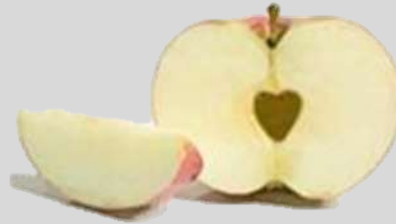


Getting to the Core  
Superior standards  
Supportive school climate  
Successful students



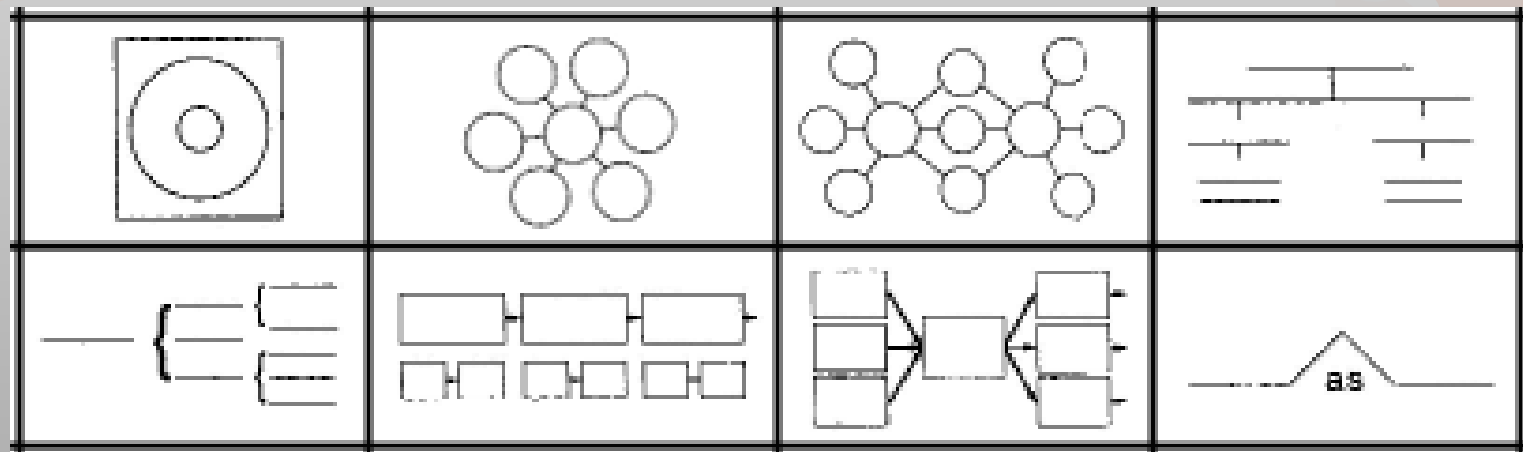
# THINKING MAPS REVIEW

**MONICA CUIEL**  
**CERTIFICATED LEARNING AND ACHIEVEMENT SPECIALIST**

**STAFF DEVELOPMENT DEPARTMENT**  
**JUDITH BARDEN, DIRECTOR**  
**NOVEMBER 7, 2012**

# Objectives:

- Review and practice all 8 maps
- Focus on EL support using the maps



# Common Core and Thinking Maps

- Common Core standards include “rigorous content and application of knowledge through higher order skills”
- Common Core requires students to use evidence to support their findings
- Reading and Writing standards are included for each content area
- Thinking Maps are visual tools used to represent the critical thinking required to access rigorous content and apply higher order skills
- Students provide evidence and cite their sources of information on the Frame of Reference
- Thinking Maps are tools used to break down complex text, orally summarize information, and take it to writing.

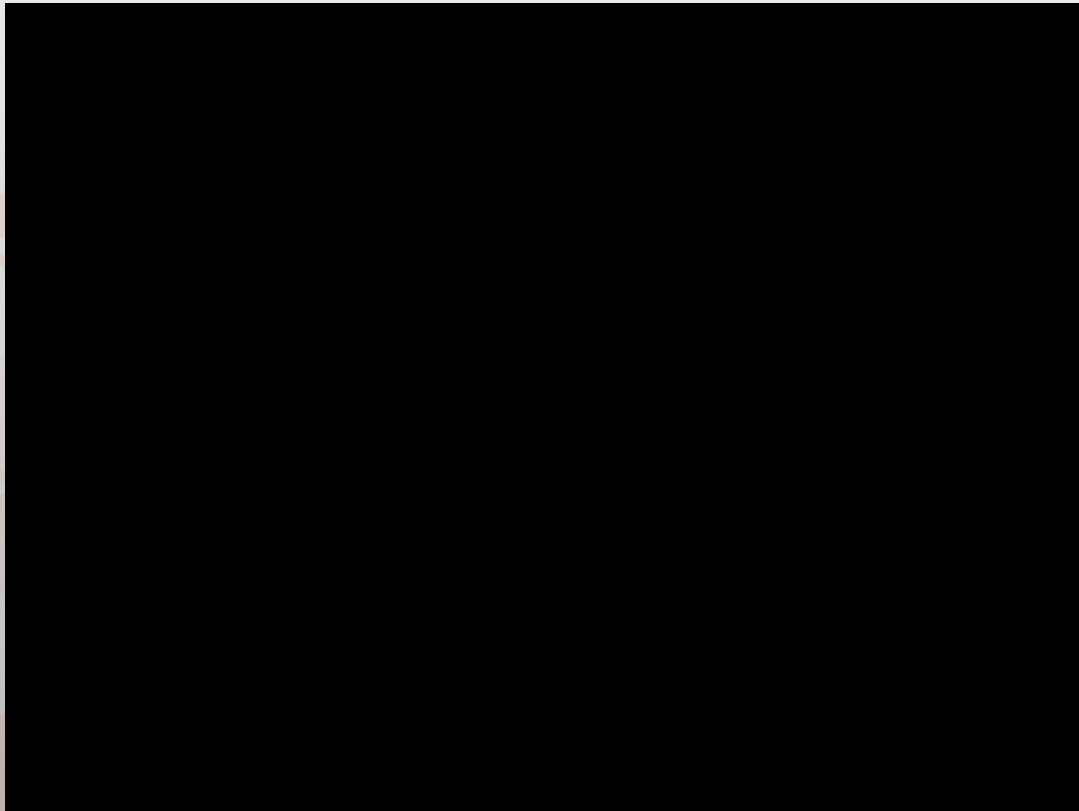
# Sorting Activity

Directions:

With a partner or group, separate and categorize the cards.

\*\*\*Don't look in your binder!! 😊

# Let's Go!



# Thinking Maps Review

**QUESTIONS FROM TEXTS,  
TEACHERS AND TESTS**

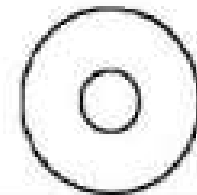
**THINKING PROCESSES**

**THINKING MAPS AS  
TOOLS**

How are you defining this thing or idea? What is the context? What is your frame of reference?

**DEFINING IN  
CONTEXT**

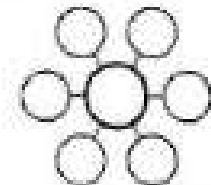
Circle  
Map



How are you describing this thing?  
Which adjectives would best describe this thing?

**DESCRIBING  
QUALITIES**

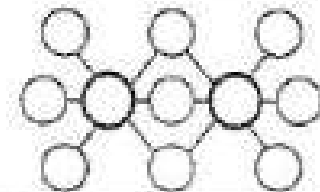
Bubble  
Map



What are the similar and different qualities of these things? Which qualities do you value most? Why?

**COMPARING AND  
CONTRASTING**

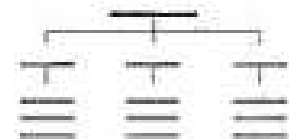
Double  
Bubble  
Map



What are the main ideas, supporting ideas and details in this information?

**CLASSIFYING**

Tree  
Map

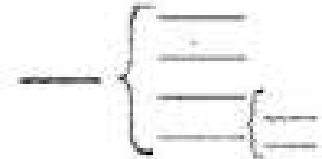


# Thinking Maps Review

What are the component parts and subparts of this whole physical object?

## PART-WHOLE

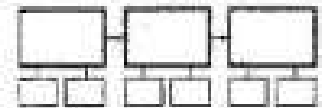
Brace Map



What happened? What is the sequence of events? What are the substages?

## SEQUENCING

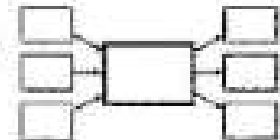
Flow Map



What are the causes and effects of this event? What might happen next?

## CAUSE AND EFFECT

Multi-Flow Map



What is the analogy being used? What is the guiding metaphor?

## SEEING ANALOGIES

Bridge Map



# Frame of Reference

Turn to pp. 72-75

- Promotes reflective thinking and metacognition: “thinking about their thinking”
- 4 Ways to use the frame of reference:
  - Identify their prior knowledge:** “How do you know that information?”
  - Site sources:** “Where did you gather your information from?”
  - Addressing Point of View:** “Who or what is influencing the information on your map?”
  - Summarizing:** “Why is this important? What have you learned?”



# Circle Map p. 98

- Used for brainstorming/defining in context
- Phrases, words, and/or pictures may be used
- Vocabulary development

Key words

Describe, list, define, tell everything,  
brainstorm, discuss, identify

Pictures



Definition

Plants that have pipes or tissues made of cells that transport water and nutrients through the plant.

Examples

bushes, trees,  
grass

**Vascular  
Plants**

gymnosperms  
and angiosperms

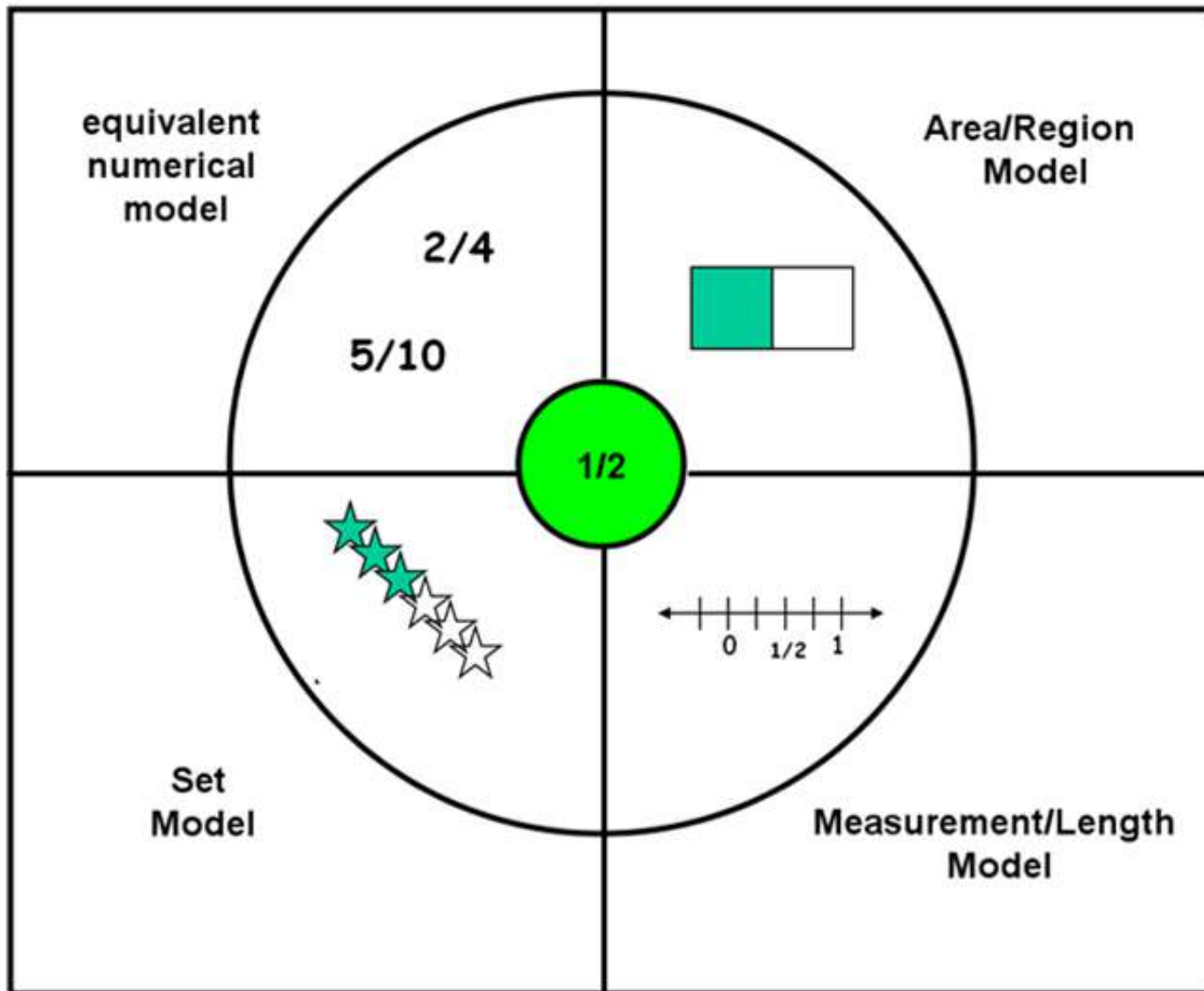
Large or  
Small

Reproduces  
by spores or  
seeds

Contains  
xylem and  
phloem

Essential  
Characteristics

Types



Definition (in own words)

Characteristics

A change in  
size, shape,  
or state of  
matter.

New materials  
are NOT  
formed. Same  
matter present  
before and  
after change.

**Physical  
Change**

Cutting hair

Burning wood

Breaking a glass

Mixing baking  
soda & vinegar

Ice melting

Examples

Non-examples

# Bubble Map pp. 100-102

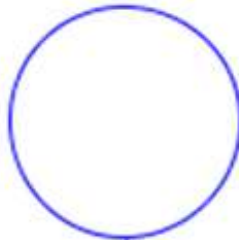
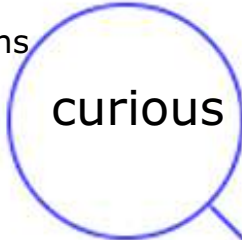
- Used to describe-can only use adjectives or adjective phrases
- Common core requires students to “value evidence”: Ask students to provide their evidence/justification for their adjectives
- Can be used for:
  - characterization
  - attributes (math and science)
  - describing real people, places, and events

Key words

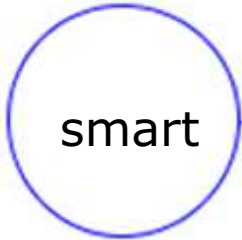
describe, use vivid language, observe, characteristics  
Properties, adjectives, qualities

How would you describe this person,  
place, thing, idea or picture?

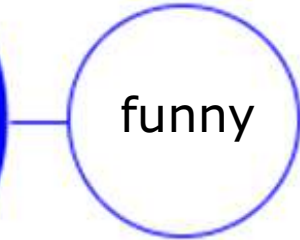
always asking questions



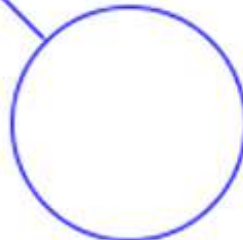
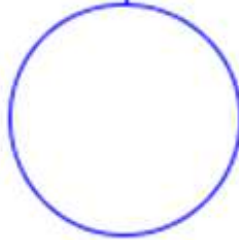
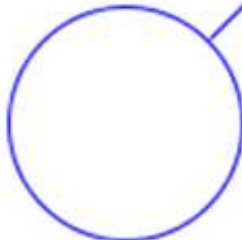
Takes care of  
his baby sister



In kinder and  
can read  
1<sup>st</sup> grade  
decodables

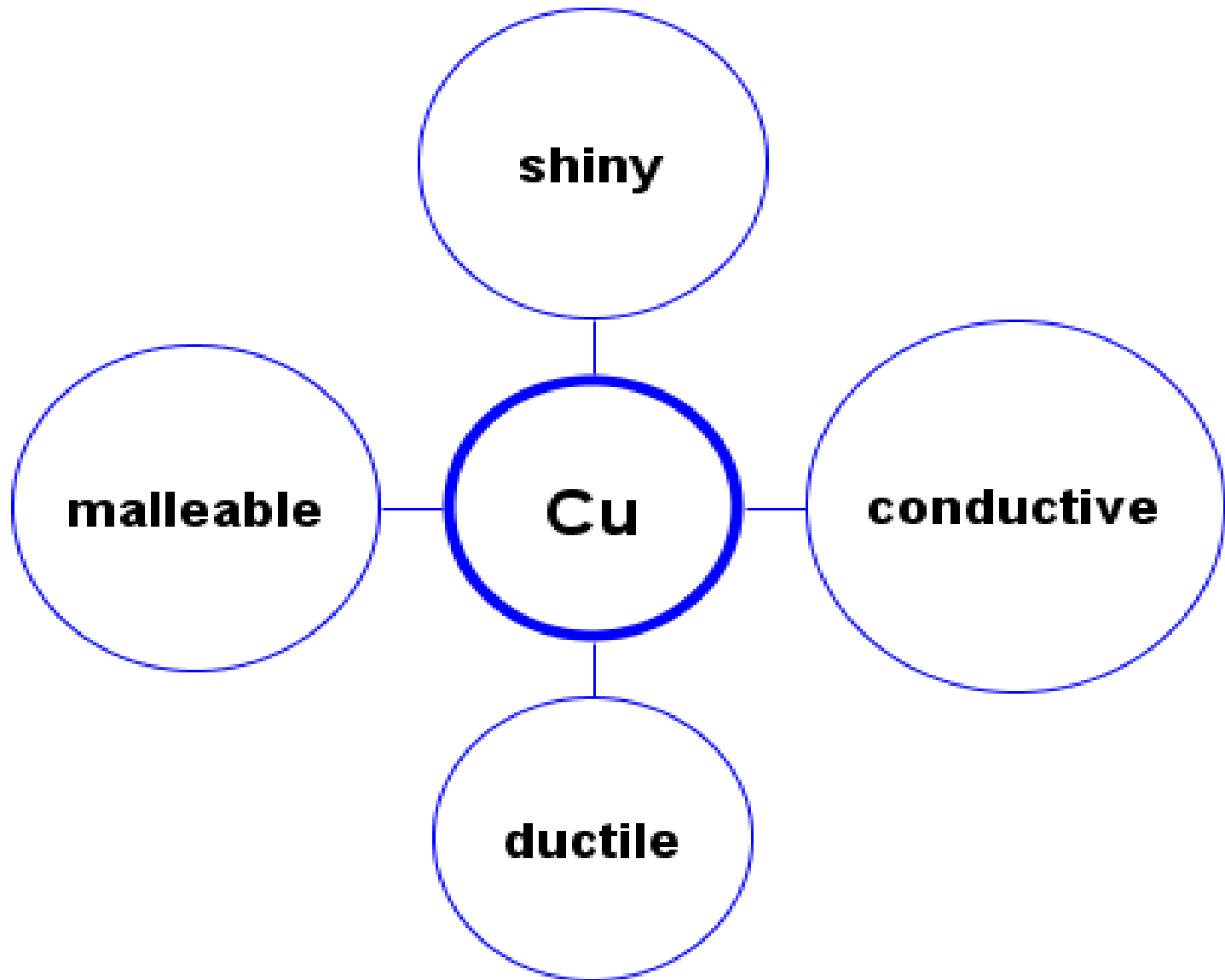


Makes up  
his own  
jokes



Describe someone important in your life?

[Extend Page](#)



# Double-Bubble Map pp.103-105

- Used to compare and contrast
- Can be completed with only the middle (comparing) filled in or only the outside (contrasting)
- Outside bubbles MUST correspond-create a “but arc”

\*include key words used for contrasting that can be transferred to writing

Take it to writing! Compare and contrast essays or paragraphs, summaries of text comparing events, historical figures, math concepts, science concepts...

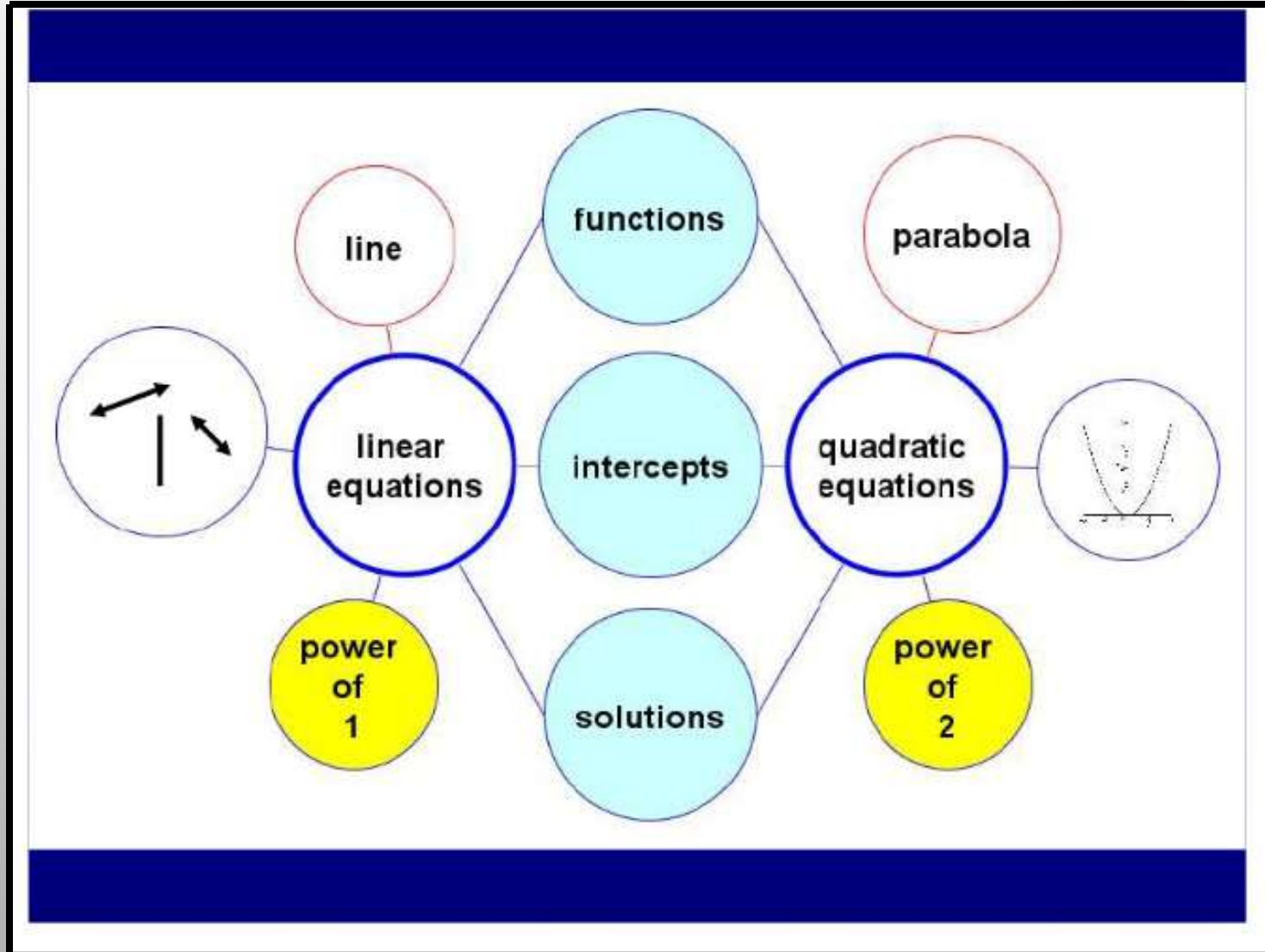
## Key words:

**Compare:**  
similarly, likewise, just like,  
also, to compare, in the same way  
both, too

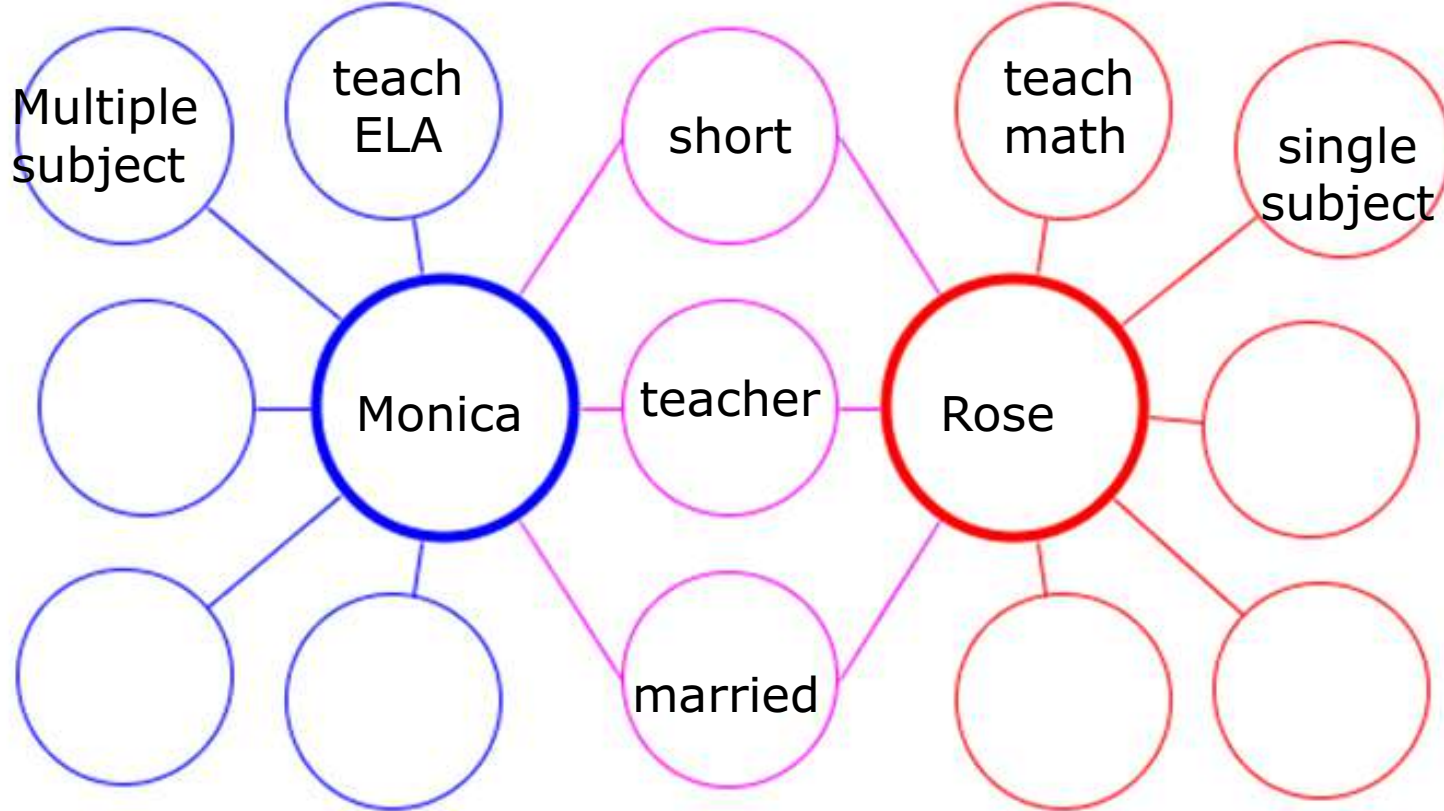
**Contrast:**  
although, however, but,  
on the other hand, unlike,  
in contrast, yet



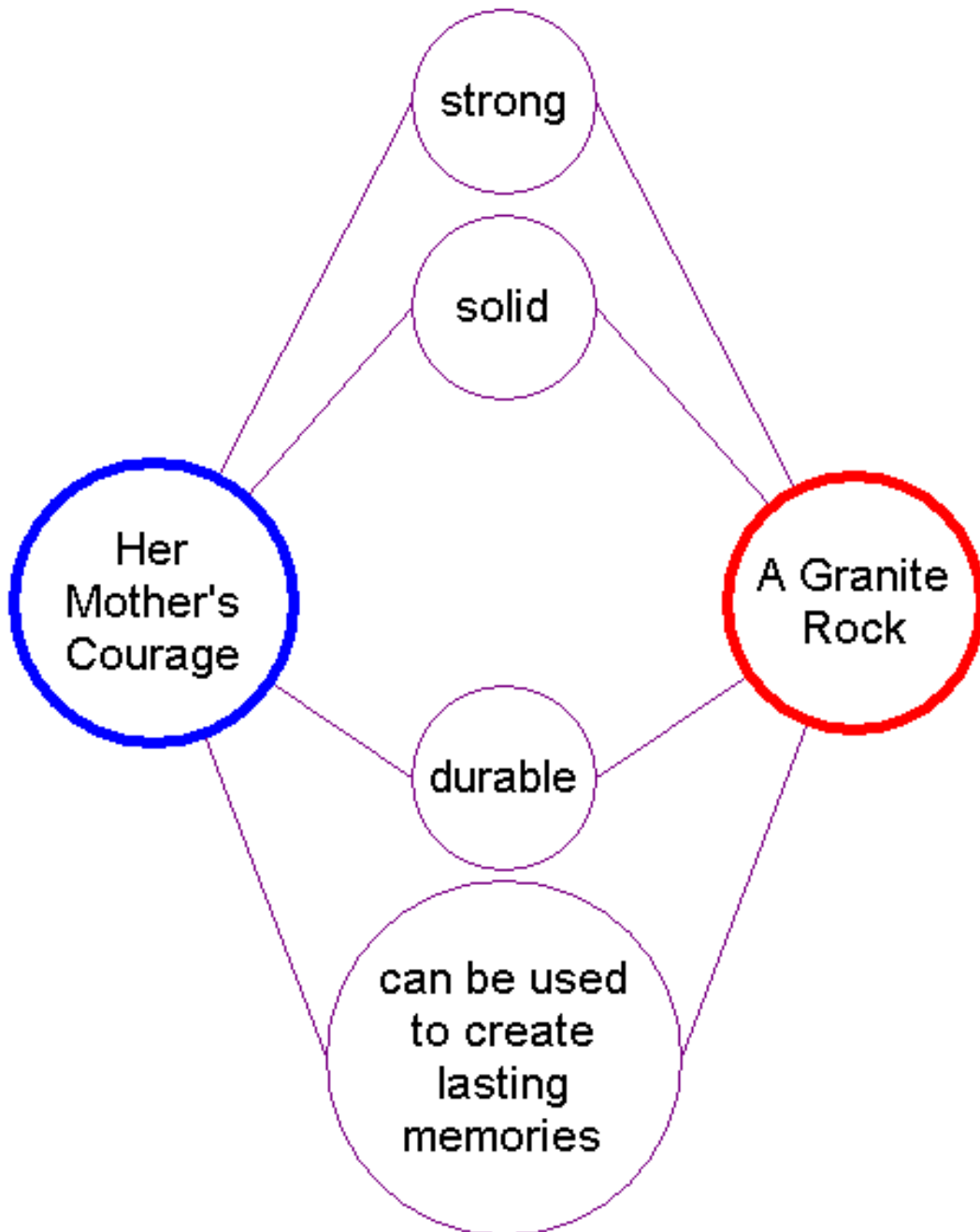
# Compare terms



but, however, on the other hand



Monica and Rose have some similarities. For example, they are both teachers. They are also both married and are kind of short. These two ladies are also very different. Monica teaches ELA, while Rose teaches Math.



# **WORD ANALYSIS STRAND**

**Similes and  
Metaphors**

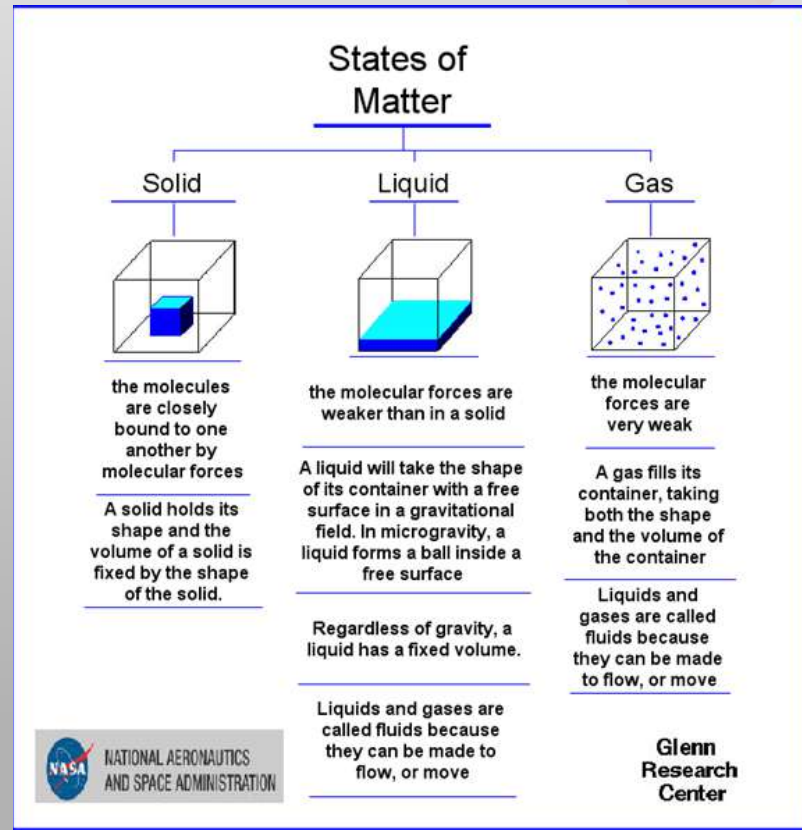
**Figurative and  
Literal Language**

# Tree Map pp. 106-108

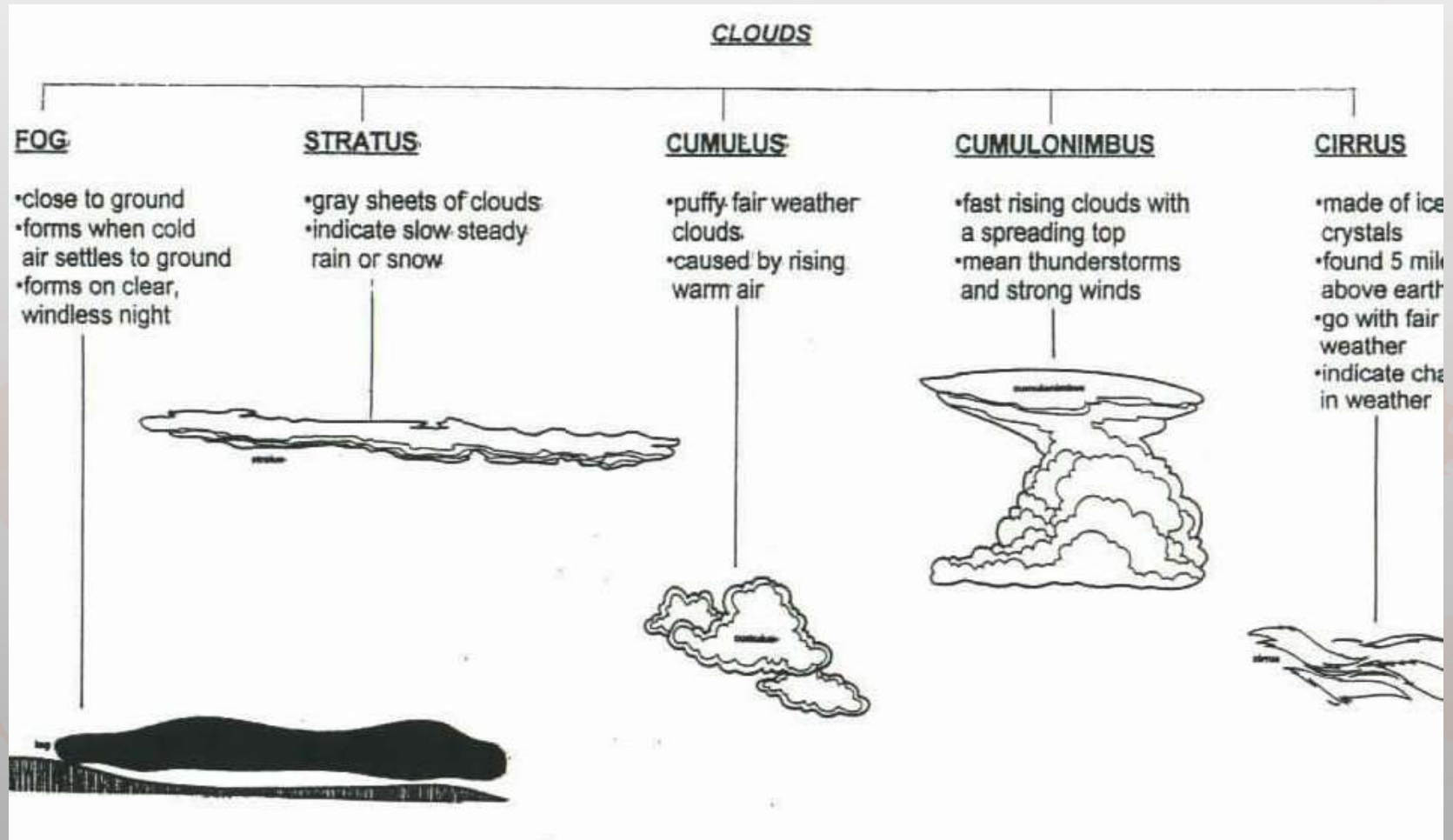
- Used for classifying and categorizing
  - Example: Classify the following scientific ideas into 3 categories. Label the categories.

Key words

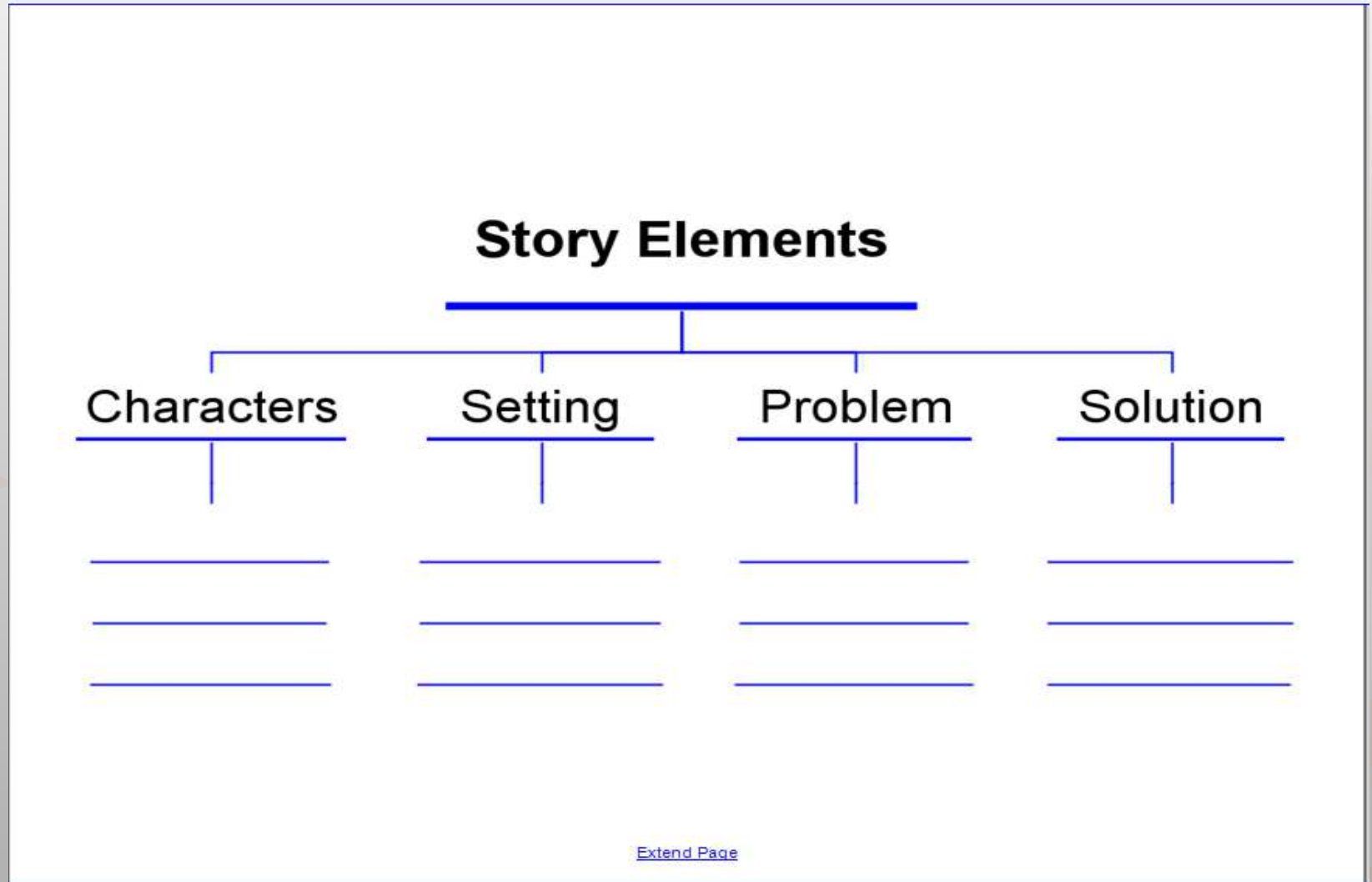
Classify, sort, group, categorize, types of, main idea and details, taxonomy



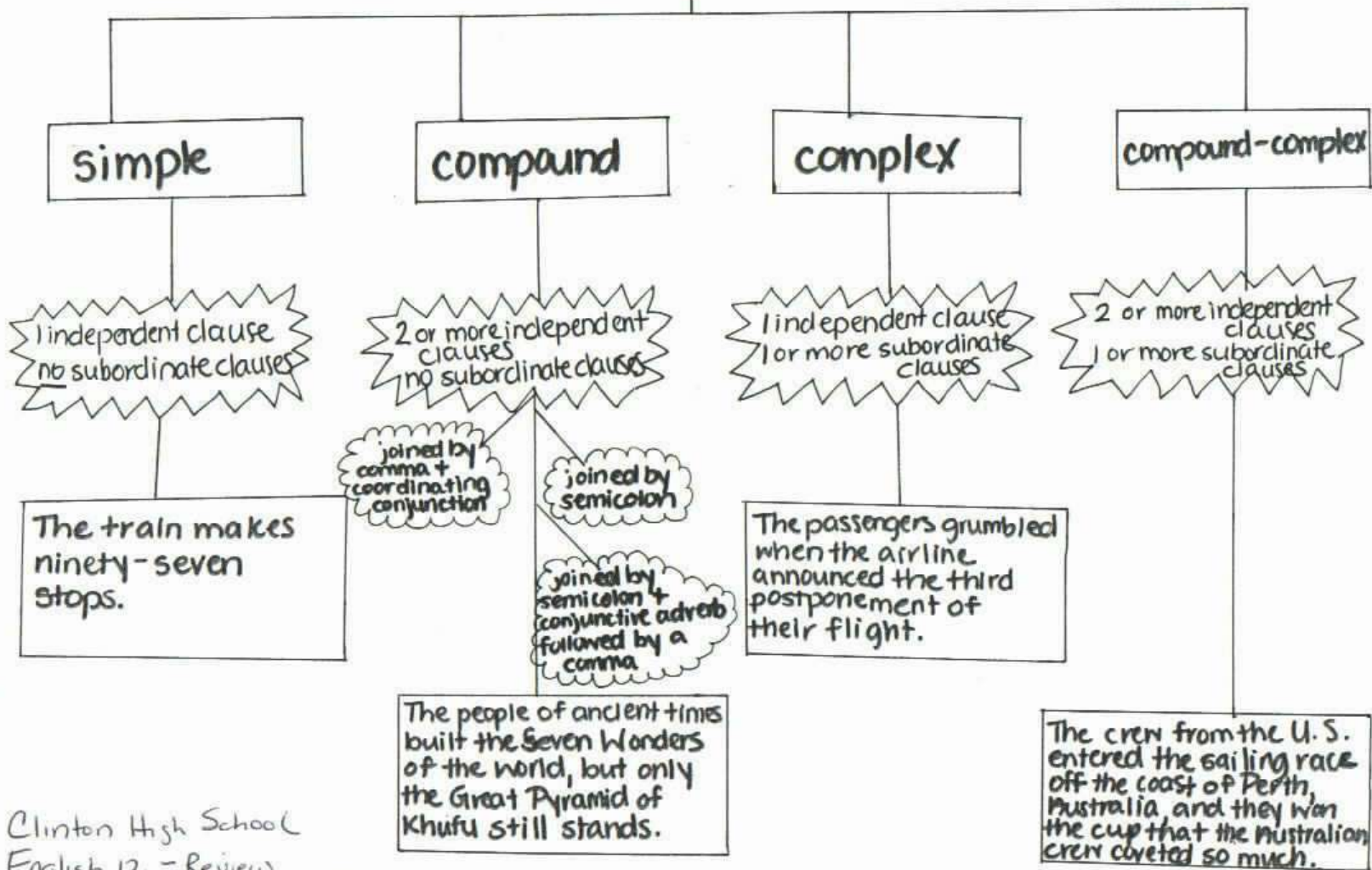
# Vocabulary and note-taking:



# Tree Map in ELA:



# Sentence Structure



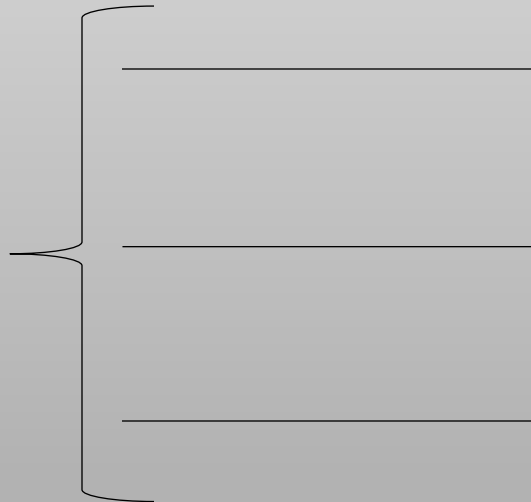
Clinton High School  
English 12 - Review  
Stephanie Jordan 9/1/00

# Brace Map pp. 109-111

- Used to represent whole to part relationships
  - Only list the parts on a Brace Map-NO EXPLANATIONS OR EXAMPLES

Key words

Parts of, show structure,  
physical components,  
anatomy



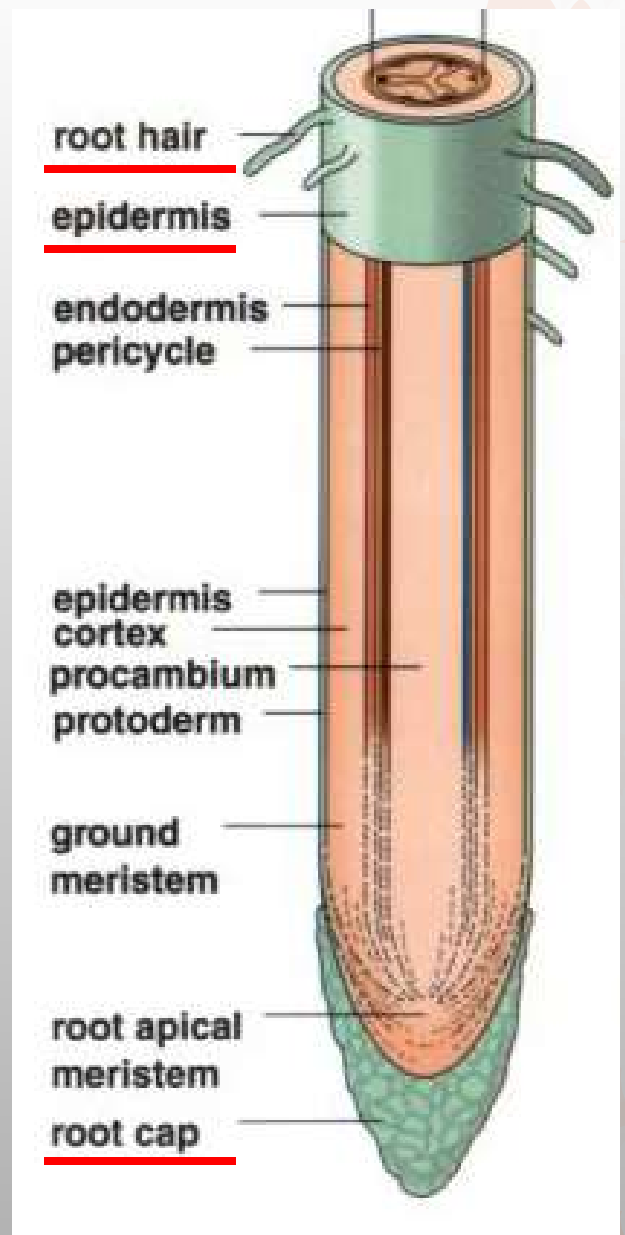


Root Structures

Root Epidermis

Root Hairs

Root Cap



# Break up word parts with a Brace Map

Antifederalist

anti ( against /  
opposed )

federal (syn:  
national / central)

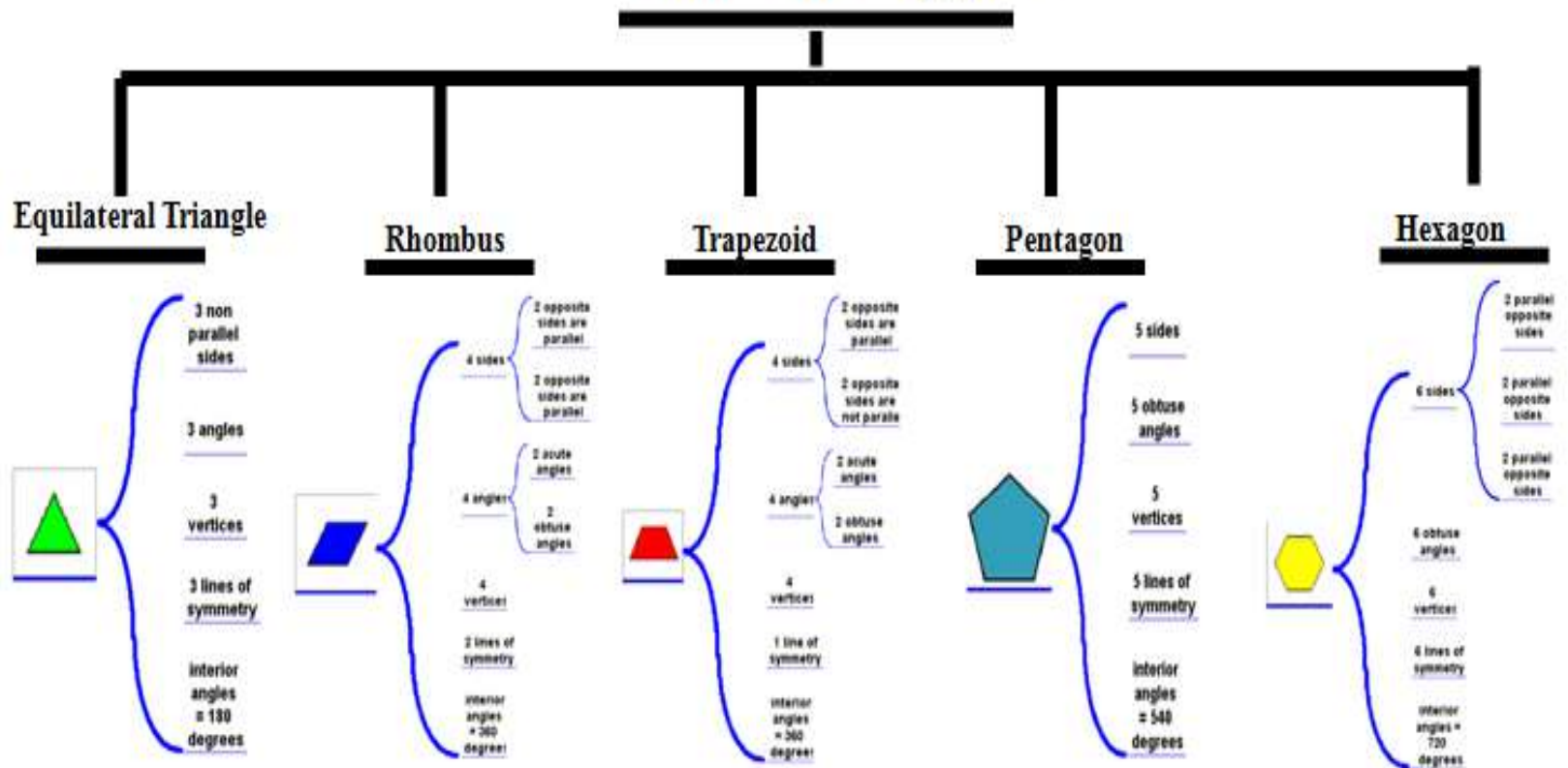
ist (noun - person)

A person against a  
central form of  
government.

Use the  
meaning of  
each part to  
write the  
definition of  
the whole  
word.

# Combining maps for depth:

## Attributes of Polygons



# Flow Map pp. 112-114

- Use to show sequencing
- Can be combined with the Tree Map for writing by adding details below the sequence box

topic	topic	topic
_____	_____	_____
_____	_____	_____
_____	_____	_____

Key words

sequence, put in order, retell, patterns,  
cycles, multi-step, process

# Flow Map

# act ONE I



- the three witches tell Macbeth that he's going to be a king.
- (Banquo's sons will be king)



- Macbeth becomes a war hero (Thane of Cawdor)



- Macbeth sends a letter to Lady Macbeth saying that the witches said he's going to be king!



- Lady Macbeth forcefully wants to kill the king & tells Macbeth that she's going to do the murder.



- Macbeth talks to the King about coming over to their house.



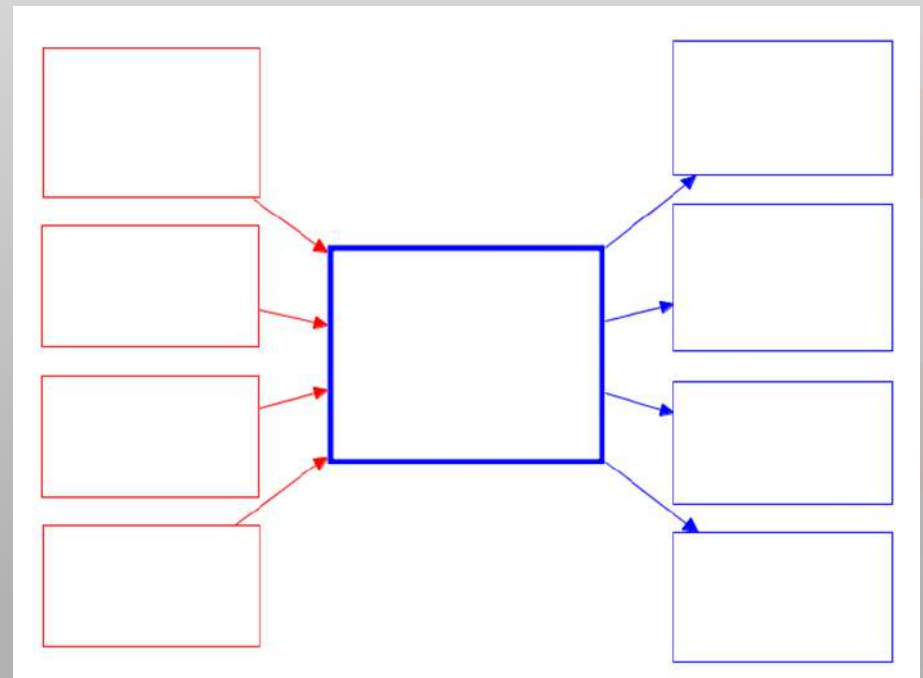
- King plans to come over!
- Macbeth's perfect set up!!

# Multi-Flow Map pp. 115-117

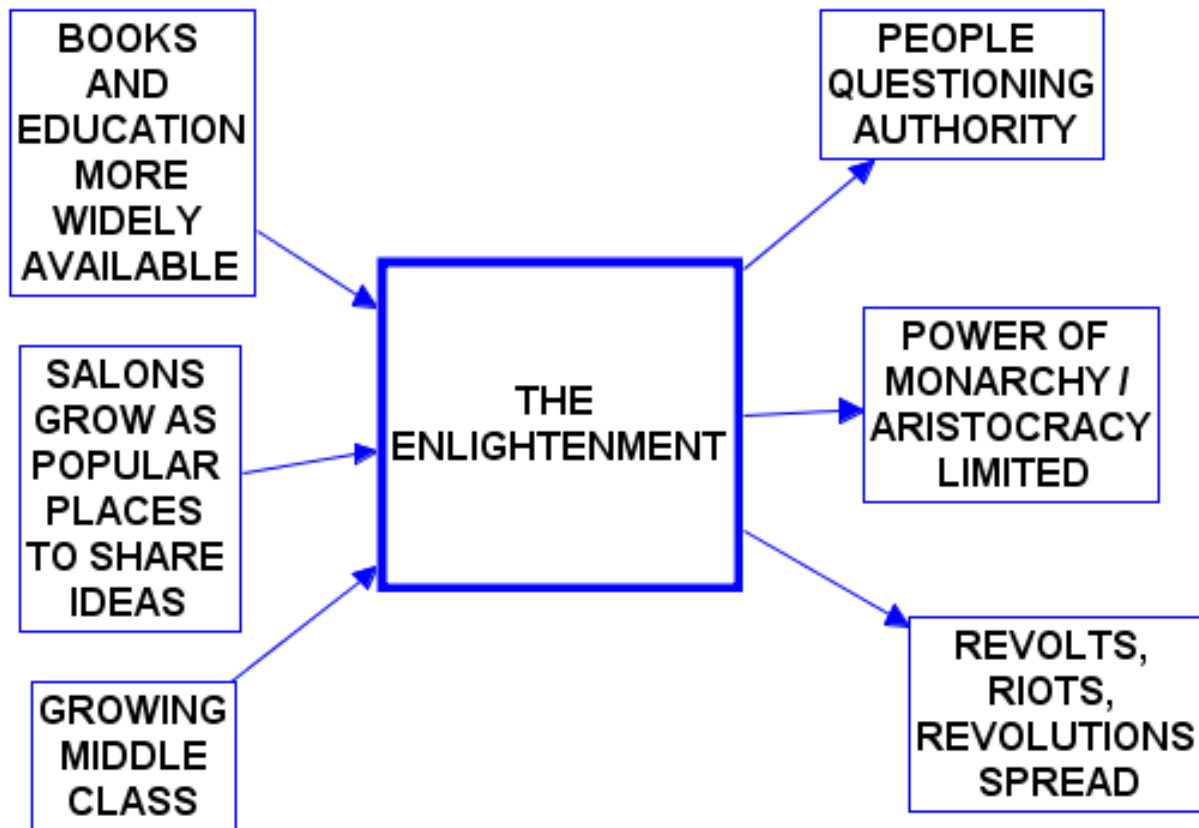
- Used to show cause and effect
- Can be made as a one-sided Multi-Flow with only the causes or only the effects
- Opposite sides DO NOT have to match

Key words

cause and effect, discuss consequences, if/then, predict, results, outcomes



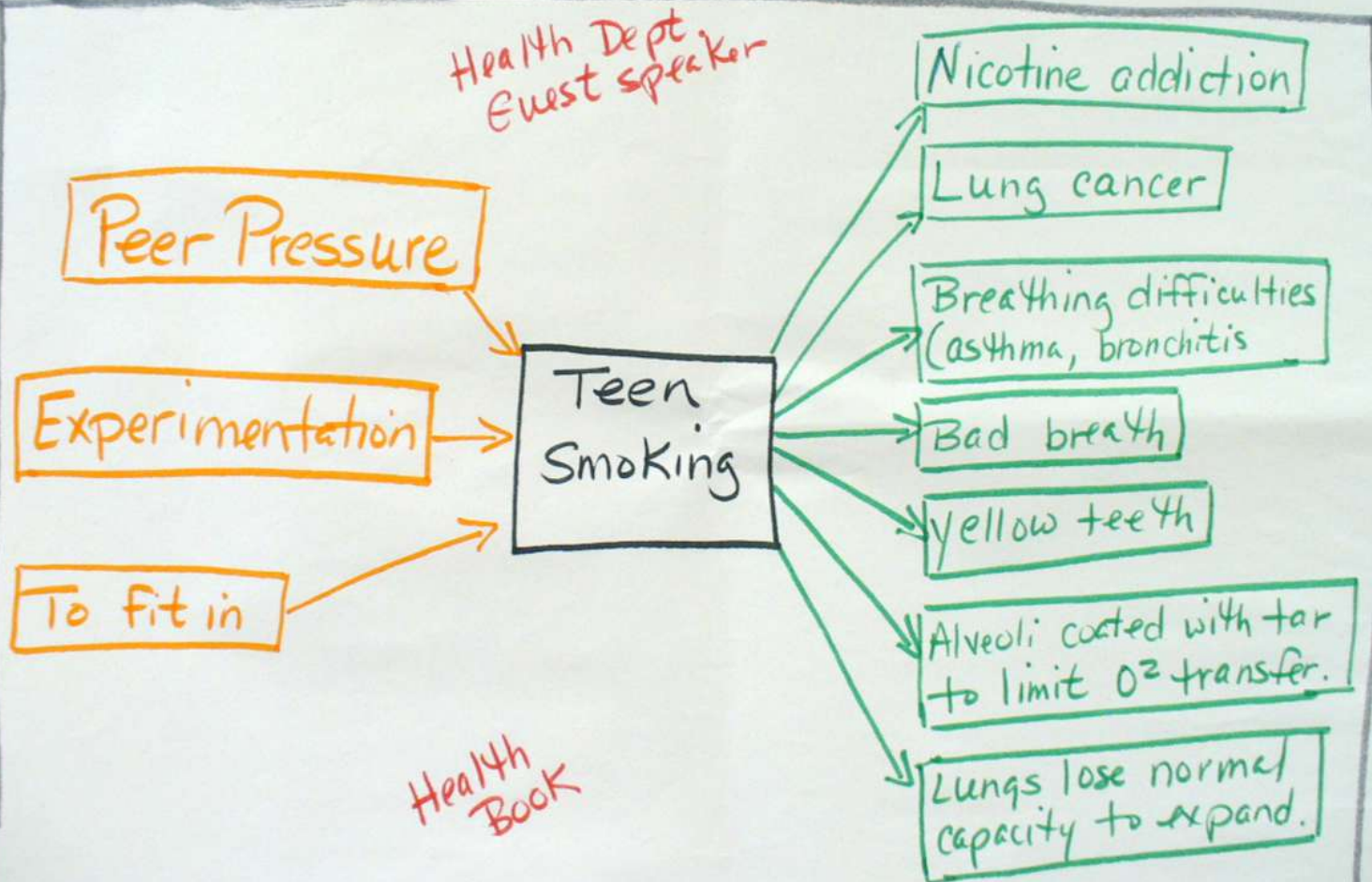
**IF YOU WANT TO KEEP PEOPLE IN THE DARK, KEEP THEM  
POOR AND UNEDUCATED.**



# Multi-Flow Map

Middle School  
High School  
Science

Healthy Choices and Decisions





# Bridge Map pp. 118-120

- Used to represent analogies-show relationships
- Must have a relating factor that links the concepts being compared



What is the similar relationship  
between these two words?

4. *Dog* is to *leash* as *balloon* is to \_\_\_\_\_.

cloud

branch

helium

string

$$y = mx + b$$

as

$$y = ax^2 + bx + c$$

as

$$y = ab^x$$

Linear Function

quadratic  
Function

Exponential  
Function

Relating Factor: ..... is the algebraic representation  
of a .....

Math Goal 4

Key words

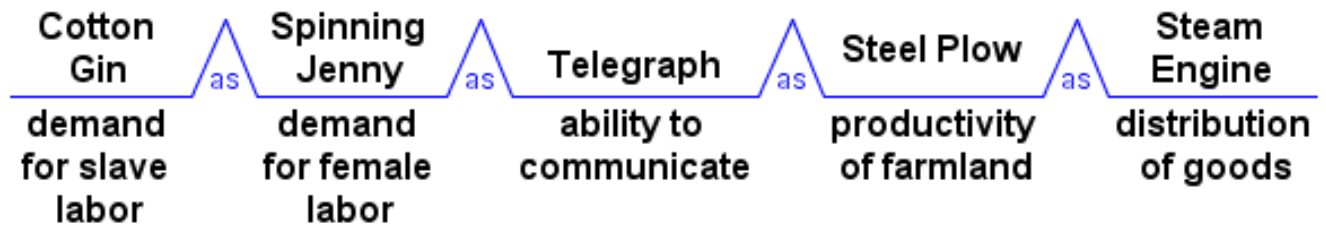
identify the relationship, simile, metaphor, ratio  
Interpret symbols, guess the rule



### The Impact of Inventions on Society

**impacted  
society by  
increasing**

*Relating Factor*

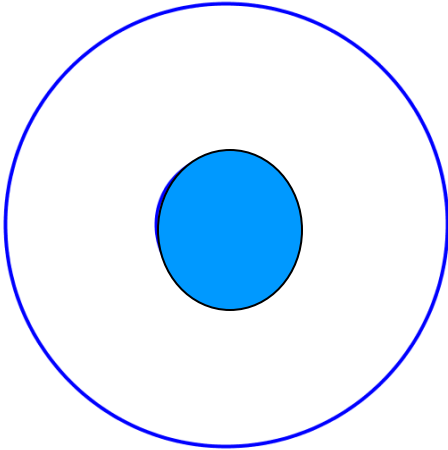
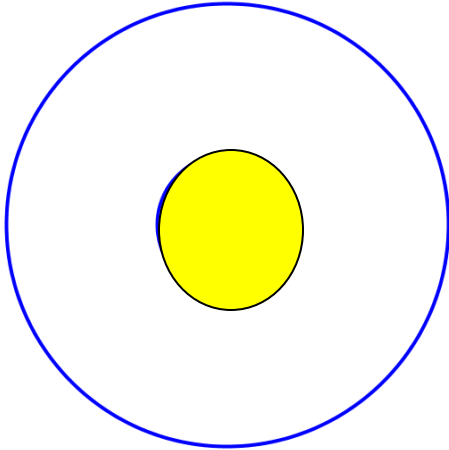
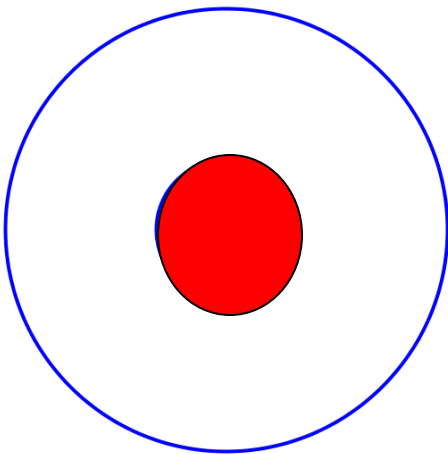


*100 Inventions That Changed the World*

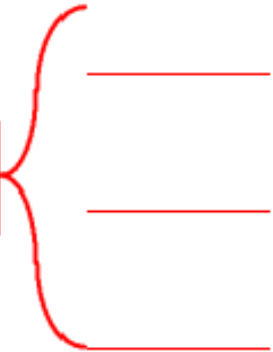
**DIGESTION**

**ABSORPTION**

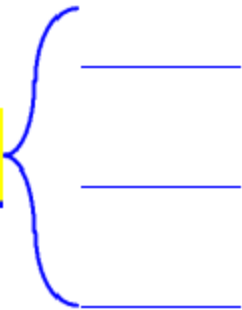
**ELIMINATION**



**DIGESTION PARTS**



**ABSORPTION PARTS**



**ELIMINATION PARTS**



# Chapter 3: Literacy Links pp. 127-168

- Vocabulary Development
  - Direct and indirect teaching of vocabulary
  - Interaction with academic vocabulary words at a complex level
- Reading Comprehension
  - Identifying and understanding text structures
  - Organizing key information
  - Author's purpose
  - Previewing text
  - Making inferences
- Writing
  - USE OF SENTENCE FRAMES-SO IMPORTANT p. 161
  - Pre-writing tools

## Exit Slip:



- Do a Close Reading of the article
- Determine what thinking process or processes are required when reading this passage
- Create at least two Thinking Maps to represent the key information in the article.