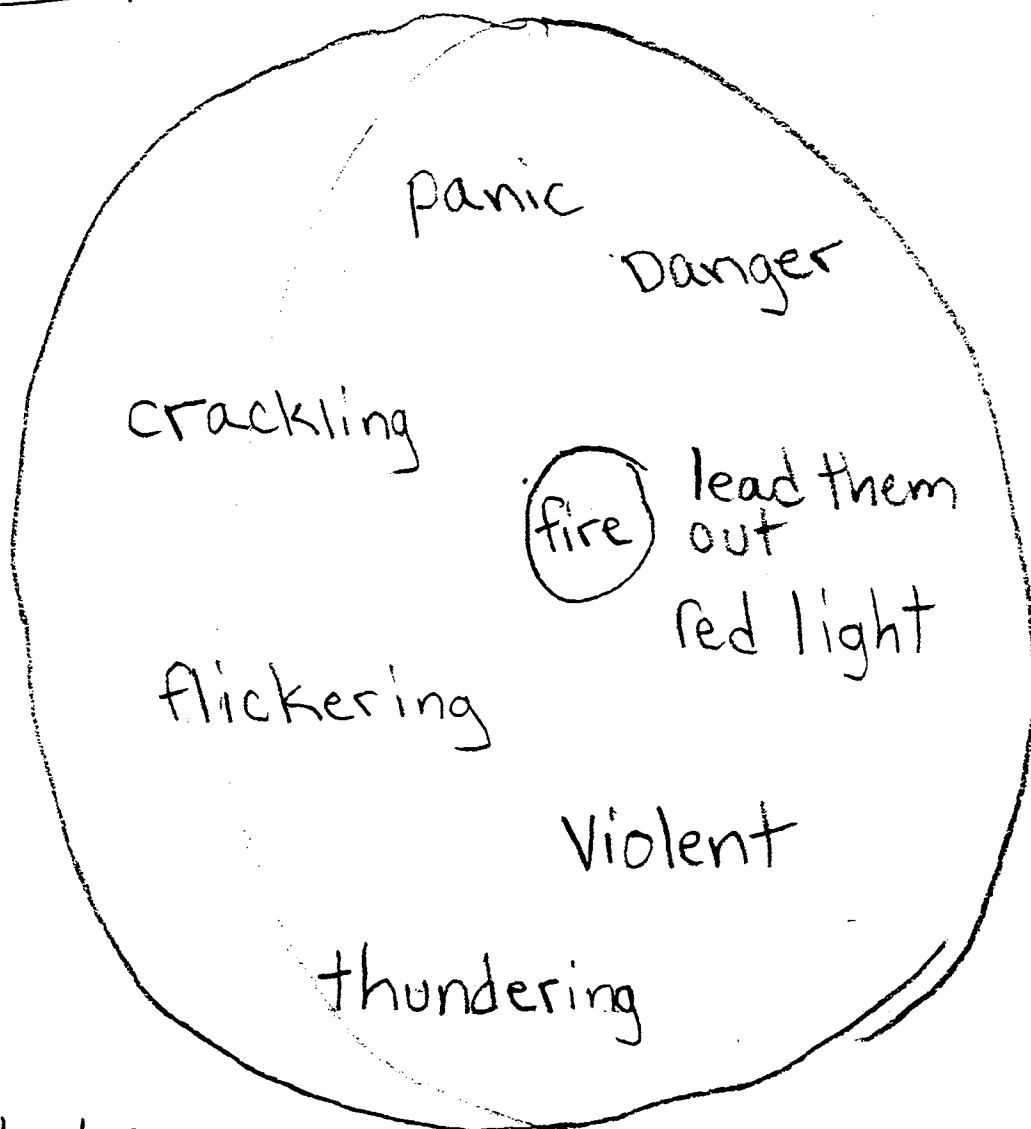
Brainstorming  
Defining in Context



Veronica

November 18/1999

Thinking Skill - Brainstorming prior knowledge.



Marion Lawless

Class 508 SIEIV QSCD

Basic literacy

Circle Map: Brainstorming

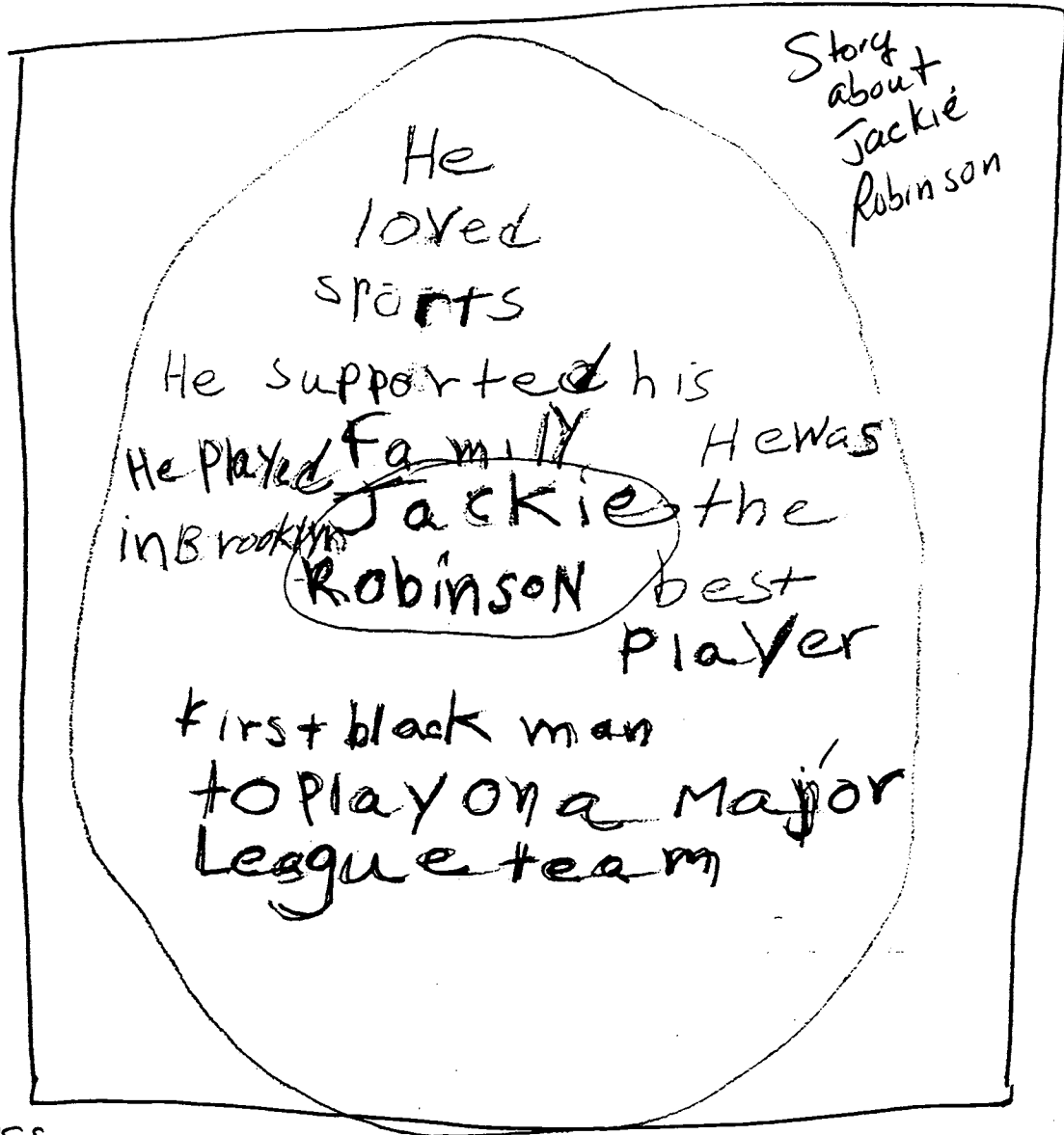
Before reading a selection from *Black Beauty*, students brainstormed ideas about fire.

Standard 1- Language for Information and Understanding

Learning Principle: Accountable Talk - Students discussed what they knew about "fire."

Daniel

504



M. Lawless

Class 504 ASCD SIETV

Basic Literacy

Read and discussed a story about Jackie Robinson.

Students verbalized important words and phrases on a circle map. Thinking Skill: Defining in Context  
Standard 2: Language for Literacy, Response and Expression  
Principle of Learning: Accountable Talk - Students stated reasons why J. Robinson was a hero.

Marian Lawless  
March 20, 2000  
S/E IV

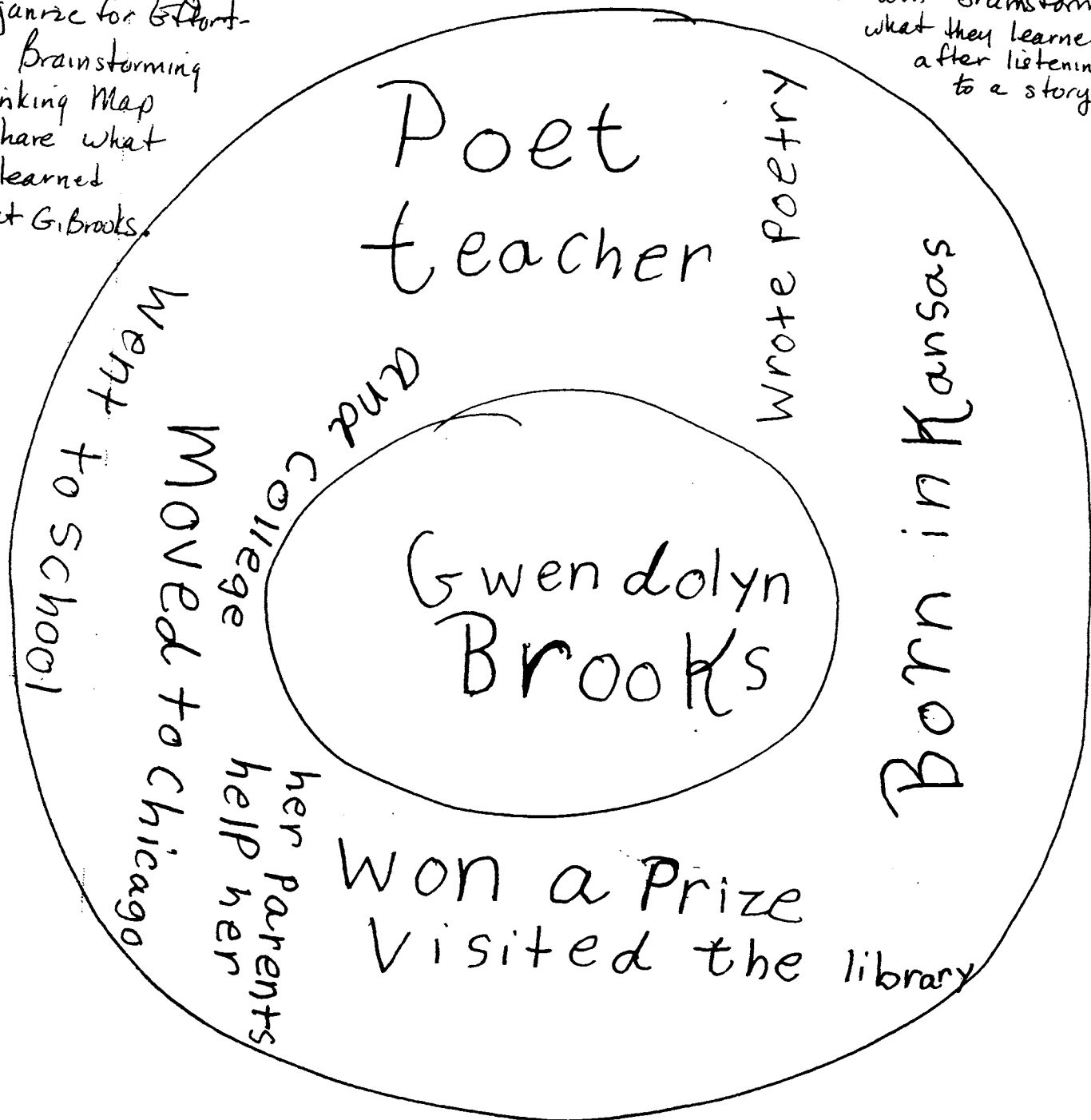
Circle Map Brainstorm

Q.S.C.D.

E2A - Guided Practice

W help  
Students will brainstorm  
what they learned  
after listening  
to a story.

Principles of Learning:  
Organize for Effort-  
Use Brainstorming  
Thinking Map  
to share what  
was learned  
about G. Brooks.

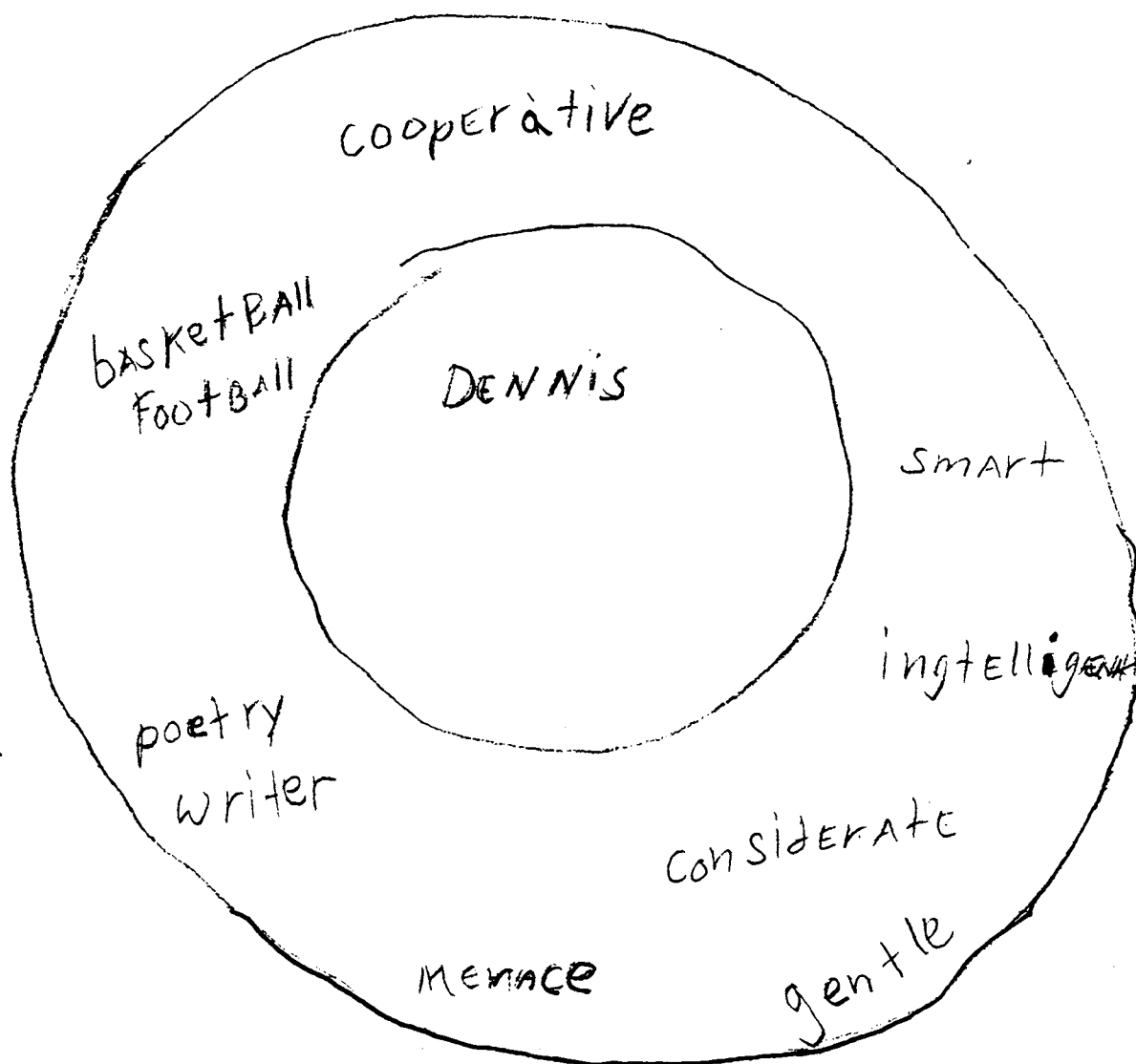


Rosemarie

508

— DENNIS

Qs/c/b



Marian Lawless

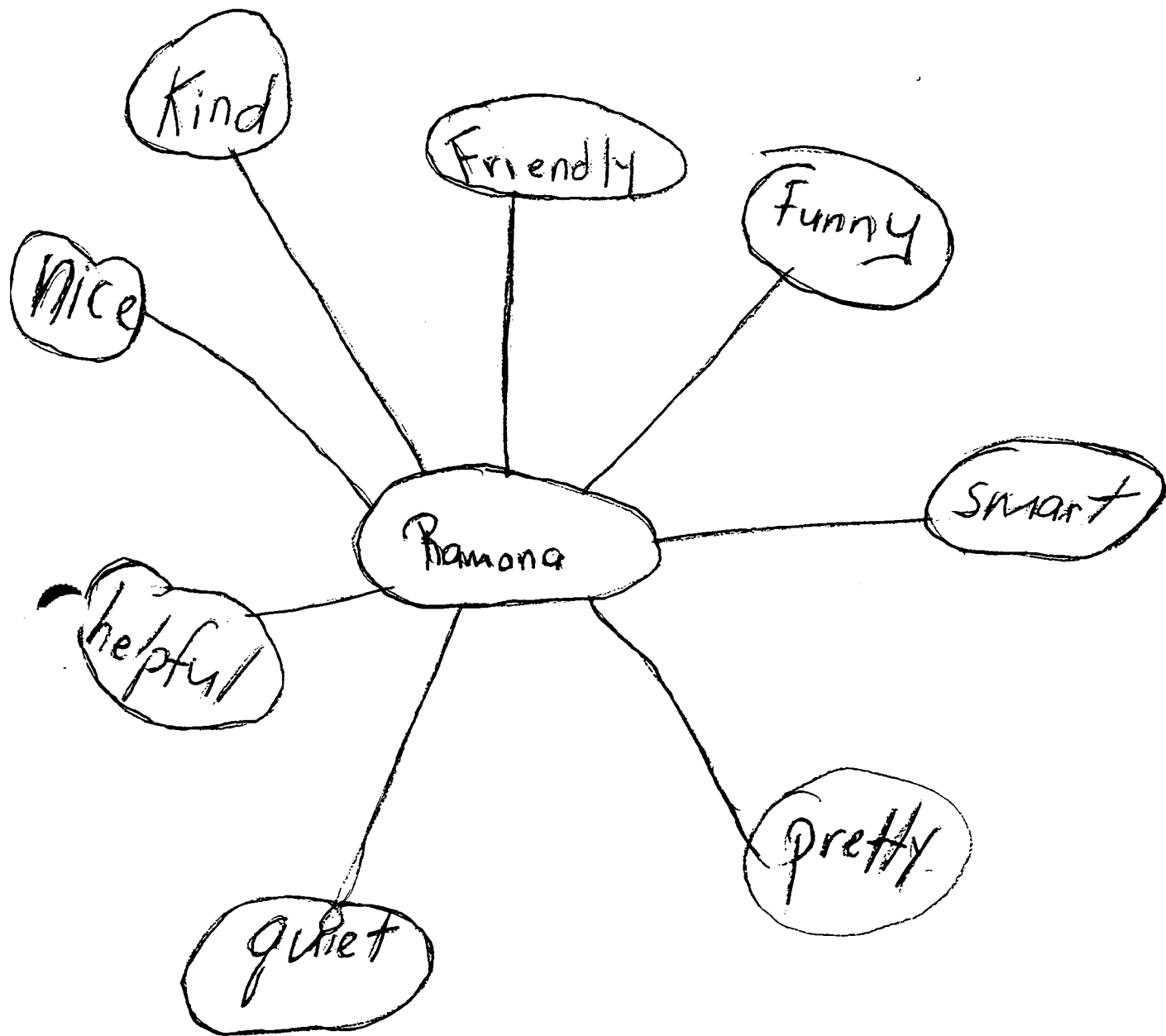
P752Q District 25

SLE IV Basic Literacy

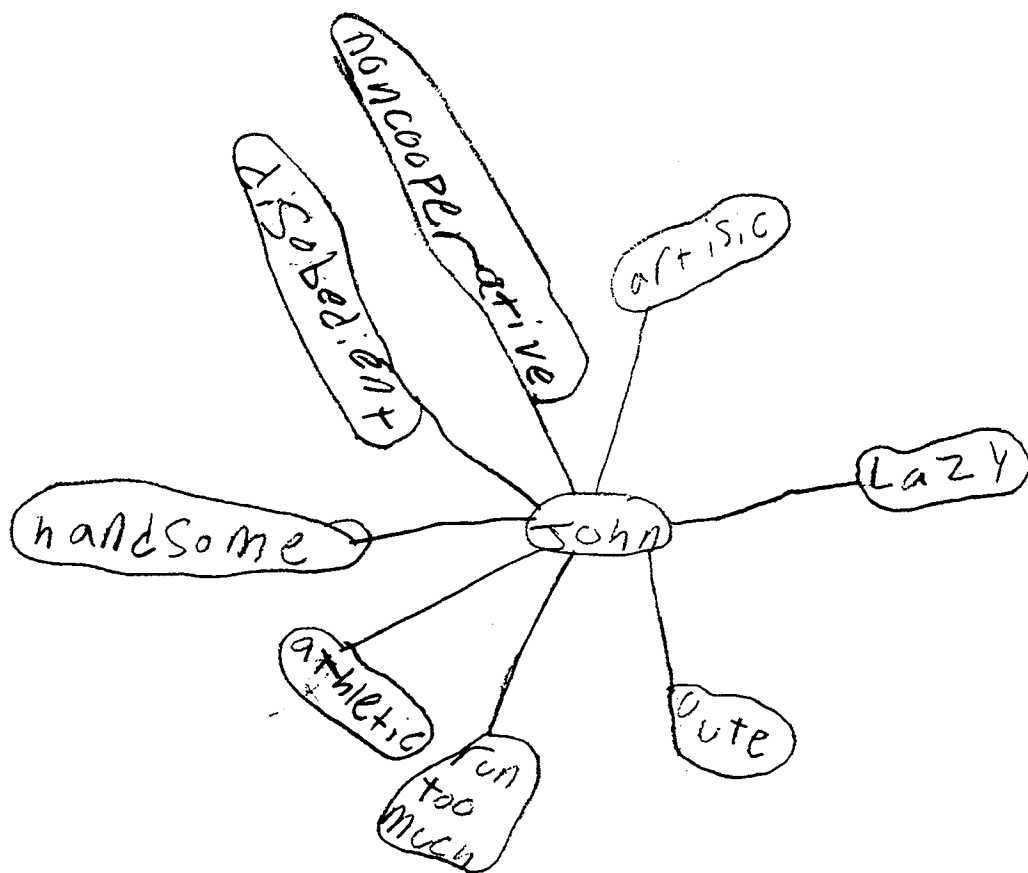
Hge 14

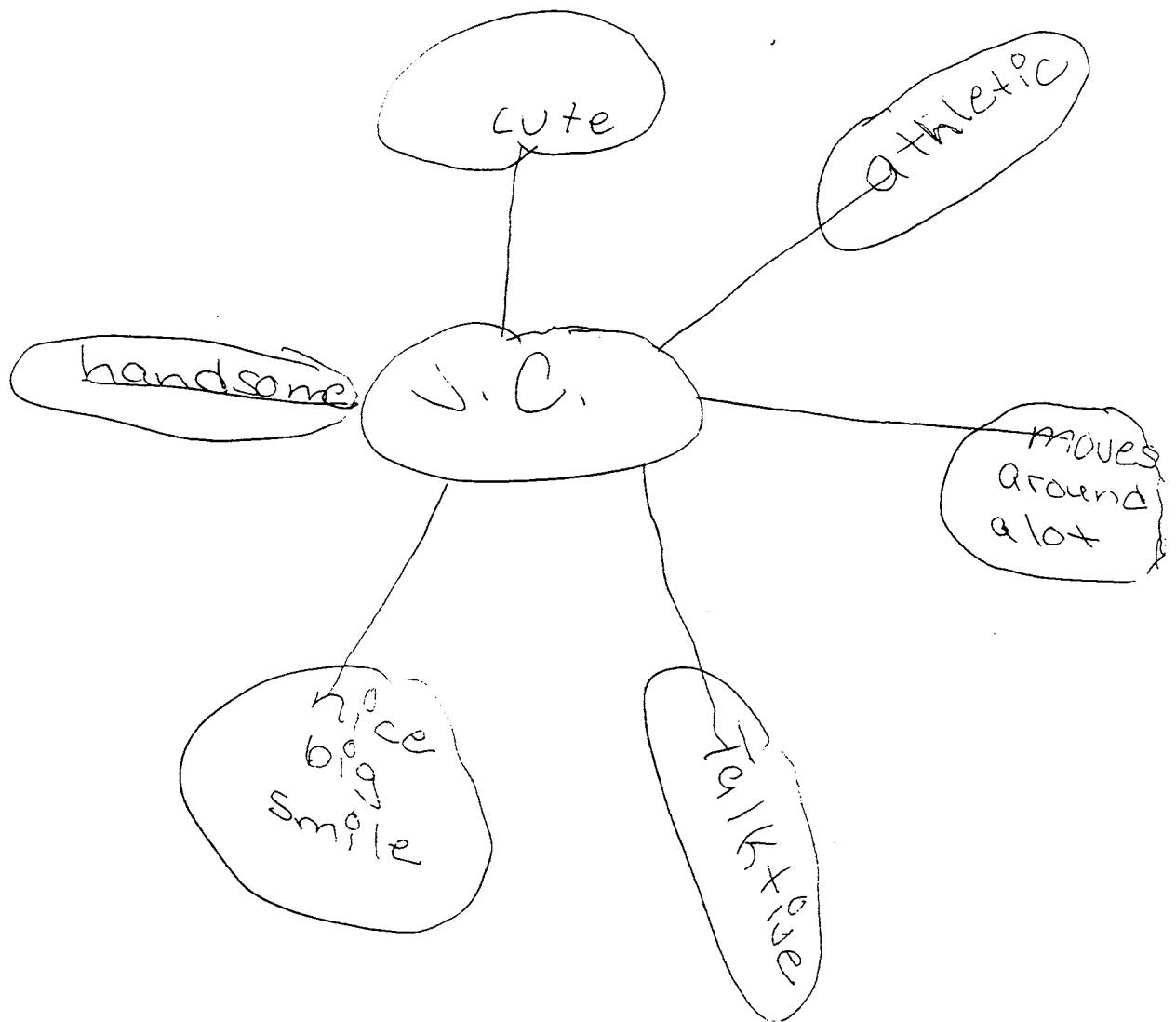
Circle Map - used for brainstorming  
and organizing information.  
(student worked on his own)

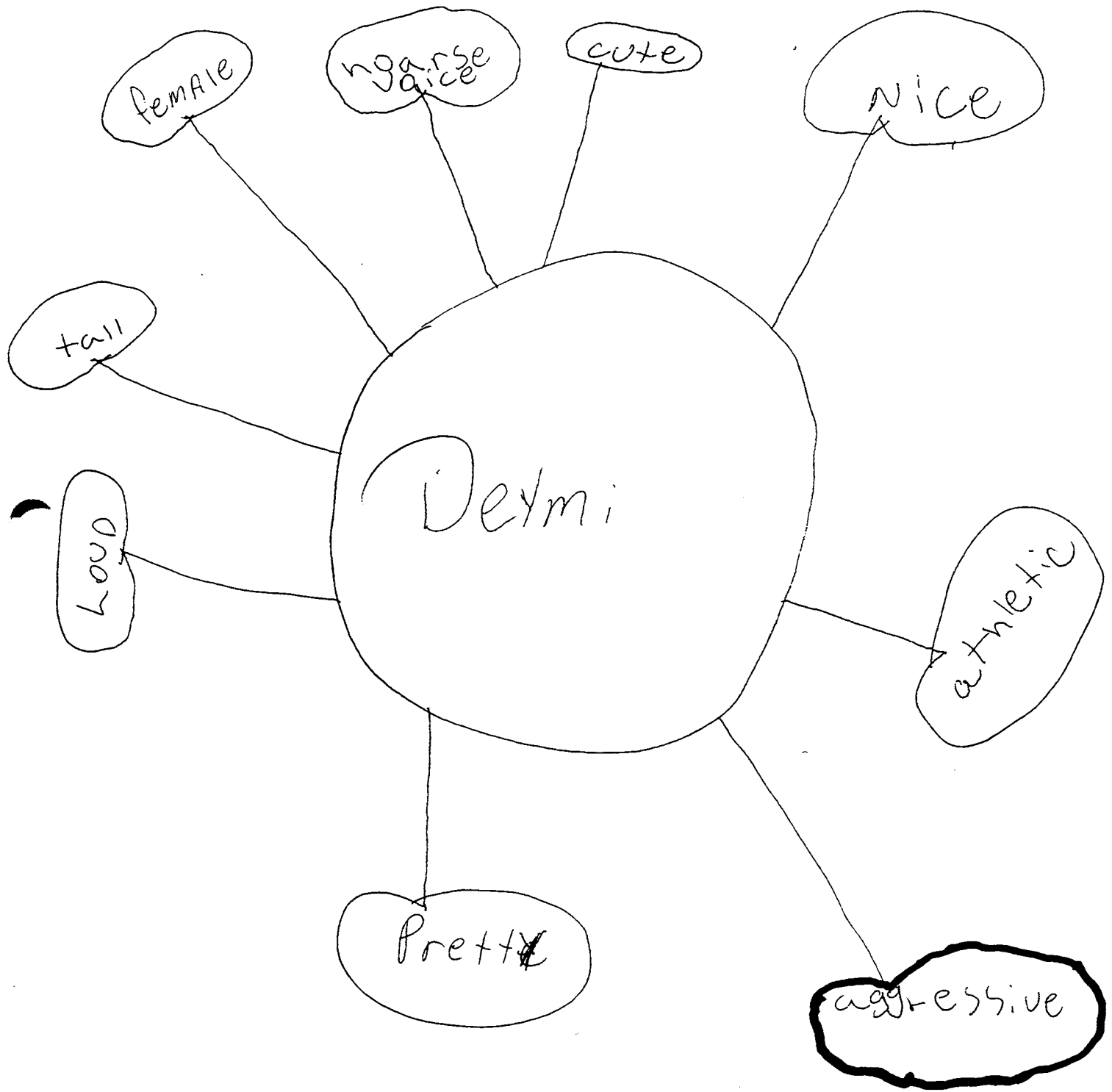
Principle of Learning - Socializing Intelligence  
English Language Arts Standard E2c  
Writing (Produce a narrative account,  
fictional or autobiographical).



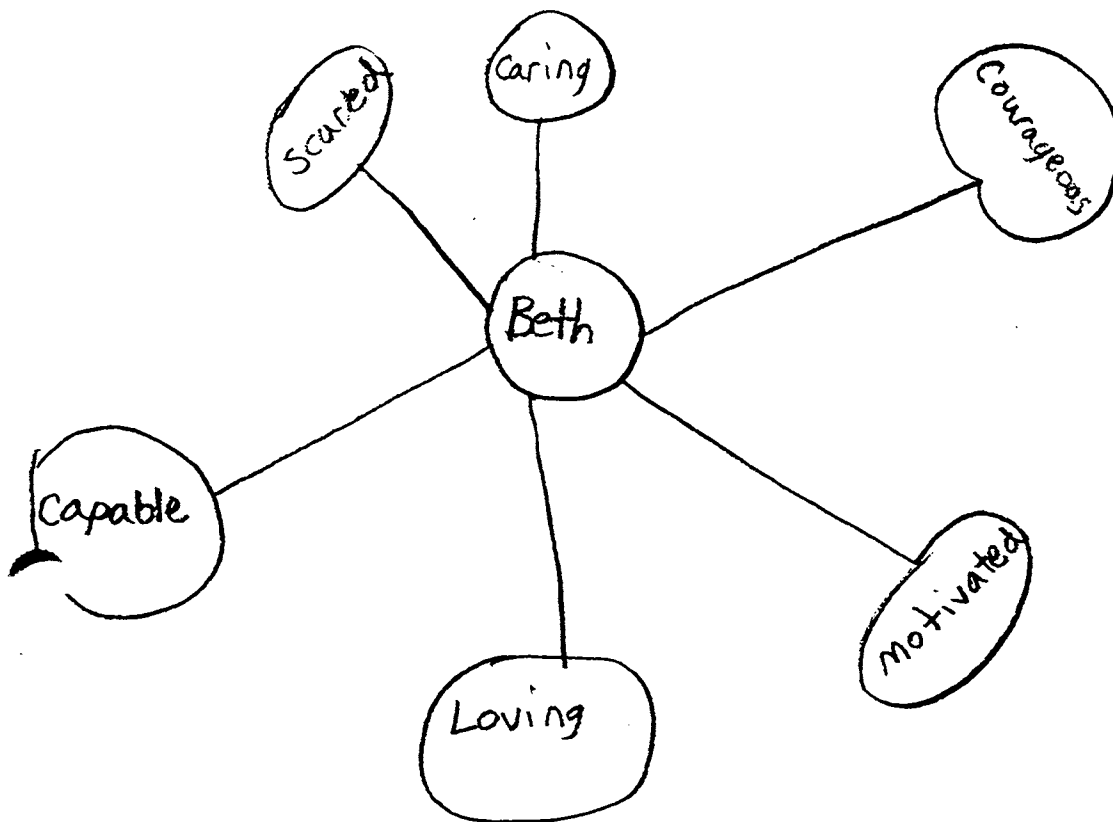


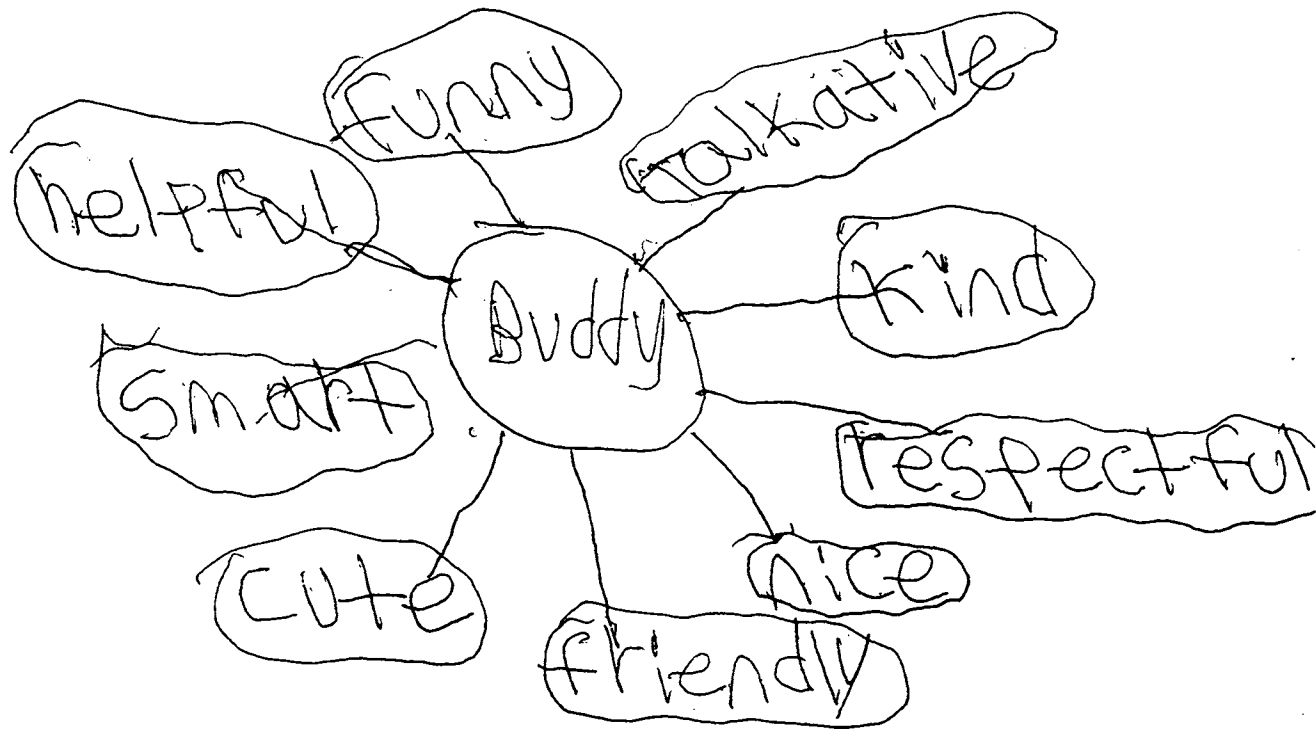






# Marvin Bubble Map.





H. Butcher  
March 2000  
SIE II

17 years old  
Basic Literary

Circle Map

OSLD

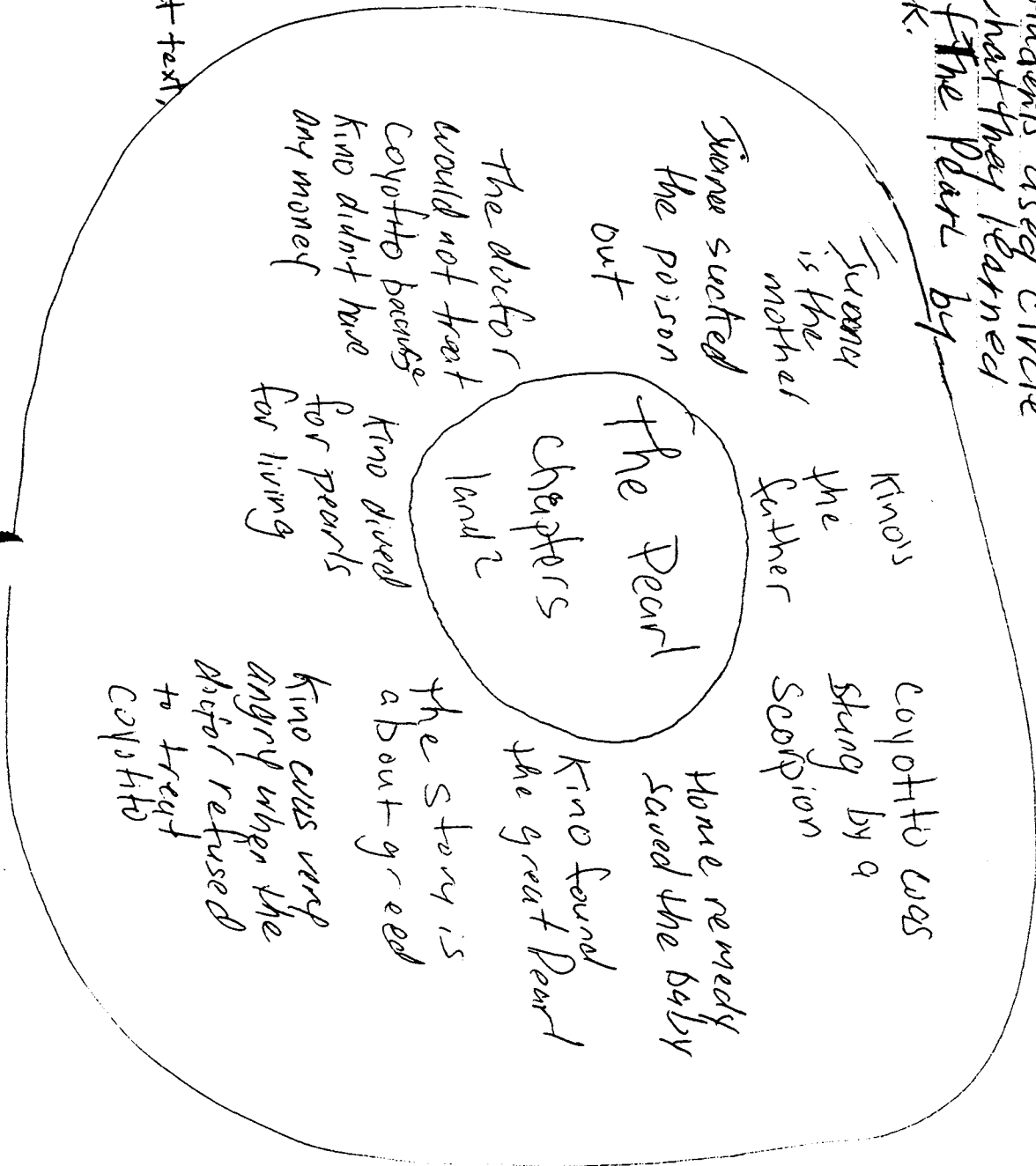
Brainstorming - Students use circle

map to brainstorm what they learned  
in chapters 1+2 of The Pearl by  
John Steinbeck.

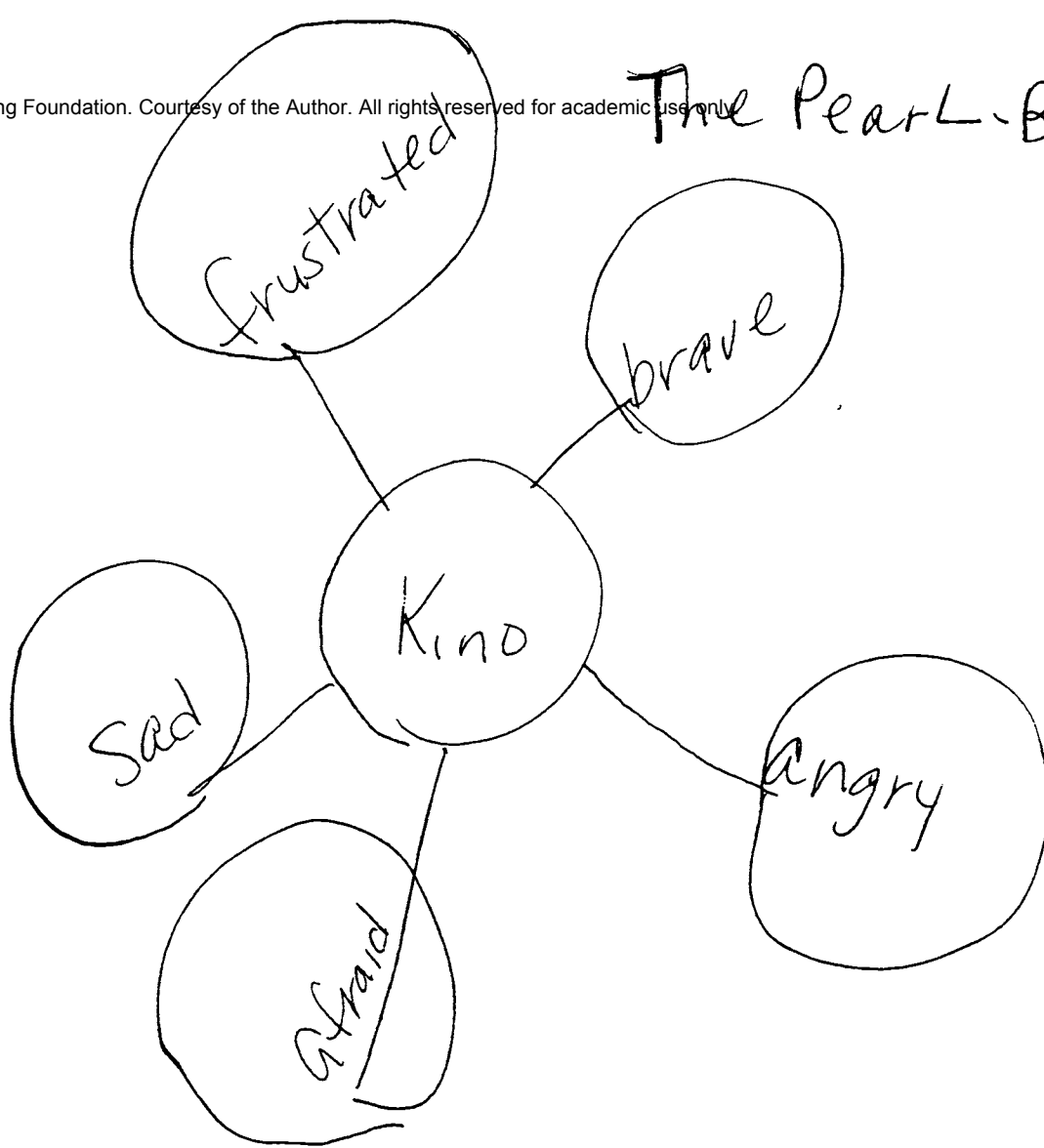
Pearl - Circle Map

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Principles of  
Learning:  
Academic rigor  
in Thinking  
Curriculum.  
Brainstorming  
used to interpret text.



# The Pearl-Bubble Map



Shirley Temple Wong  
sails from China to  
America.

Shirley doesn't know  
any English.

Bandit switch  
her name to Shirley  
Temple Wong from  
a movie star.

In The Year of the  
Boar and  
Jackie Robinson

Shirley gave Jackie  
Robinson a key to  
P.S. 8

Shirley goes to  
School and the kids make  
fun her language.

Shirley was babysitting  
and getting paid some  
money and the parents.

Shirley finally  
gets some friends.

Circle Map.  
Brainstorming.

Circle map to brainstorm information  
from a book they read.  
Circle map will be used as a support  
as students write a summary of the  
book.

Students used

H. Burger QSCD  
March 2000  
STE IV 17 yrs. old  
Basic Literacy  
Steven 509



### Annenberg Grant

Class 507, Mrs. Burger, and Mrs. Serrano participated in a project with the Teachers' and Writers' Collaborative. Daphne Greaves worked with class 507 Mondays and Thursdays period seven.

We wrote a play called *Two Enemies, Two Friends* and are demonstrating the writing process using a Flow Map.

A Flow Map is one of eight thinking maps. Thinking maps are used as a common visual language for transferring thinking processes, integrating learning, and for assessing progress.

The Flow Map is used for sequencing and ordering information.

We enjoyed working with Daphne and learned a great deal about how to write and perform a play.

THANK YOU, DAPHNE!!

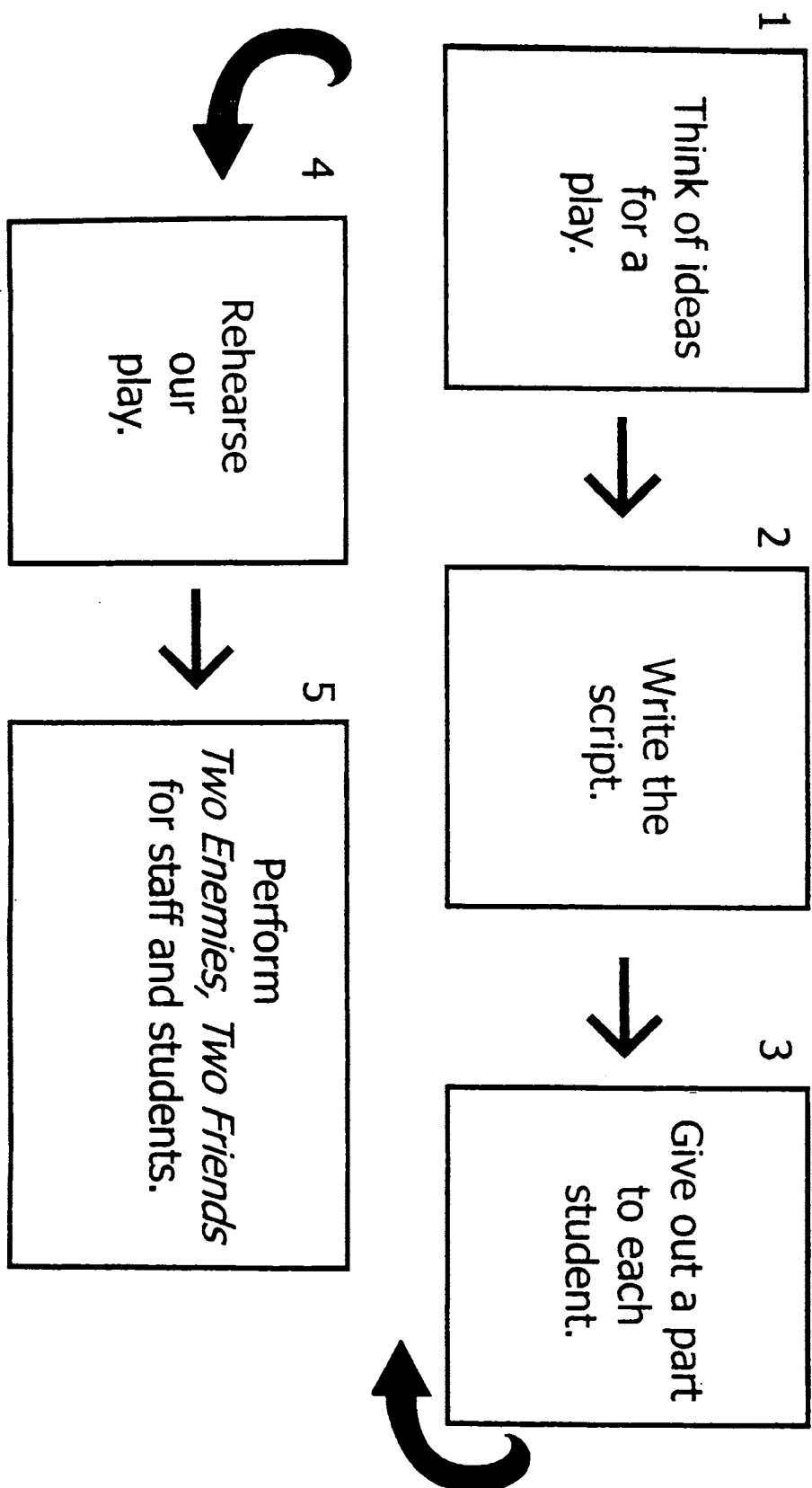
English / Language Arts

Standard 4- Language for Social Interaction

Students will read, write, listen and speak for social interaction.

Principles of Learning: Recognition of Accomplishment.

## FLOW MAP

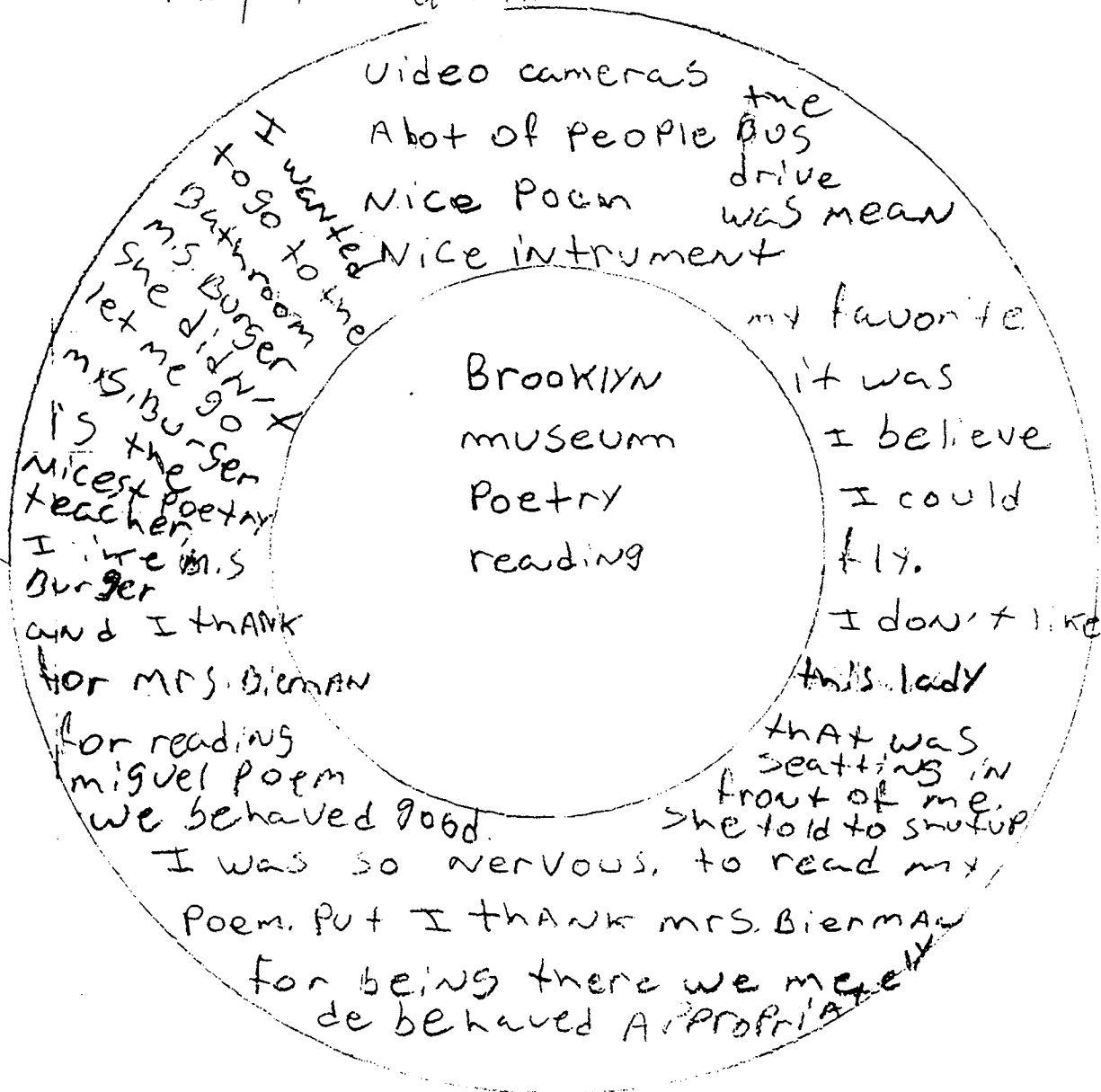


April 2000 16 years old

SL&T - Guided practice with help E2B  
Produce a response to an experience.

Students used circle map to brainstorm  
information after participating in District 75's  
Music and Poetry Festival.

Circle map was used as a support to write a  
Summary of the activity



Principles of Learning: Accountable Talk - Press for clarification of learning experience.

DExmi

Draft 1

Delfini ... Q.S.G.P.

503

# District 75's Music and Poetry Festival

On Tuesday ~~On~~ April 4/4/00 April 4, 2000

we went on a trip we <sup>were</sup> going to Brooklyn <sup>the</sup> museum to read <sup>our</sup> poems, I was very happy.

<sup>When</sup> we went inside it was so beautiful.

we took the elevator to <sup>the 3rd</sup> floor <sup>When</sup> we

got up there we used ~~the~~ the bathroom.

and then we went <sup>inside</sup> inside we <sup>saw</sup> saw a lot

of people some of them <sup>were</sup> were retarded

and we started. I was very scared <sup>and</sup> nervous

<sup>of the</sup> cameras. It was a big auditorium.

And then we started doing the poem

the first group was great I liked those

poems and then a couple of groups <sup>went</sup> went

and then it was <sup>my</sup> my turn. ~~I almost~~

~~had a~~ I thank all those teachers

<sup>who</sup> that went with us, especially Mrs.

Bienstock and Mrs. Burger for helping

us do our poems.

We saw a big  
auditorium  
with instrument.

Different School  
saying different poetry

We had small  
kids singing  
different songs  
and dance.

Brooklyn Museum  
Poetry Reading

I was reading  
a poem it was  
I AM Thankful For.  
I wrote the poem

Mrs. Bierman was  
reading a poem for  
Miguel

My classmates was  
scared to read it  
but I told my friends  
not to be scared.

We behaved  
with respect to the  
other people.

Steven

APRIL BURGER, DSC.D  
April 2000 - S.E. II - Basic Literacy  
17 years old

Guided practice with help  
English Lang. Arts. E & B -

Produce a response to an experience.  
Thinking Skill: Brainstorming Thinking Map Circle  
Principles of Learning Accountable Talk -  
press for clarification and explanation

Very good

Draft 1

Steven  
Q.S.C.D.

April 6, 2000  
Class 509

## District 75's Music and Poetry Festival

On Tuesday April 4, 2000 we went to the Brooklyn Museum Poetry Reading. There <sup>were</sup> ~~was~~ a lot of different schools <sup>there</sup> ~~their~~ performing and reading. My classmates <sup>were</sup> ~~was~~ scared to read but I told them not to be afraid. It was a big auditorium with lights cameras and people. They had staff members helping other kids out. My teacher told us we <sup>couldn't</sup> ~~can't~~ use the bathroom because we were up next so we had to wait. Ms. Bierma was reading a poem for Miguel because he was absent. The whole class had a lot of fun when we were <sup>there</sup> ~~they~~. It would be nice to do it again bye.

Draft 2

Steven  
Q.S.C.D.

April 6, 2000  
Class 509

## District 75's Music and Poetry Festival

On Tuesday April 4, 2000 we went to the Brooklyn Museum Poetry Reading. There were a lot of different schools there performing and reading. My classmates were scared to read but I told them not to be afraid. It was a big auditorium with lights, cameras and people. They had staff members helping other kids out. My teacher told us we <sup>couldn't</sup> use the bathroom because we were up next so we had to wait. Ms. Bierman was reading a poem for Miguel because he was absent. The whole class had a lot of fun when we were there. It would be nice to do it again bye.

Buddy

W/6/00

Big Avditerium  
Instrument  
poetry  
a lot of  
people  
a lot of  
scales  
small and  
idea cast  
seeing  
they were  
scared  
to do that  
times  
had you  
came  
MS Brooks  
watching

It was  
a good  
trapp  
to the  
Brooklyn  
museum  
doing  
poetry reading  
good

Brooklyn  
museum  
poetry  
reading



Student Product.

Buddy

Q.S.C.P.

4/7/00

## District 75's music and poetry festival

On Tuesday April 4, 2000  
we went to a poetry reading  
at the Brooklyn Museum  
we performed for District 75's  
music and poetry festival

We were in a big auditorium  
with lots of people from many  
schools. Small children and older  
kids were performing songs and  
poems. They did some dancing  
too. Some of us were scared  
to perform but I wasn't  
because I am used to it. I've  
had years of practice.

Cameras were taping everybody  
Mrs. Burget was watching  
us. And helped some kids  
read their poems I read  
mine with no help whatsoever.

Dictated to teacher.

## District 75's Music and Poetry Festival

On Tuesday April 4, 2000  
we went to a Poetry Reading  
at the Brooklyn Museum.  
We performed for District 75's  
Music and Poetry Festival.

We were in a big auditorium  
with ~~many~~ lots of people from many  
schools. Small children and older  
kids were performing songs and  
poems. They did some dancing too.

Some of us were scared  
to perform but I wasn't because  
I am used to it. I've had  
years of practice.

Cameras were taping  
everybody.

Mrs. Burger was watching  
us. And helped some kids read  
their poems. I read mine with no  
help whatsoever.

Mrs. Burger Q.S.C.D.

SIE IV--Basic Literacy H.R. 506 16/17 years old

E2-Produce a report of information

E5-Respond to non-fiction, fiction poetry and drama using interpretive and critical processes

Principles of Learning: Academic Rigor in a Thinking Curriculum

-Curriculum and Instruction are organized around major concepts

Recognition of Accomplishment

-Celebration with community

THINKING MAPS

As our contribution to Q.S.C.D.'s Multi Cultural Fair, our class 506 studied the country of Korea. We read a Korean folk tale -- "Sir Whong and The Golden Pig" as well as other books to gather information about Korean customs.

Thinking Maps were used as a major part of our class presentation. We demonstrated how we could compare and contrast two characters in our Korean fable using the Double Bubble Map. We sequenced the events of Sir Whong and The Golden Pig using a Flow Map and brainstormed information about Korea with the support of a Circle Map.

H.R. 506 Paraprofessionals: Mrs. Lindsay and Mrs. Clark

Students: Jae Won, Steven, Christine, Christina, Constante, Tony, Lanece, Asmaa, Norris, Adrienne, Sandra, Janet and Mario

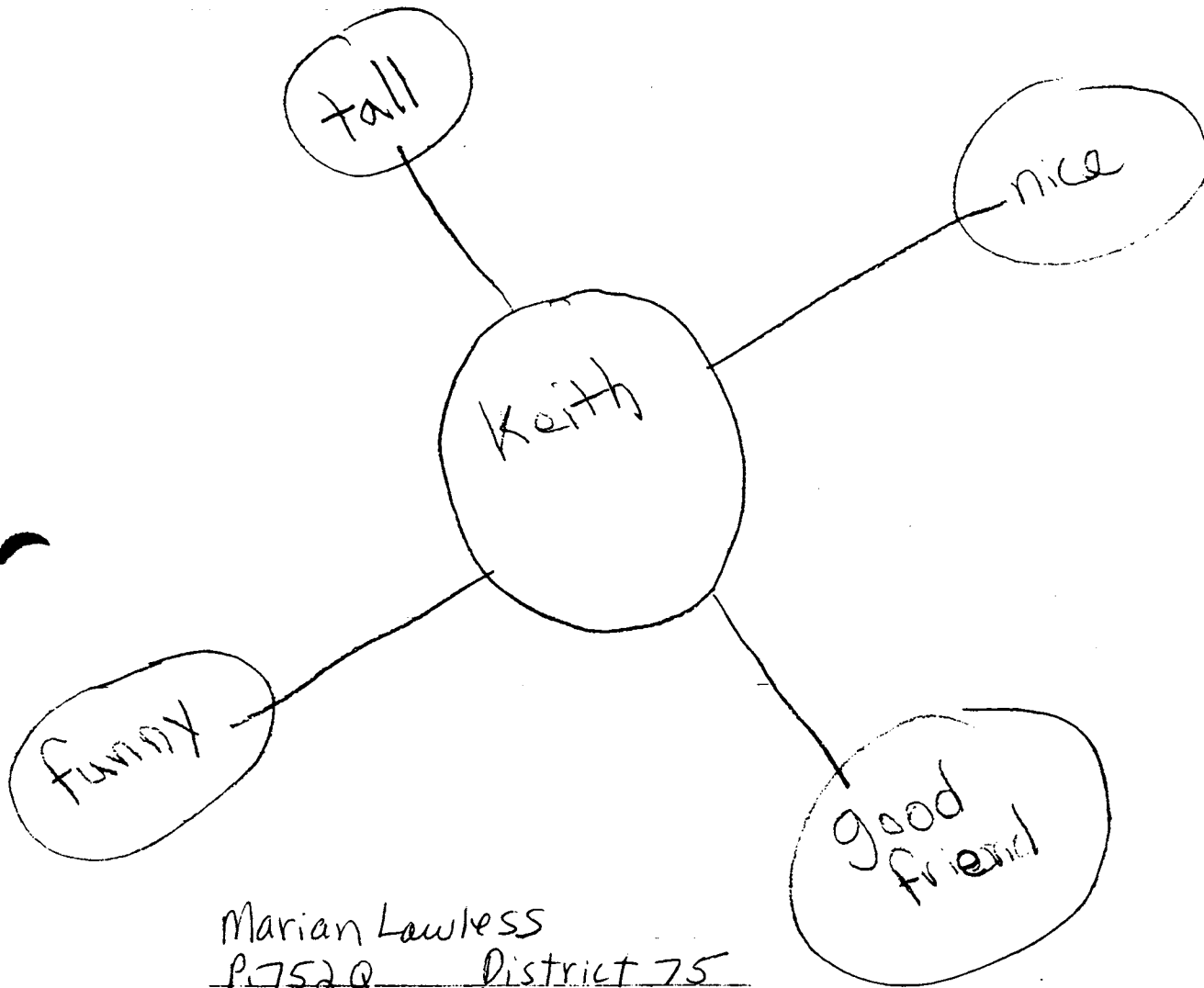
DENNIS

Q5/C/D

508

PEOPLE CALL ME DENNIS THE MENACE. BUT I AM  
INTELLIGENT AND GENTLE I HELP MY FAMILY IN THE  
HOUSE I AM A POETRY WRITER MY FAVORITE  
THINGS ARE BASKETBALL AND FOOTBALL.

Keith  
508



Marian Lawless

P. 752 Q District 75

SIE IV Basic Literacy Age 16

Bubble Map - skill of describing using adjectives and identifying qualities with teacher direction.

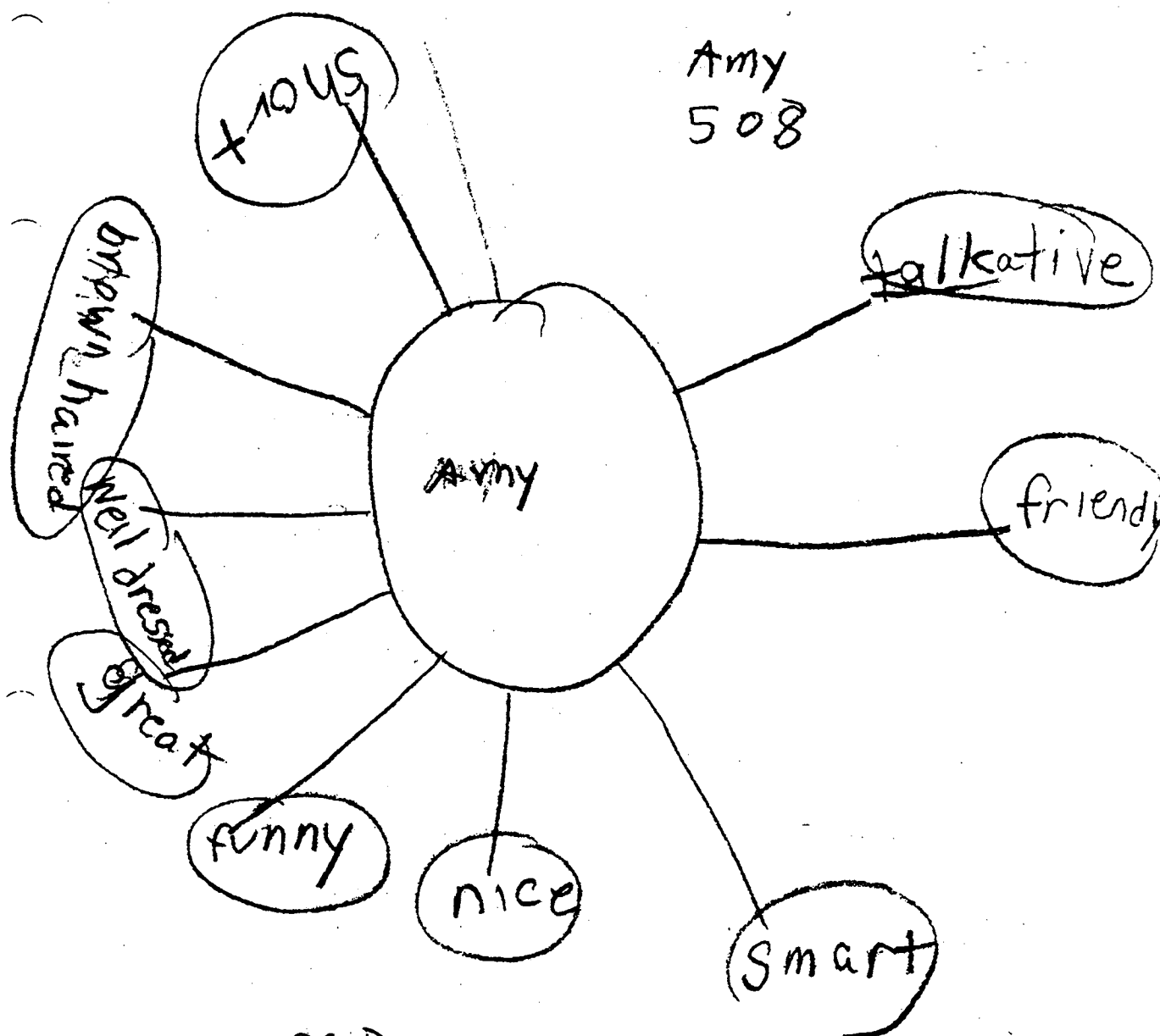
English Language Arts Standard Ex- Writing (Produce a narrative account, fictional or autobiographical).

Keith

Class 508

My name is Keith

I am very tall. I am a  
nice and funny person. And  
I am a good friend. when  
I graduate, I would like  
to be a basketball player.



QSCD

Mrs. Lawless  
January, 2000  
SIE. IV

17 years old

Basic Literacy

Describing using adjectives and adjective phrases.

Thinking Foundation. www.thinkingfoundation.org

Bubble Map. Thinking Skill - Describing qualities  
Students will describe their own qualities

Q.S.C.D.

Mrs. Lawless

January, 2000

SIE. IV

17 years old

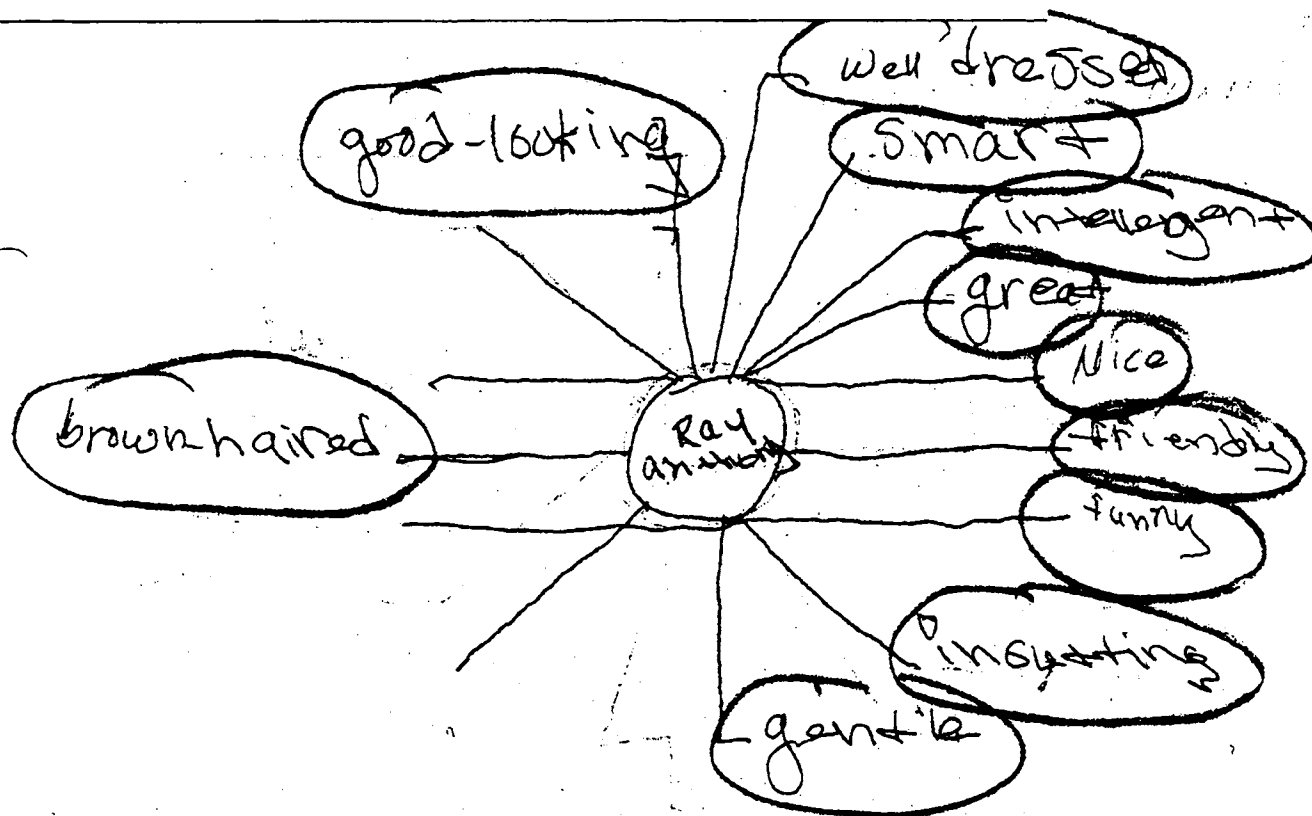
Basic Literacy

Describing using adjectives and adjective phrases.

Bubble Map. Thinking Skill. Describing qualities  
Students will describe their own qualities  
and write a paragraph about themselves  
using the map as a support.

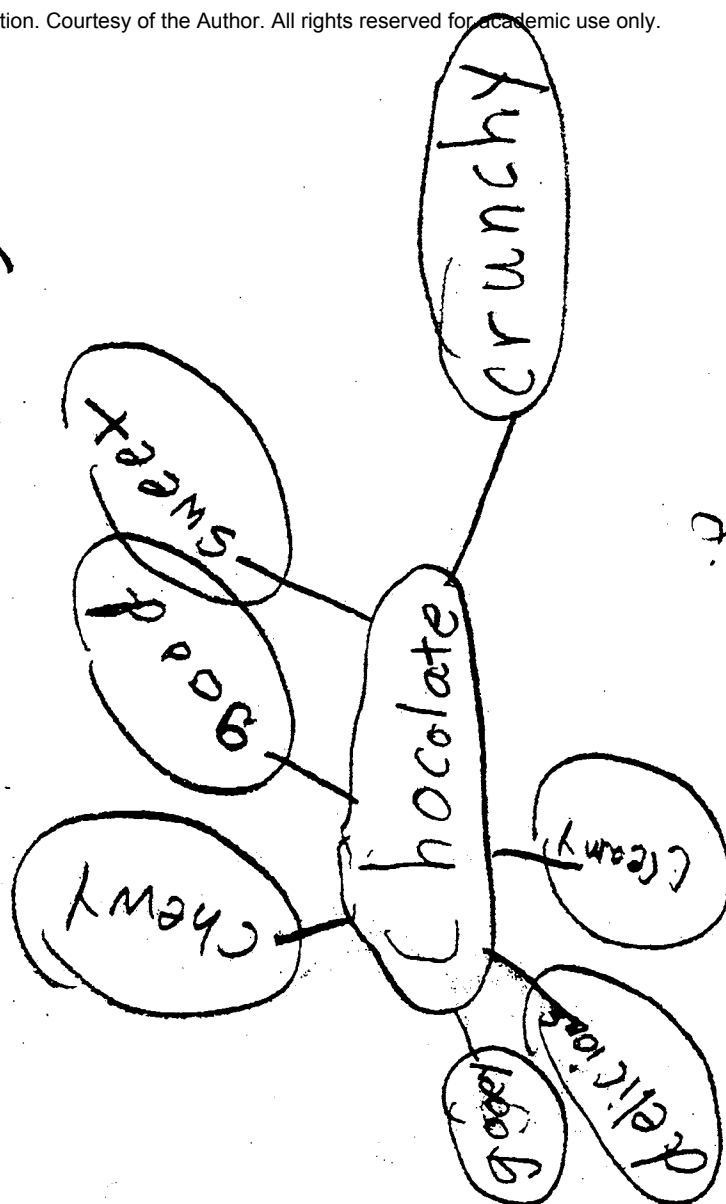
Independent practice with help.

February 8, 2000





508



Rosemary

Q.S.C.D

McLawless  
February, 2000  
S.I.E. IV  
17 years old

Basic Literacy

Describing using adjectives and adjective phrases.

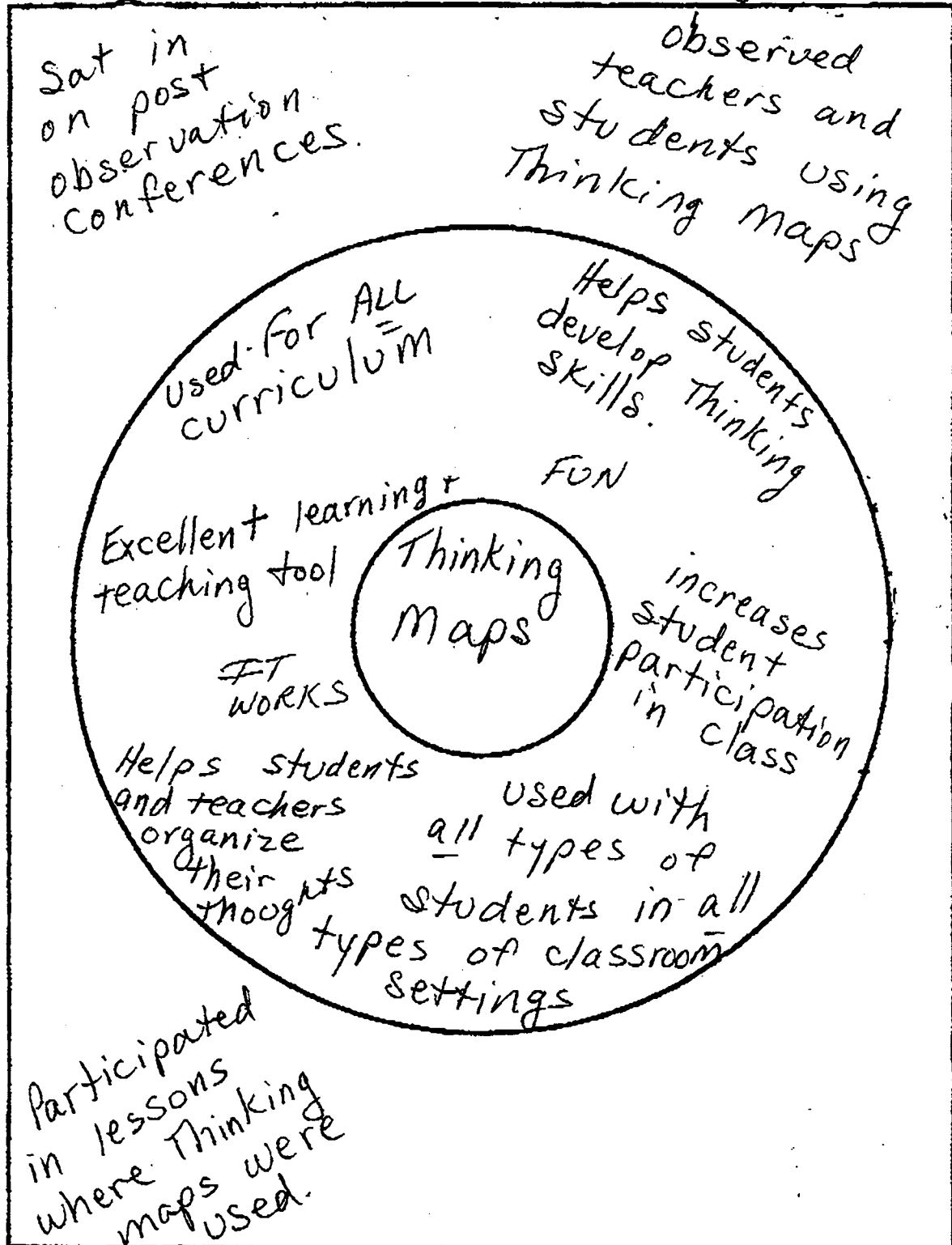
Bubble Map. Thinking skill: describing qualities.  
Students will describe the qualities of chocolate and write a short paragraph using the map as a support.

# What I Learned About

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## Thinking Maps

Support Teacher - Olga Rothman



**Thinking Maps® can be used by adults in many real life situations. The following maps are some samples of notes taken in a graduate course I audited in Applied Behavioral Analysis at City College given by Professor John Bahadourian.**

**Taking notes in this way helped me to better understand the material and remember what I had heard and/or read. The Maps were a great assist in studying for the tests.**

**I wish to thank Dr. Marilyn Rousseau for the opportunity to audit the course and Dr. John Bahadourian for teaching the course in such an interesting, informative and passionate manner.**

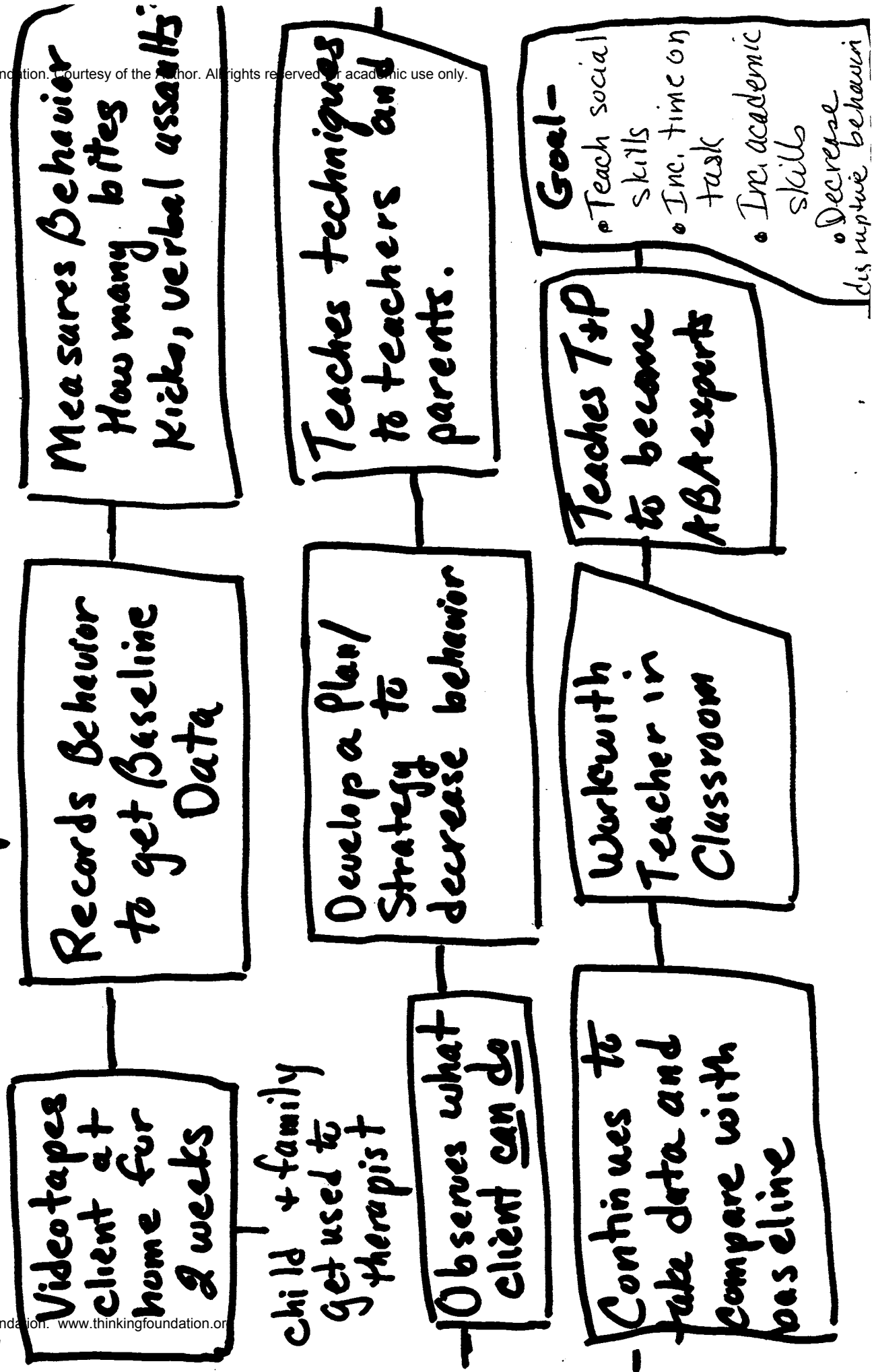
# Thinking Skill - Sequencing

J. Go Ystein

## Flow Map

What does an ABA specialist/therapist do?

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# Cycle Map

J. G. Goldstein

## Thinking Skill - Brainstorming

What did I learn about ABA during my first class - 2/3/00.

Course at U.I.U.

Course at

D. 28

- needs baseline data before program can begin

- developed by a psychologist

- changes behavior in children, adolescents and adults

ABA

- excellent for use in E.I. to prevent referrals to Special Ed.

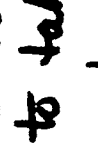

- uses specific distinctions in language

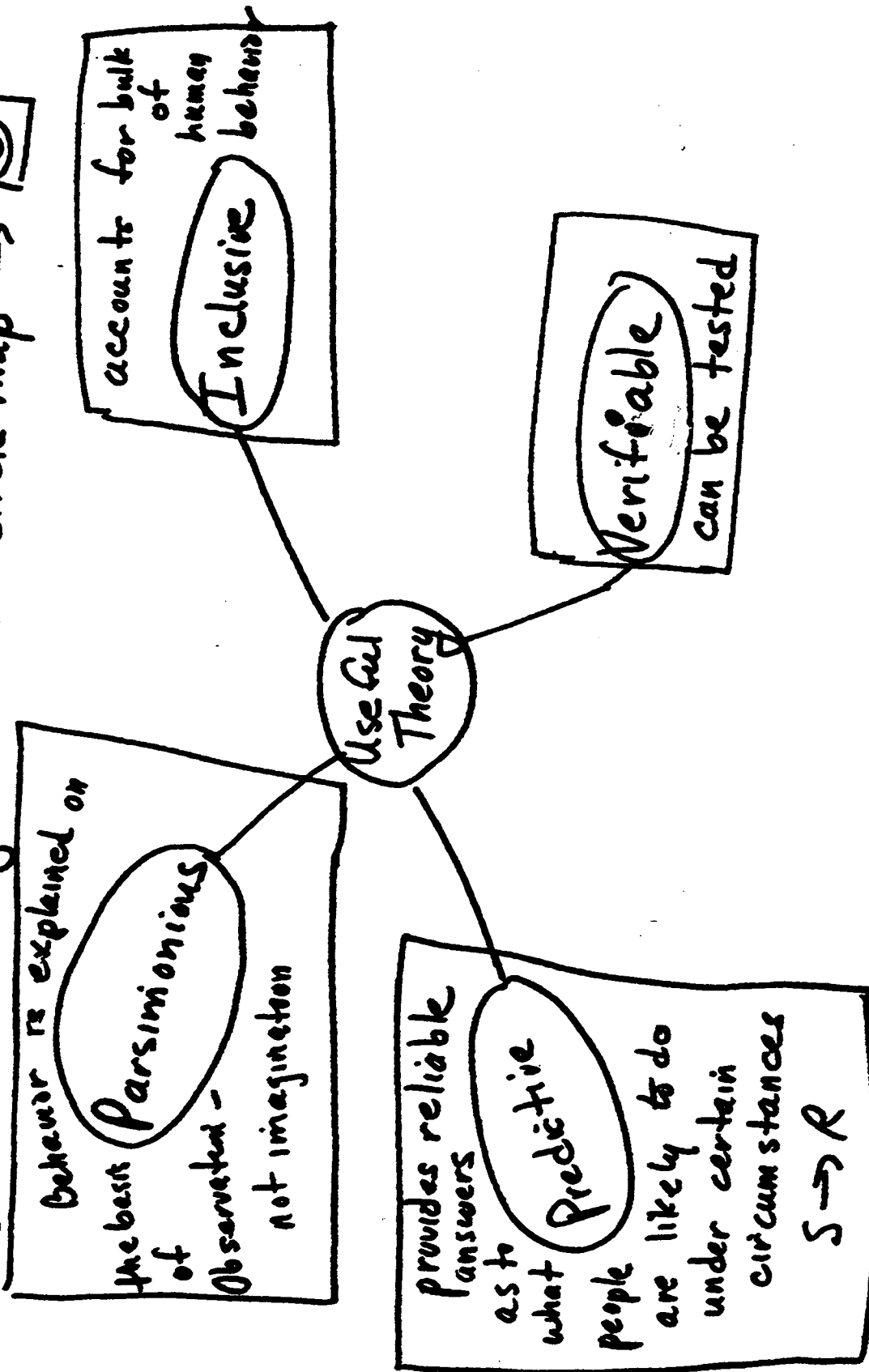
- uses clear verbal instructions consistently

- goal is for staff and family to become ABA experts

- develops strategies to change behavior based upon baseline data

- compares baseline data before treatment & treatment

What is a useful theory? Does this apply to the Behavioral Theory?  
Thinking Skill - Describing Qualities - Bubble Map →   
Thinking Skill - Defining in Context - Circle Map → 

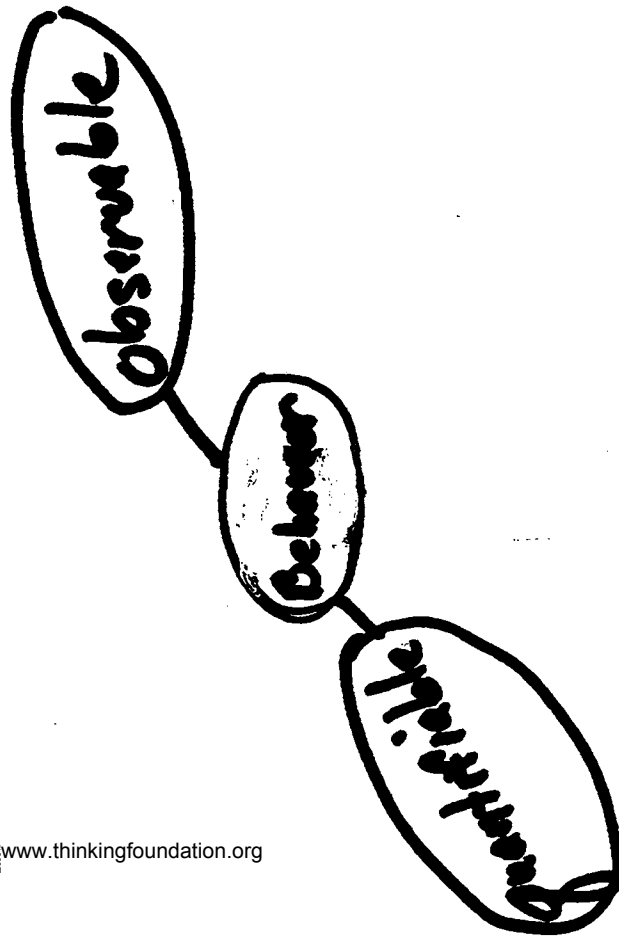


J. Goldstein  
Using T.M. to take notes -  
To organize and visualize  
information in ABA Course.

Behaviorist - A Behavior must be Observable and Quantifiable.

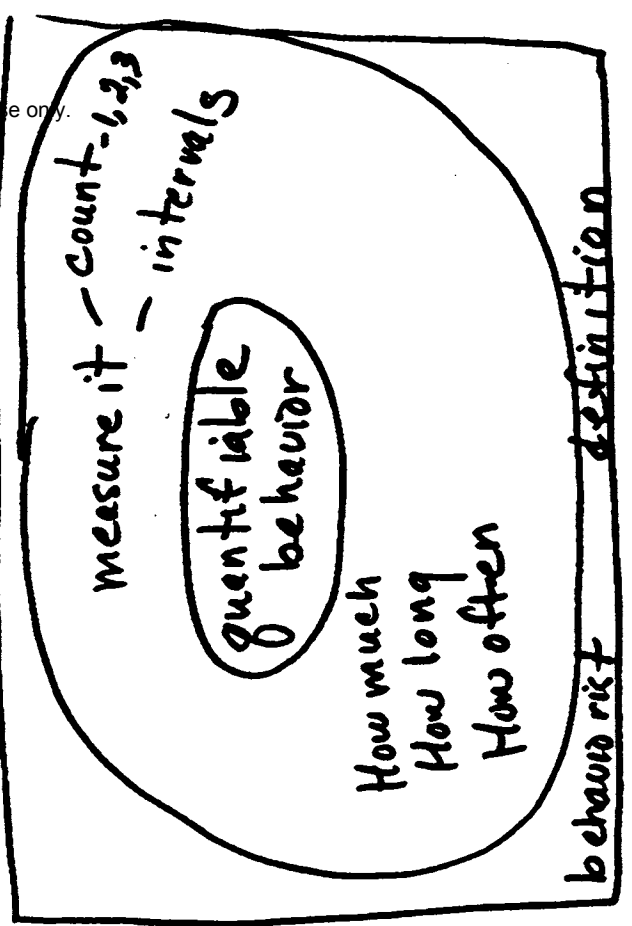
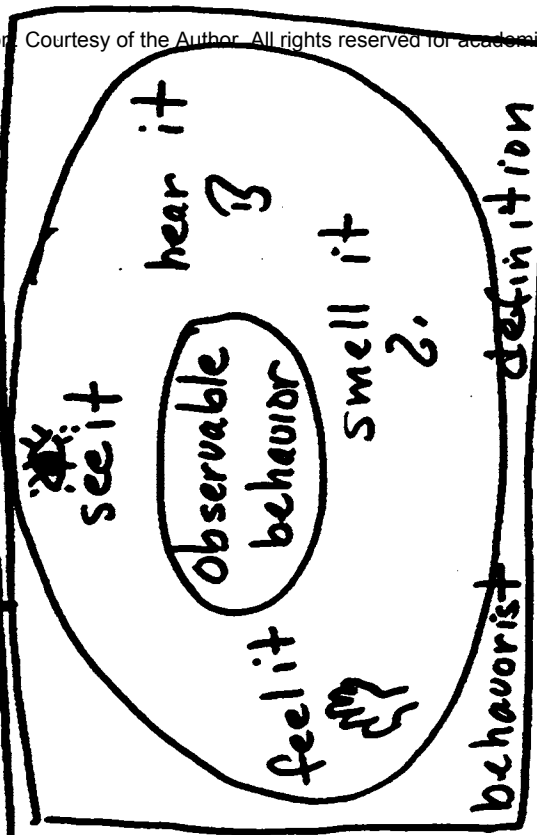
Thinking Skill - Describing Qualities

Bubble Map



Thinking Skill - Defining in Context

Circle Map



Thinking Skill - Defining in Context  
How would a "Behaviourist" explain human behaviour?

human behaviour is learned  
uses several learning principles  
Behavioural Explanation  
learning occurs as a result of the consequences of behaviour  
h.b. can be adaptive and maladaptive

Book: Applied Behavioural Analysis for Teachers



The Quality Assurance Team thanks Dr. Marilyn Rousseau for allowing her ABA check off lists to conclude this Resource Guide. We include them as a review for those teachers who took the Applied Behavioral Analysis course given by Dr. Rousseau as part of the Grant, in September, 1999.

We are pleased that the State has extended the Grant for the year 2000-2001 so that we can continue with staff development in Applied Behavioral Analysis and Thinking Maps®.

## ABILITY TO USE APPLIED BEHAVIORAL ANALYSIS PROCEDURES

PROCEDURE	ACCEPTABLE	NEEDS IMPROVEMENT	NEEDS TRAINING
1. Materials used (teacher's manual, students' books, handouts, etc.) <u>ready and easily available</u> . (Antecedent)			
2. Teacher uses appropriate <u>signals for students' attending and responding</u> . (Antecedent))			
3. Lesson is appropriately <u>paced</u> . (Antecedent)			
4. Teacher follows a <u>logical sequence</u> in presenting the antecedents. (Antecedent)			
5. Teacher ensures that all students in the lesson are on-task. (Student response)			
6. Teacher observes students closely to see that they are responding correctly. (Antecedent)			
7. Teacher uses appropriate <u>procedures to correct errors</u> . (Consequence)			
8. <u>Errors are corrected</u> immediately and consistently. (Consequence)			
9. Teacher gives <u>adequate feedback</u> to students ("Yes, the word is red," or, "Good answer." (Consequence)			
10. Record keeping procedure is up-to-date.			

\_\_\_\_\_  
Observer

\_\_\_\_/\_\_\_\_/\_\_\_\_  
Date

## EXPLANATION OF RATING SHEET FOR APPLIED BEHAVIOR ANALYSIS PROCEDURES

ITEM	RATIONALE	IMPORTANCE
1. Materials ready & easily available.	To eliminate wasted time.	When students are not actively engaged in the lesson, they will stop paying attention and are likely to become disorderly.
2. Signals for attending & responding.	Students learn the correct response to make to the teacher's signals.	Signals prompt students' responses.
3. Lesson is appropriately paced.	Lesson should move at a pace that keeps the students on their toes.	Lesson that is too slow causes students to lose interest; too fast, and they give up.
4. Logical sequence in presenting the antecedents (sequential curricular materials).	Each lesson must be part of a larger goal, and each step within lessons should enable students to move towards understanding or learning the skill being taught.	Lessons that are not clearly & logically presented will confuse students, prevent learning, and increase behavior problems.
5. All students are on-task. (On-task means appropriately engaged with the teacher, other learners, the curricular materials, or the motivational system.)	Students who are off-task are not learning.	Learning occurs when students are engaged with the teacher, the materials, or the motivational system.
6. Teacher observes closely to see that all students are responding correctly.	Teacher must be alert to which students are making errors, so they can be corrected immediately. (See 7, 8, & 9)	Helps keep students from falling behind and failing to learn necessary skills and concepts.
7. Teacher uses appropriate procedures to correct errors.	Error correction should not be punitive; otherwise, it will suppress students' willingness to try.	Use of positive correction will enable students to learn more and learn faster. Students will be more willing to learn.
8. Errors are corrected immediately and consistently.	Errors must be caught as soon as they occur to avoid students' practicing incorrect responses.	Immediate error correction helps students discriminate correct and incorrect responses, and increases the likelihood that they will respond correctly the next time.
9. Adequate feedback.	Feedback should be immediate and descriptive to help students learn the correct responses to make to particular antecedents.	Helps reduce errors in learning, and increase the likelihood that students will respond correctly the next time. Students know why they are being reinforced.
10. Record keeping procedure is up-to-date.	Instructional decisions (when to move forward or step back) are based on daily individual student performance records.	The teacher should use student performance data (i.e., correct & incorrect responses and objectives mastered) for decision-making.

scale was used with 1= *Poor* and 5 = *Excellent*. The resulting mean score was a perfect 5.0. There was no argument about how they felt about Dr. Hammonds.

The respondents were asked how relevant the course was to their specific teaching needs. Except for one respondent they said that they learned:

- to understand the needs of individual children
- the meanings of behavior problems
- how to maintain student journals
- how to teach students with learning disabilities

The respondents were asked what approach used by the presenter impressed them the most. The answers of two respondents failed to address the question. The others were impressed by:

- the personal knowledge and caring demonstrated by the presenter
- the thoughtful way in which the course was presented

The respondents were asked what kind of help will they need to implement what they learned in the course. In order of frequency the answers were:

- help with hands-on activities
- more resources (manuals, guides, books, etc)
- more workshops to enhance what they learned

Some of the individual comments made at the end of the survey were:

- I would like to take another class with Dr. Hammonds (3)
- I was glad to be invited to participate in such an extraordinary and rewarding course
- Dr. Hammonds is the best education teacher that I ever had
- Dr. Hammonds is a fantastic instructor

**Note:** While teachers were invited to participate, the primary group for whom this 15-session masters level course on assessing and interpreting child behavior was intended were District 28 SBST clinicians and members of the Committee on Special Education. The course description stated that participants will learn how to apply new assessment tools for students with special needs, and to help them understand, interpret and use collected data in the formulation and review of the goals and objectives of Individual Education Plans (IEPs). The course was scheduled for the fall semester but was postponed and rescheduled for the spring term. This change may have deterred the involvement of these clinicians. It is not clear how many clinicians (if any) would have participated if the course were given in the fall, as planned.