

VISIBLE THINKING AND VIDEO REFLECTION

MEDDWL GWELADWY AC ADFYFYRIO AR FIDEO

Outstanding teachers... make
thinking and learning visible gwneud
meddwl a dysgu'n weledol

Video reflection Adfyfyrrio ar fideo

1

- Identify a focus eg questioning/ oral feedback etc

2

- Film a short segment of a lesson where you feel you will address this focus

3

- After the lesson watch the video back by yourself and reflect

4

- Choose the most important episode (a few seconds to a minute) to show to your 'buddy'/ 'mentor' etc

5

- Watch the clip together and discuss the significance

6

- Plan your next session in the light of this discussion

Using video reflection (VSRD)

Adfyfyrrio ar fideo

Olivia questioning her children:

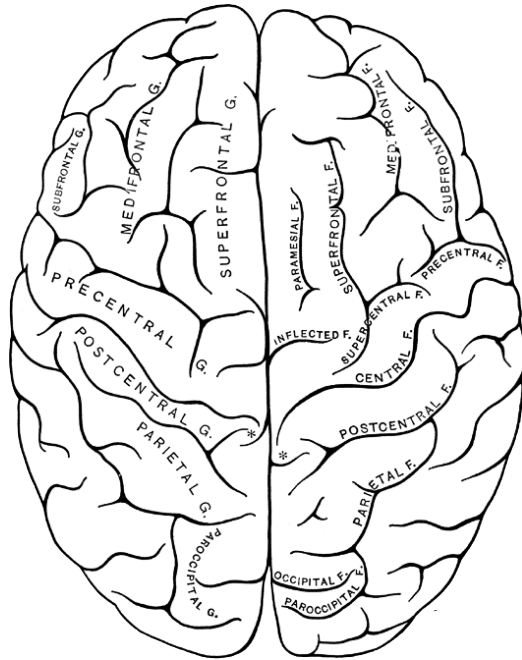
- O: 'I've got some answers, you are going to make the questions. We can make as many as we like. Are they all the same? Are they still the same shape? Shall we read them all together? Or one at a time? Can anyone come up with a question? Have a think. It's time to think. Have a go at helping each other. Have a minute to talk with each other.'

(The group chat for 45 seconds)

- O: 'What are your ideas? What do you think?'
- Child 1 'Too close?'
- O: 'Why do you think they were so close?'
- Child 2: 'Why were they close together?'
- O: 'What a good question.'

Why video may improve reflection

- Reflecting back on the clip helped Olivia consider aspects of her teaching that she was not aware of, or that she felt she had been mistaken about.
- For example, she said that she had '*mistaken lots of questions for quality*' – and noted how little time children had to think about their responses.
- She was surprised by how many questions she asked.
- She also realised that much of her teaching input used very general guidance rather than specifics, such as saying that was 'a good question' but not actually developing the children's understanding of why it was good.



**One's mind,
once stretched
by a new idea,
never regains its
original dimensions.**

Oliver Wendell Holmes

The Six Starting Points of Thinking



Reflective Questioning

high quality questioning and listening skills



Thinking Skills

explicit use of cognitive processes



Visual Mapping

the use of visual tools to map out ideas



Collaborative Networking

between us in pairs, groups, schools, and global networks



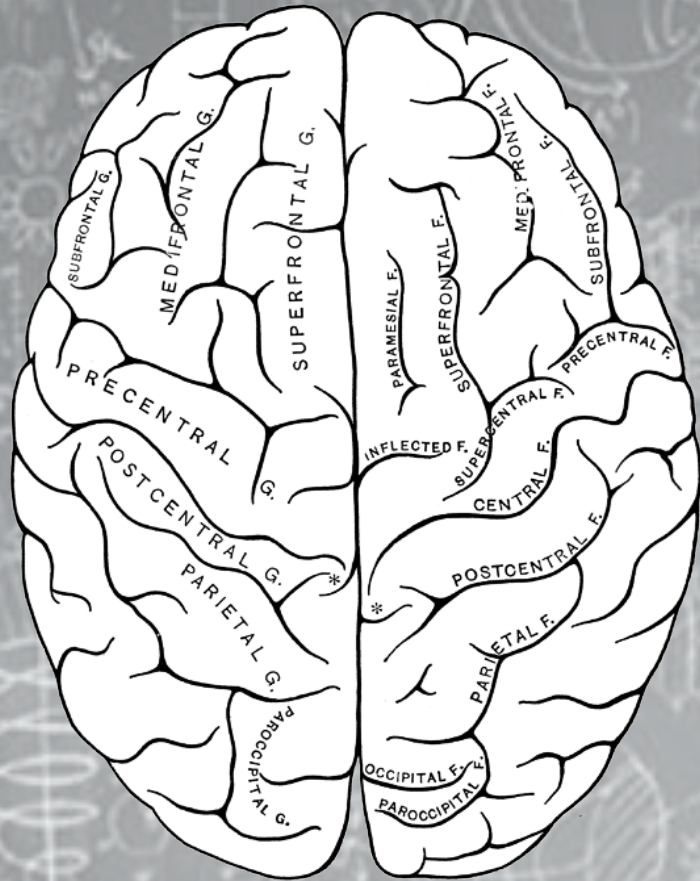
Developing Dispositions

characteristics, dispositions, and habits of mind are engaged



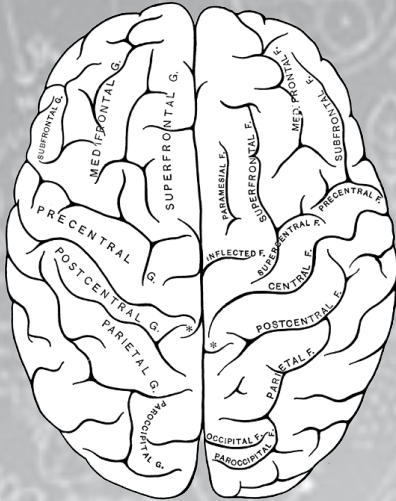
Structuring Environment

considering how the physical space is organized and resources used



Visual Tools
are bridges between
the networking brain

are patterns of thinking
and the mind's cognitive
and emotive capacities
for generating creative,
analytical, and conceptual



**Visual Tools directly facilitate
the interplay between
brain and mind**

**the brain is unconsciously
making neural networks**

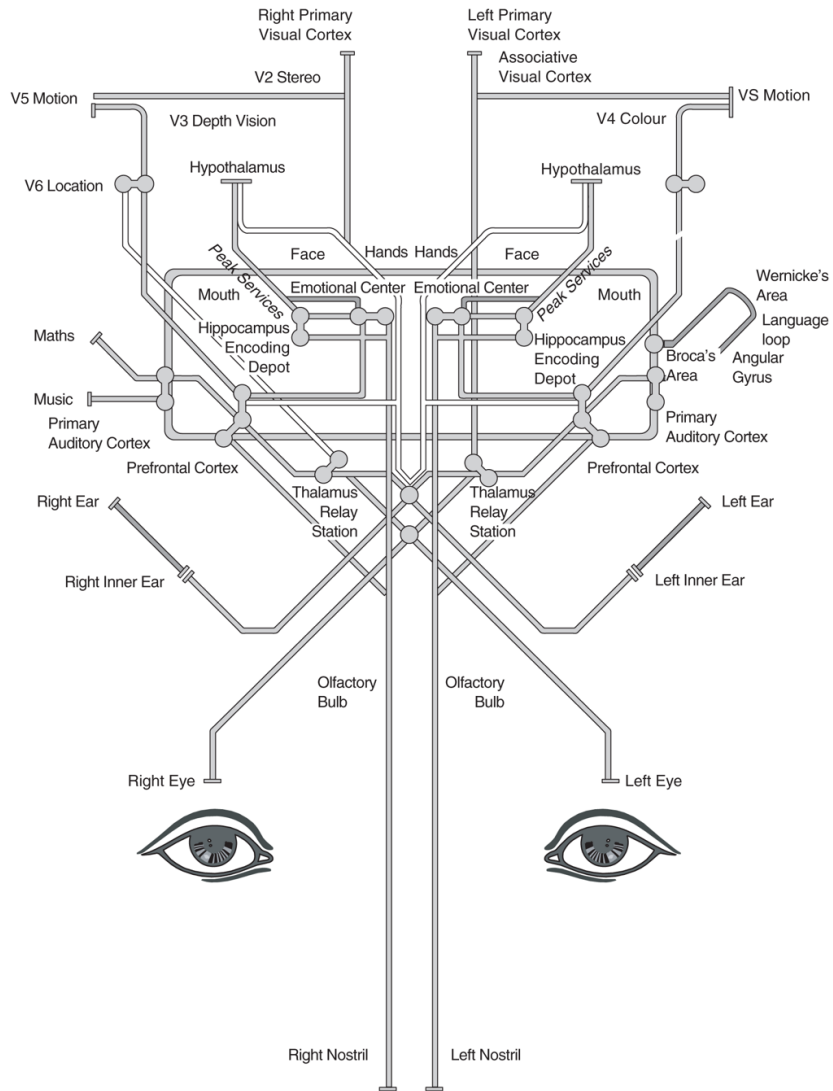
**the mind is consciously
patterning information**

Learners construct knowledge as they build **cognitive maps** for organizing and interpreting new information.

Effective **teachers help students** make such maps by **drawing connections** among different concepts and between new ideas and learners' prior experience.

Linda Darling-Hammond
The Right to Learn (1997)

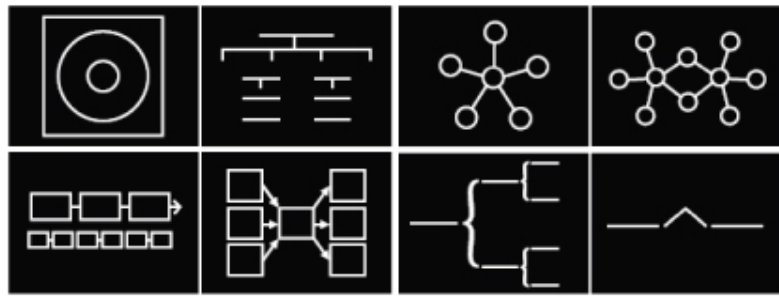




**“Neuroscientists
tell us that the brain
organizes information in
networks and maps”**

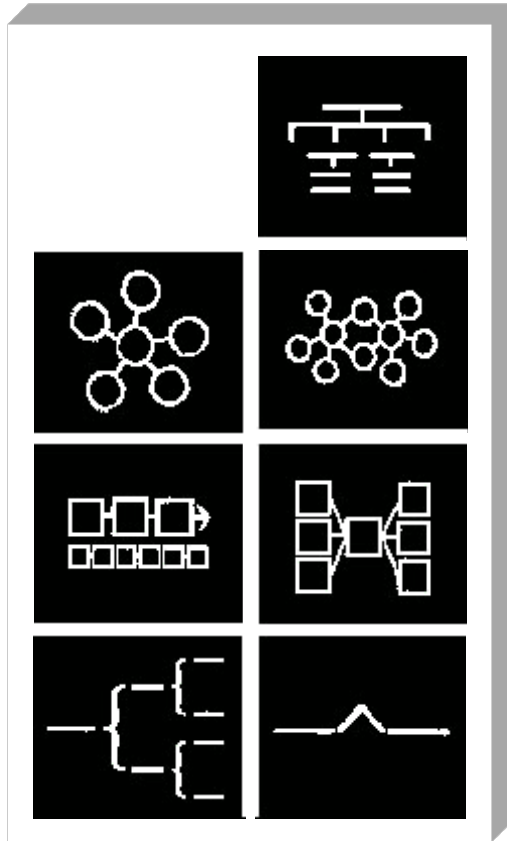
Pat Wolfe, Ed.D.

Teaching with the Brain in Mind



Thinking Maps® provide a common ***language*** that **integrates** the visual tools.

The Thinking Maps® are associated with particular cognitive processes.



The Circle Map
for defining in context

POV Parents

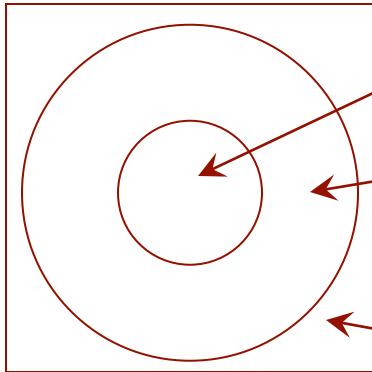
knowledgeable
confident
good values self-discipline
adequate living independent &
positive skills leadership
thinking
loyalty
faith in god
multi interpersonal skills
intelligent
achieve in sports & edu
healthy & wealthy life

A
21st
century
learner
innovative
risk taker
solve problems
creative
critical noble
ICT skills
moral

Notemaking Guide for Learning Thinking Maps

Circle Map

Looks Like:



Thinking Process:

Defining in Context or
Brainstorming

Notes:

Topic

Everything I
know

How or where did I
learn this?

My frame of reference

Can be used for:

- Brainstorming
- Diagnosing prior knowledge
- Closure/review

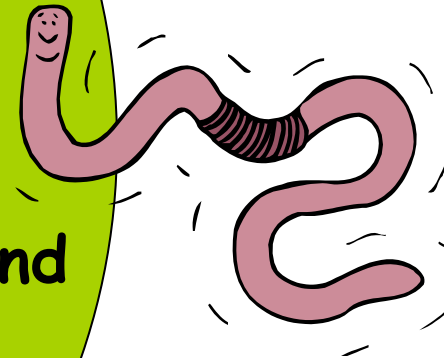
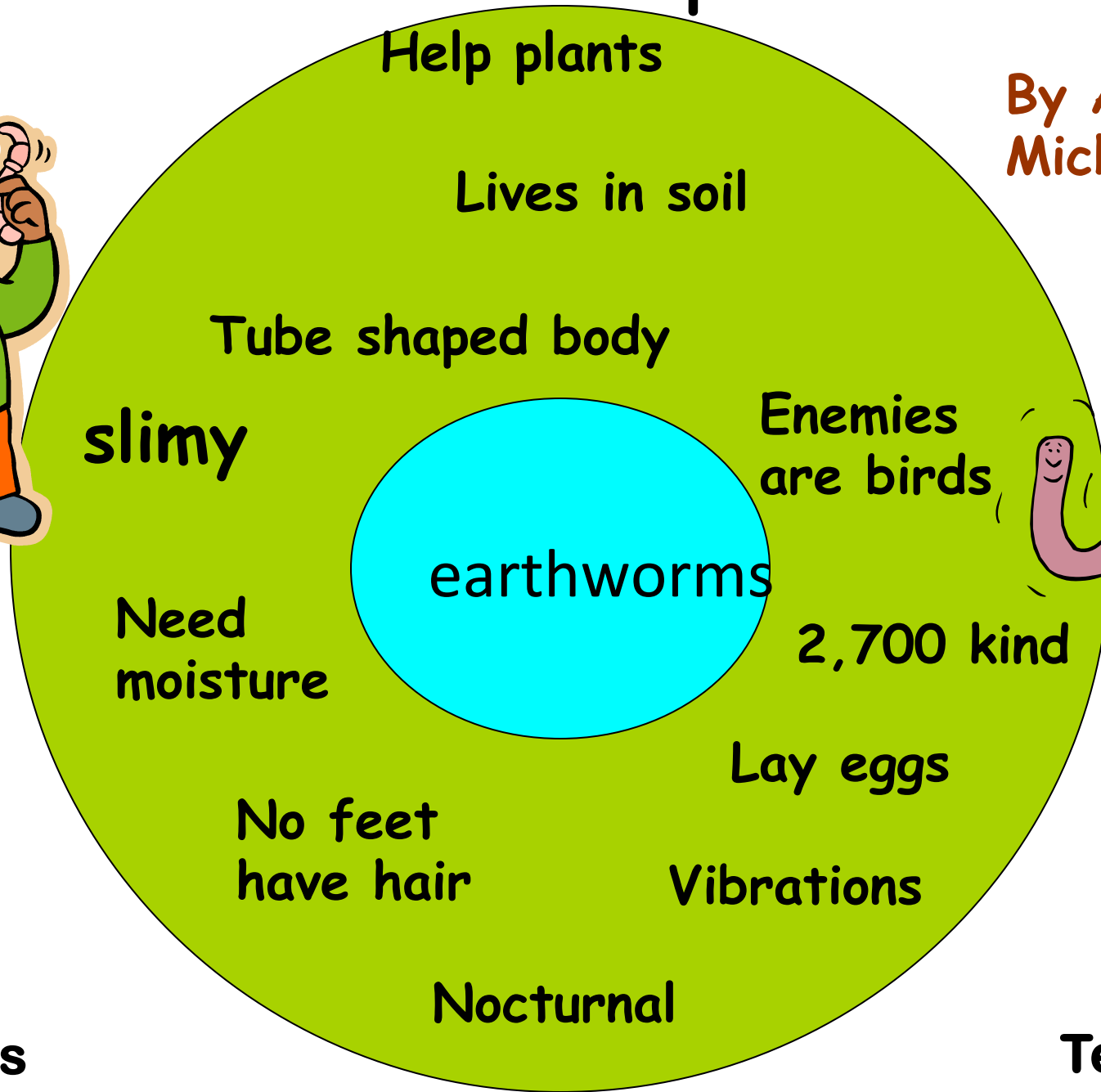
Circle to Tree for Writing

Science kit

Circle Map

Internet

By Alex and Michel

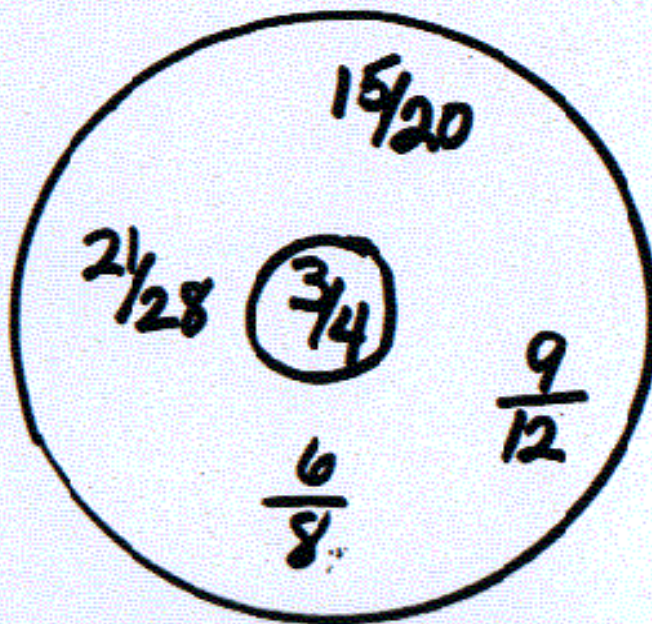
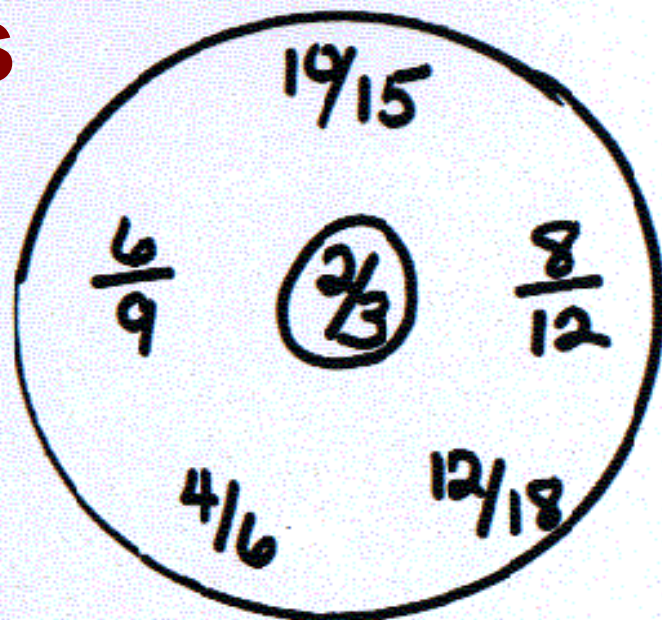
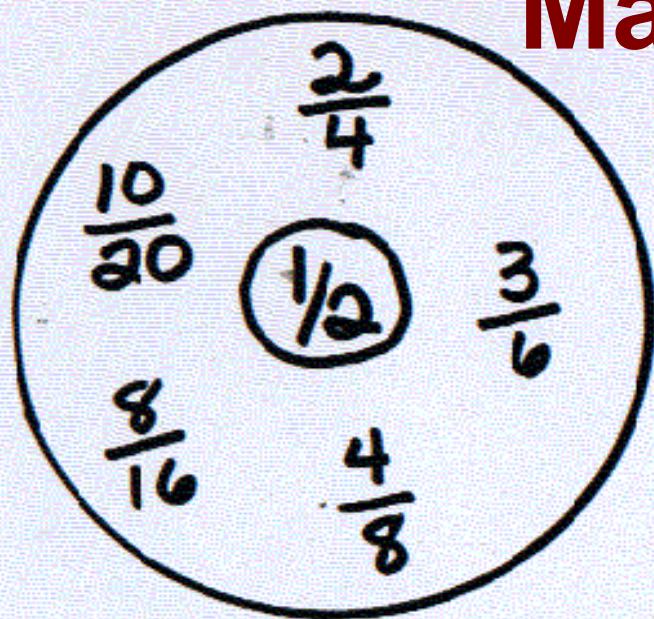


Books

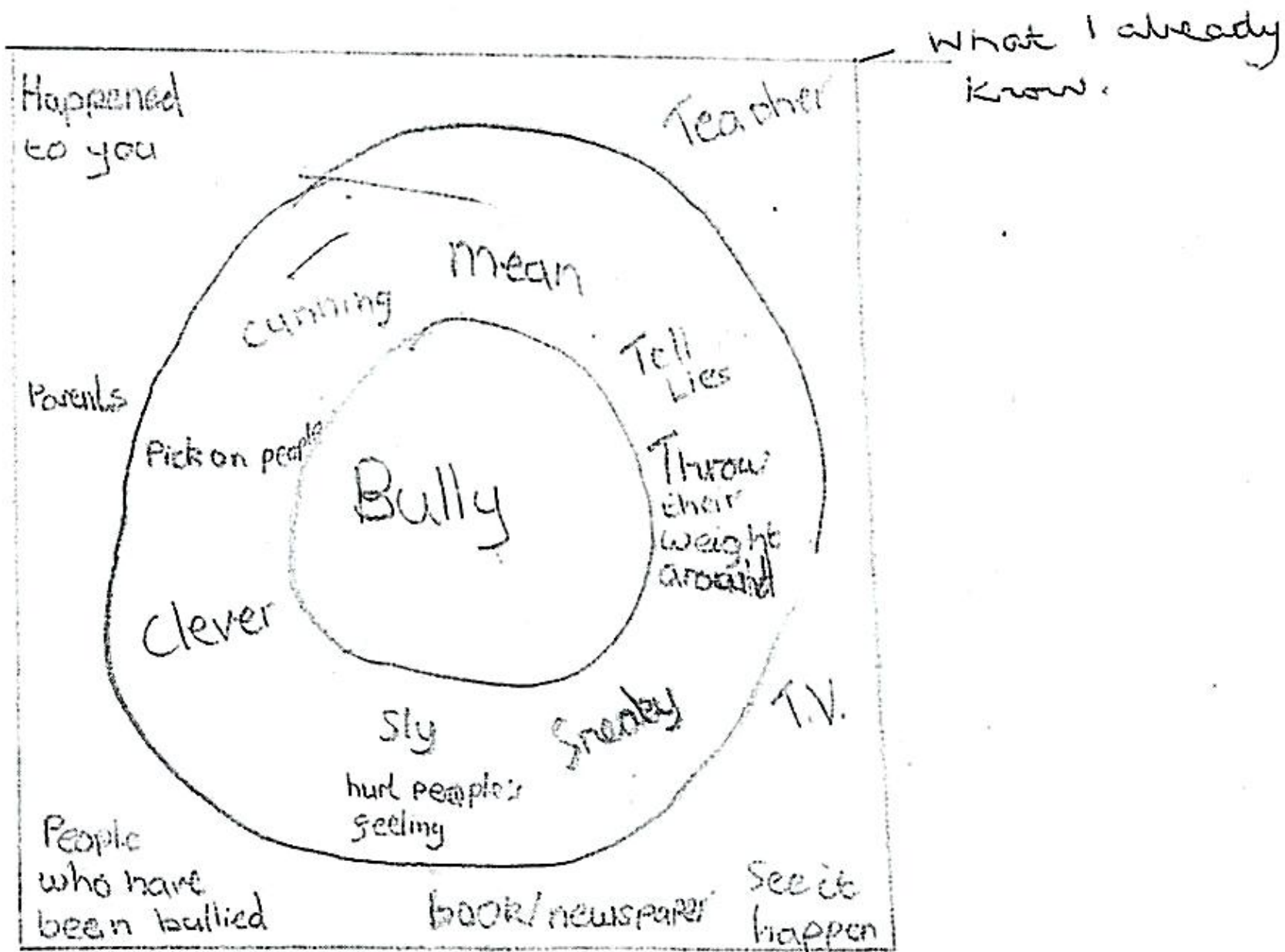
Teacher

Equivalent Fractions

Mathematics



Circle Map





...working together
to achieve a goal!



...being friends

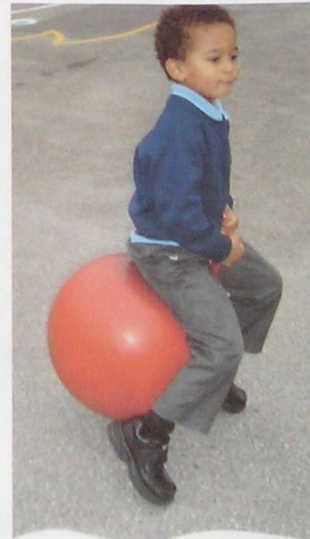
**We
like...**



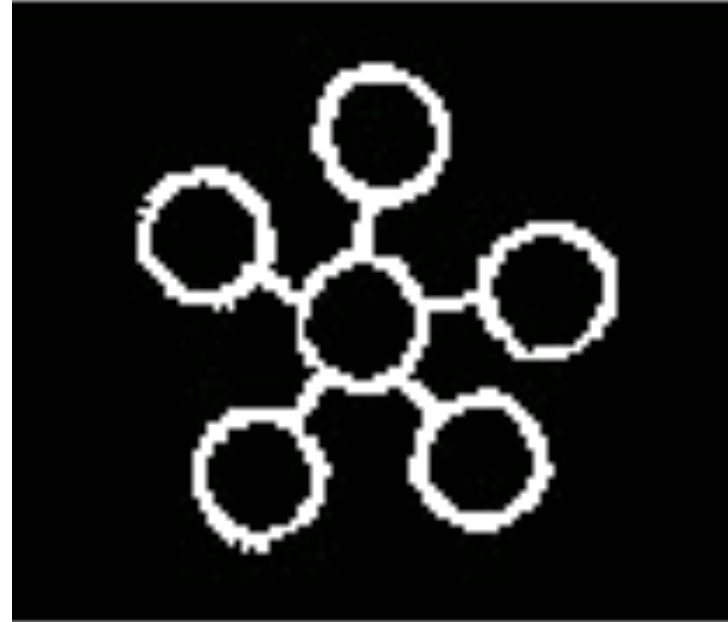
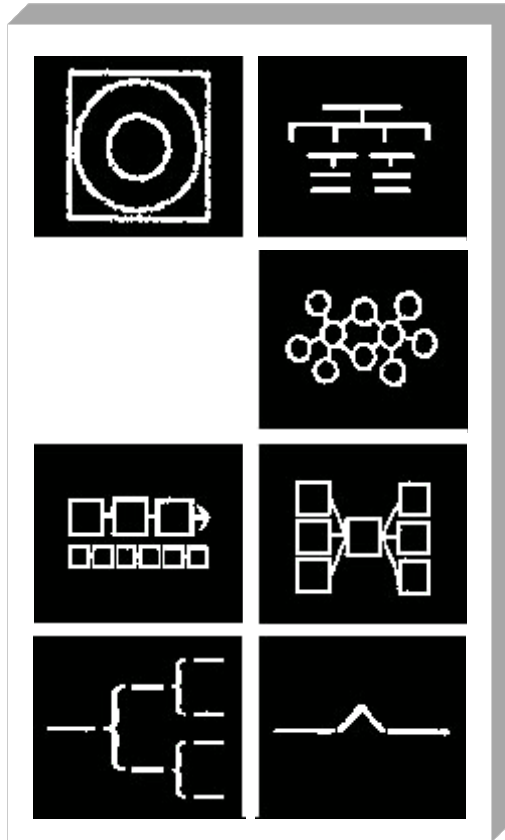
...playing together



...making models



...trying new things

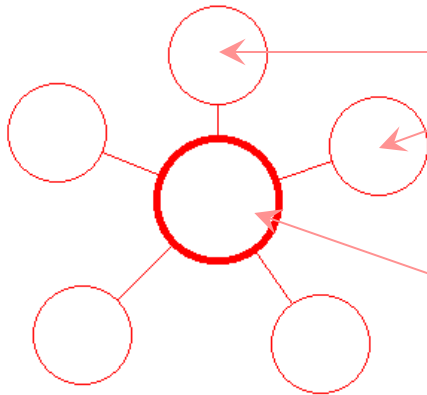


The Bubble Map
for describing things

Notemaking Guide for Learning Thinking Maps

Bubble Map

LOOKS LIKE:



THINKING PROCESS:

Describing (adjectives or adj. phrases only)

NOTES:

Adjective, phrase, character trait

Attributes: Maths

Properties: Science

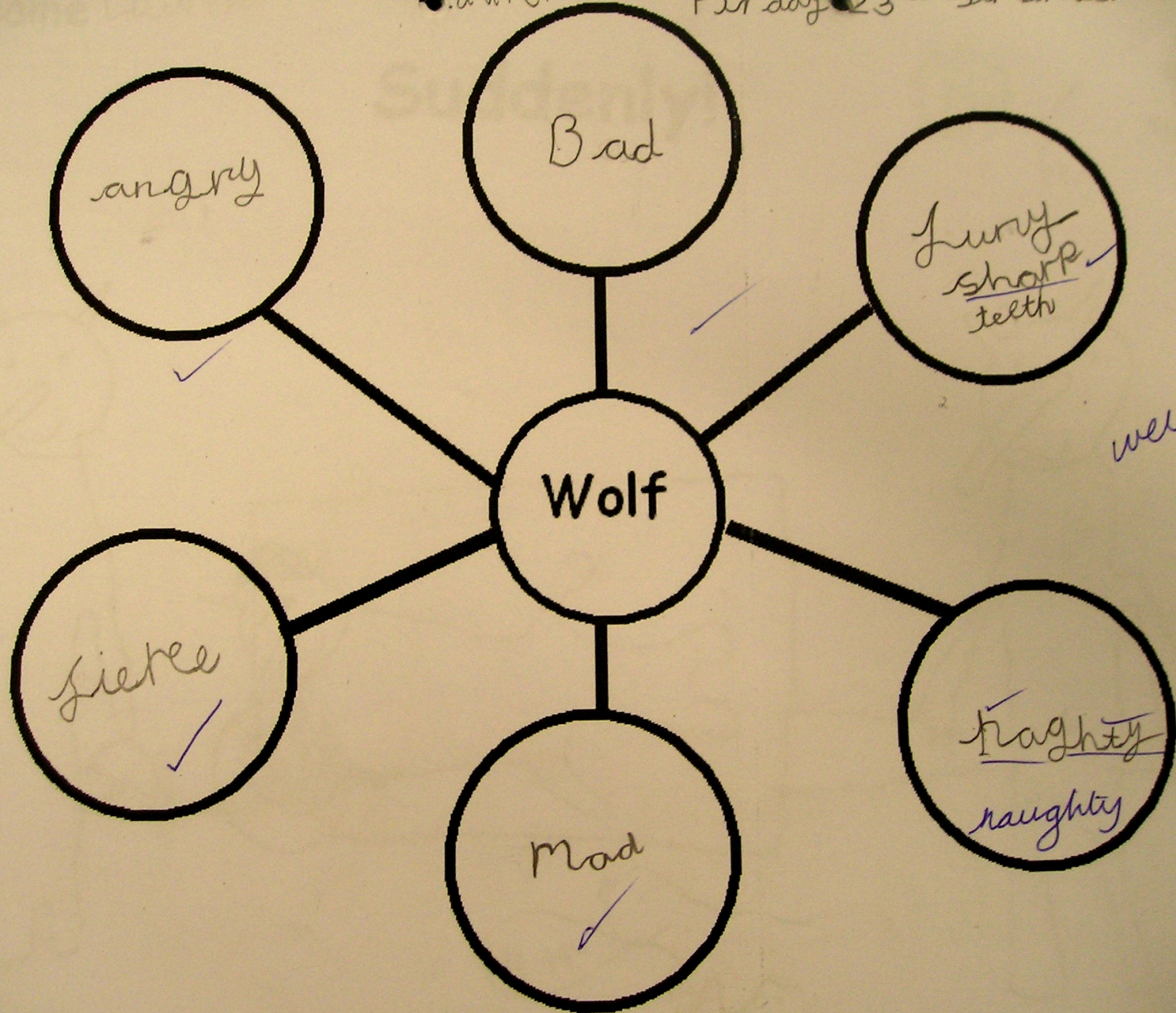
Thing you are describing

Adjectives Only!

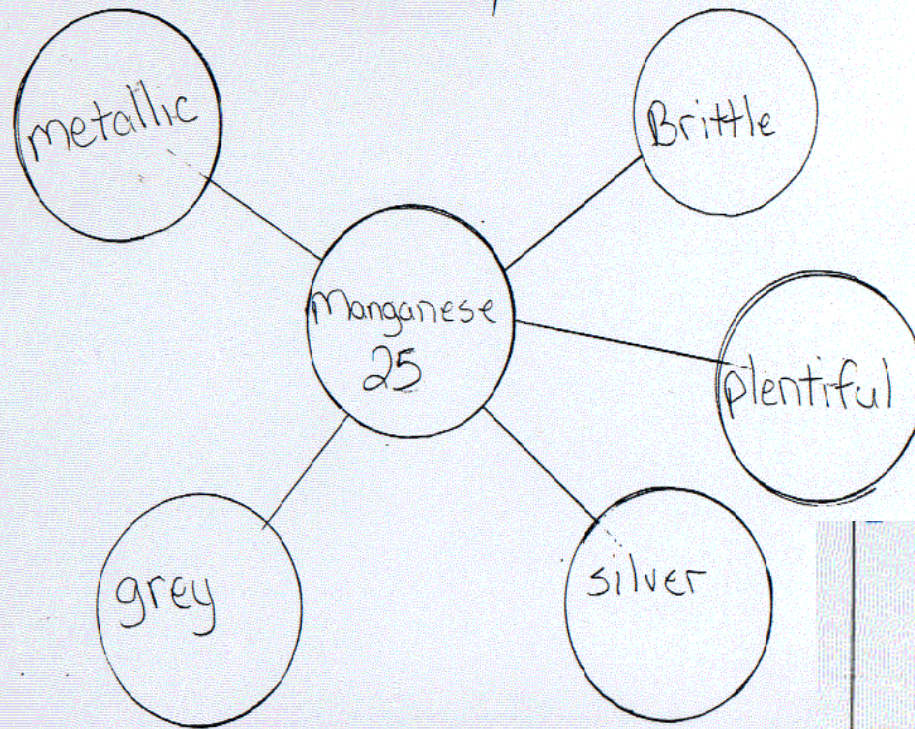
**Yates Mills Elementary
School Raleigh
North Carolina, USA**







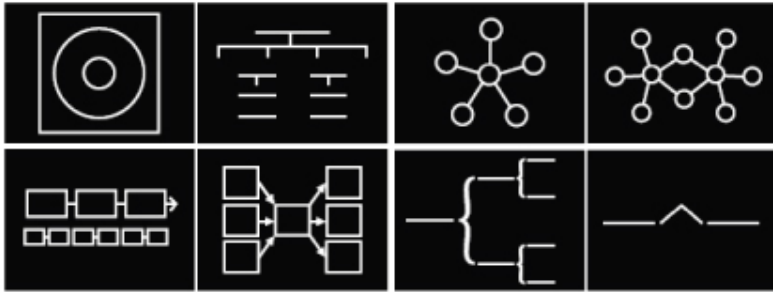
Bubble Map



Science

Manganese

Manganese is a brittle, silver grey, metallic element. It has many industrial uses. Manganese is a plentiful element that is found throughout the earth's crust. Manganese is used in the form of alloys and compounds. Manganese removes oxygen and sulfur from steel. Manganese can exist in four different forms.

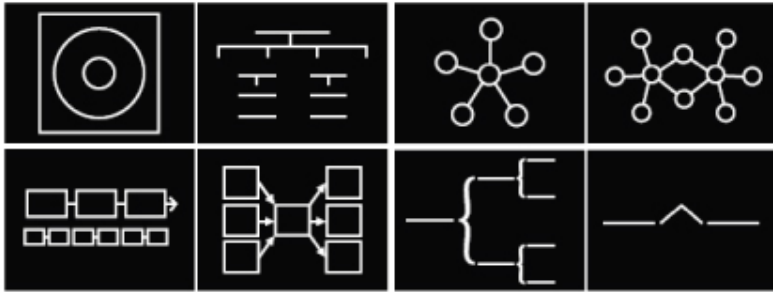


The Frame of Reference:

Can be used with **ANY** map

Gives students an opportunity to ***think about their thinking.***

Encourages greater ***reflective thinking.***

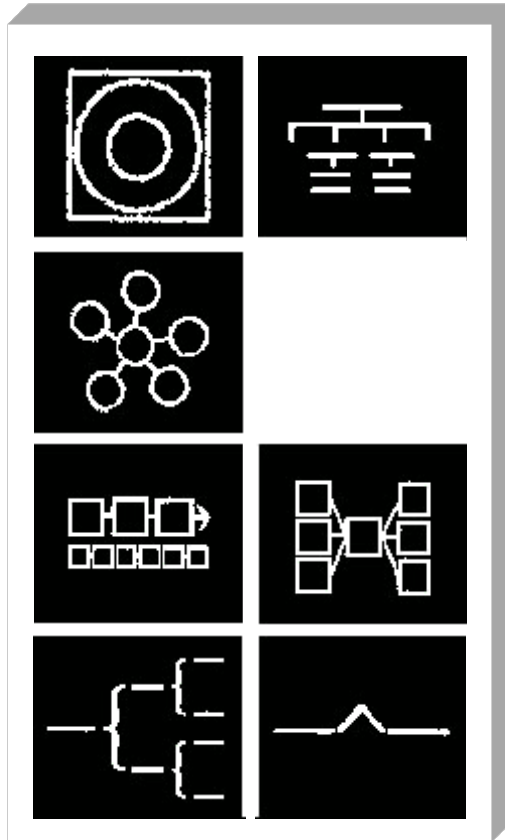


3 guiding questions

How do you know what you know?

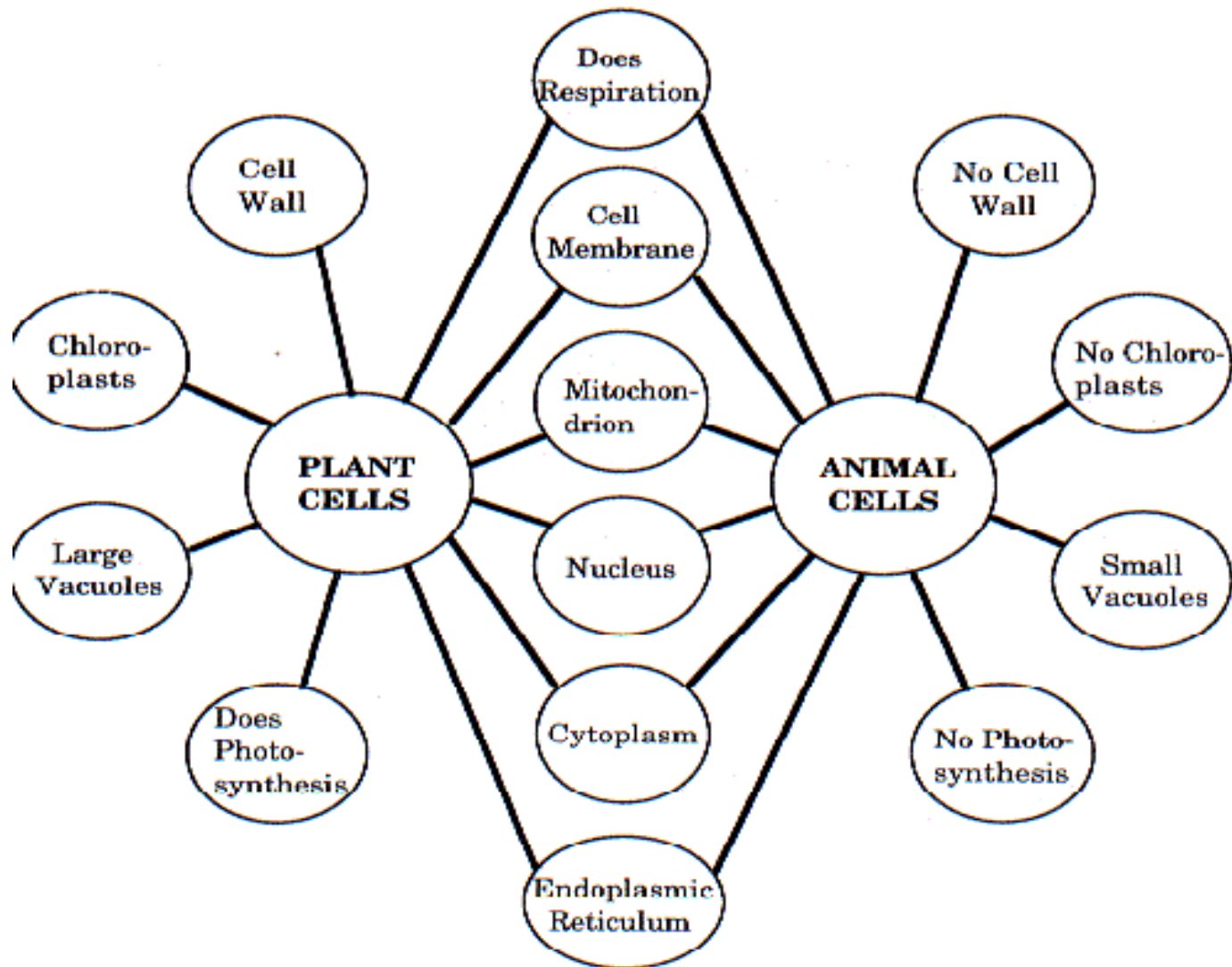
What is influencing the information on your Map?

Why is this information important?



The Double Bubble Map
for comparing & contrasting

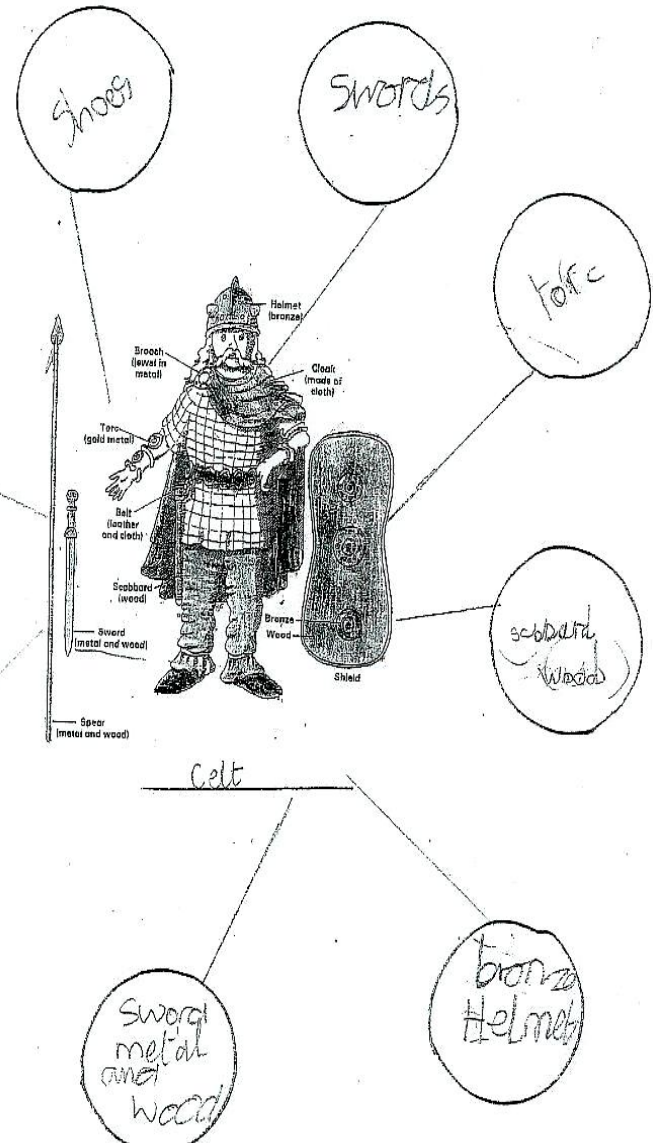
Biology

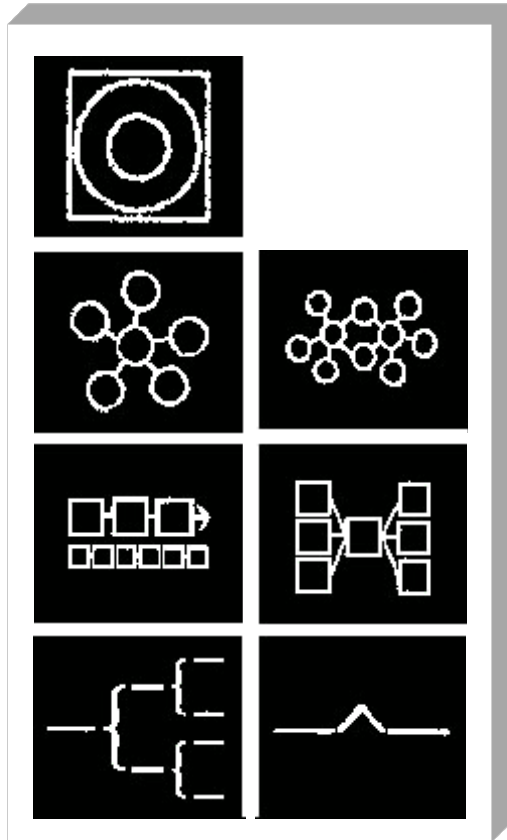


Alex

With a BoBl Map you do
less writing on the other
hand a DoBl BoBl map
you do more writing
A BoBl Map you describe
things while a DoBl
BoBl Map you compare
things. A BoBl Map is
smaller than a DoBl BoBl

The diagram illustrates the equipment of a Roman soldier. At the center is a drawing of a soldier standing, wearing a helmet, a breastplate, a tunic, and leggings. He holds a long spear (javelin) in his right hand and a large oval shield (side shield) in his left. A small round shield (small shield) is shown above the large one. Labels with lines pointing to the soldier's gear include: 'Metal' (helmet), 'Leather' (breastplate), 'Cloth' (tunic), 'Leather' (leggings), 'Javelin' (the spear), 'Wood' (the shaft of the spear), 'Side shield' (the large oval shield), and 'Small shield' (the small round shield). Surrounding the central figure are six circles, each containing a label: 'Dagger' (top), 'Sandals' (top right), 'Sword' (top left), 'Legion' (middle left), 'Training' (bottom left), and 'Leather' (bottom right). The word 'Roman' is written below the central figure.



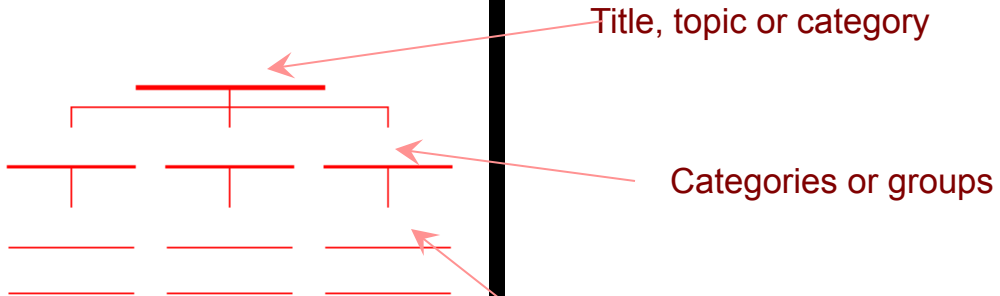


The Tree Map
for classifying things

Notemaking Guide for Learning Thinking Maps

Tree Map

LOOKS LIKE:



THINKING PROCESS:

Classify/Group/Sort

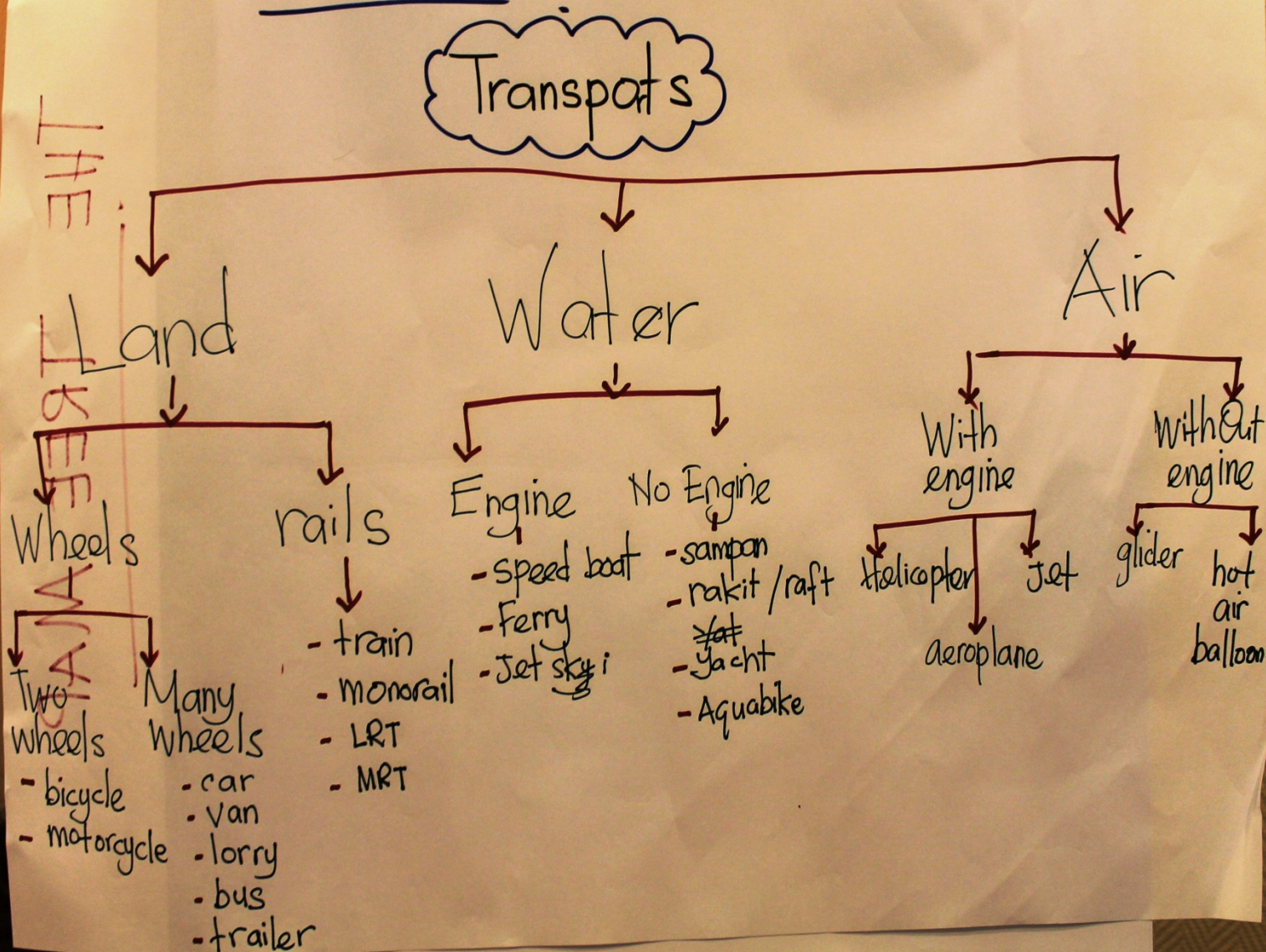
NOTES:

Types of...

Kinds of...

Inductive/Deductive

THE TREE MAP..

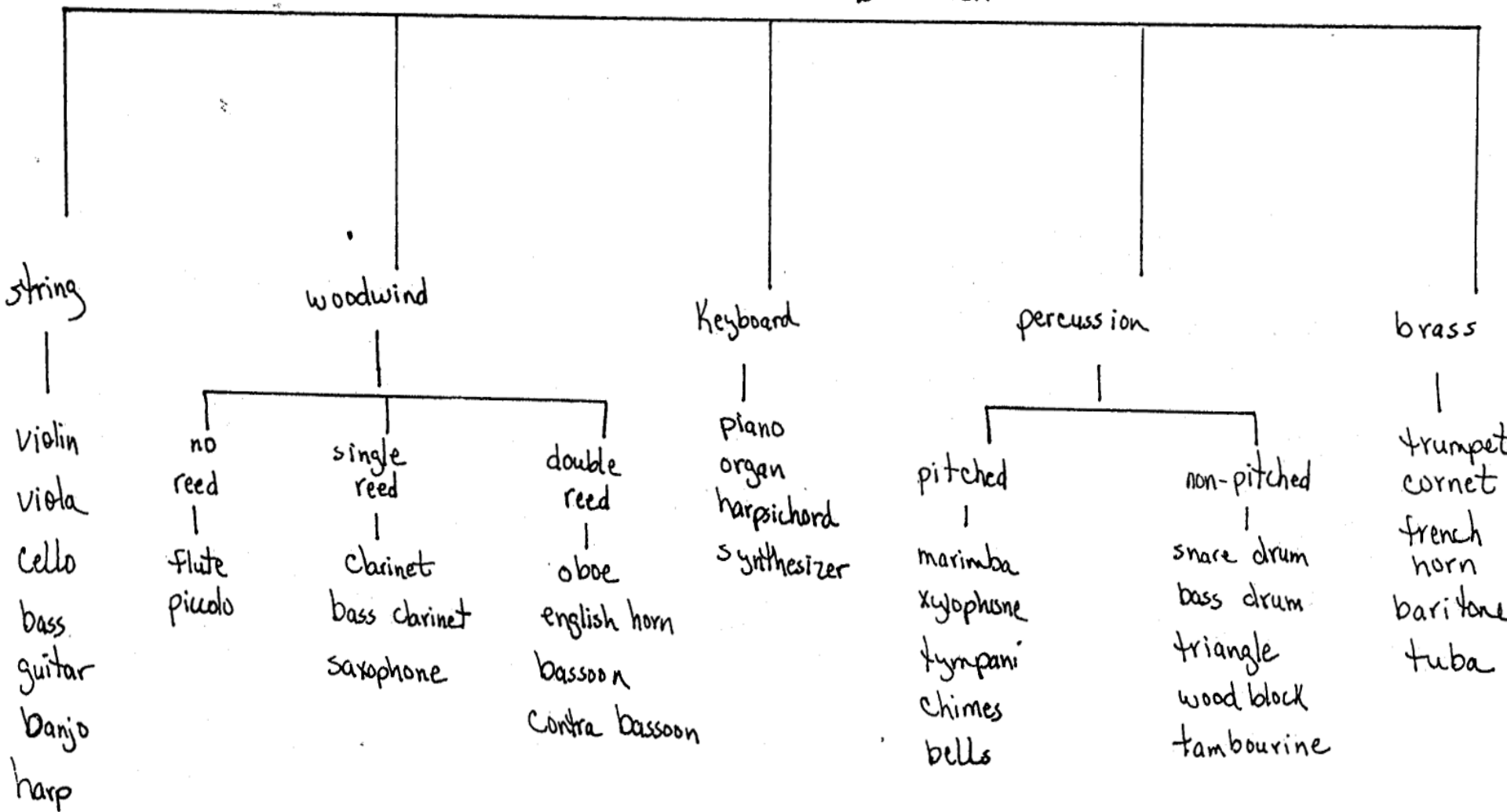




Using the Tree Map:

Task — classify musical instruments into different categories.

Musical Instruments





drum



Instruments



Wood
Blocks

Blowing

cornet

flute

tambore

Saxophone

trumpet

bag pipes



calasa

Hitting

drum

wood block

tambore

Shaking

maracas

tambore

calasa



maracas



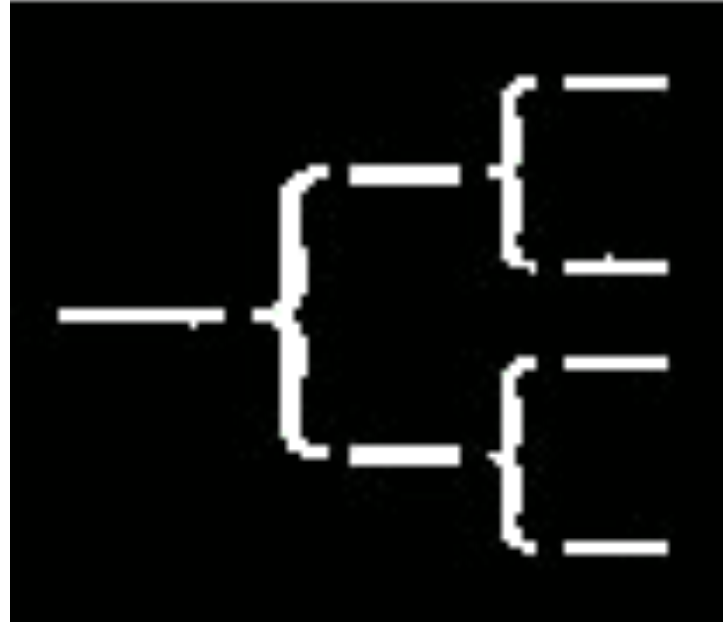
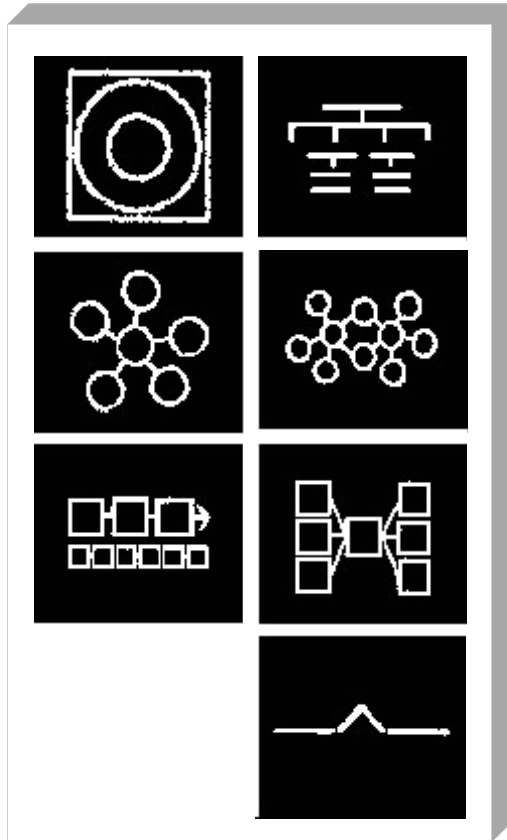
Plucking

banjo
guitar

Sitar



tambore



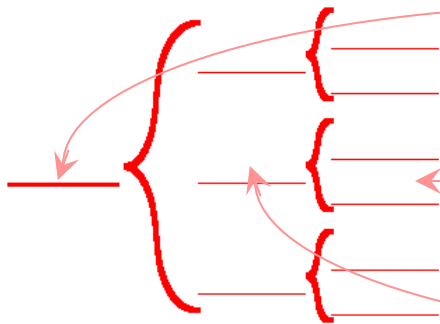
The Brace Map

for seeing parts of a whole

Notemaking Guide for Learning Thinking Maps

Brace Map

LOOKS LIKE:



NOTES:

Whole

Parts of...

Physical, tangible objects

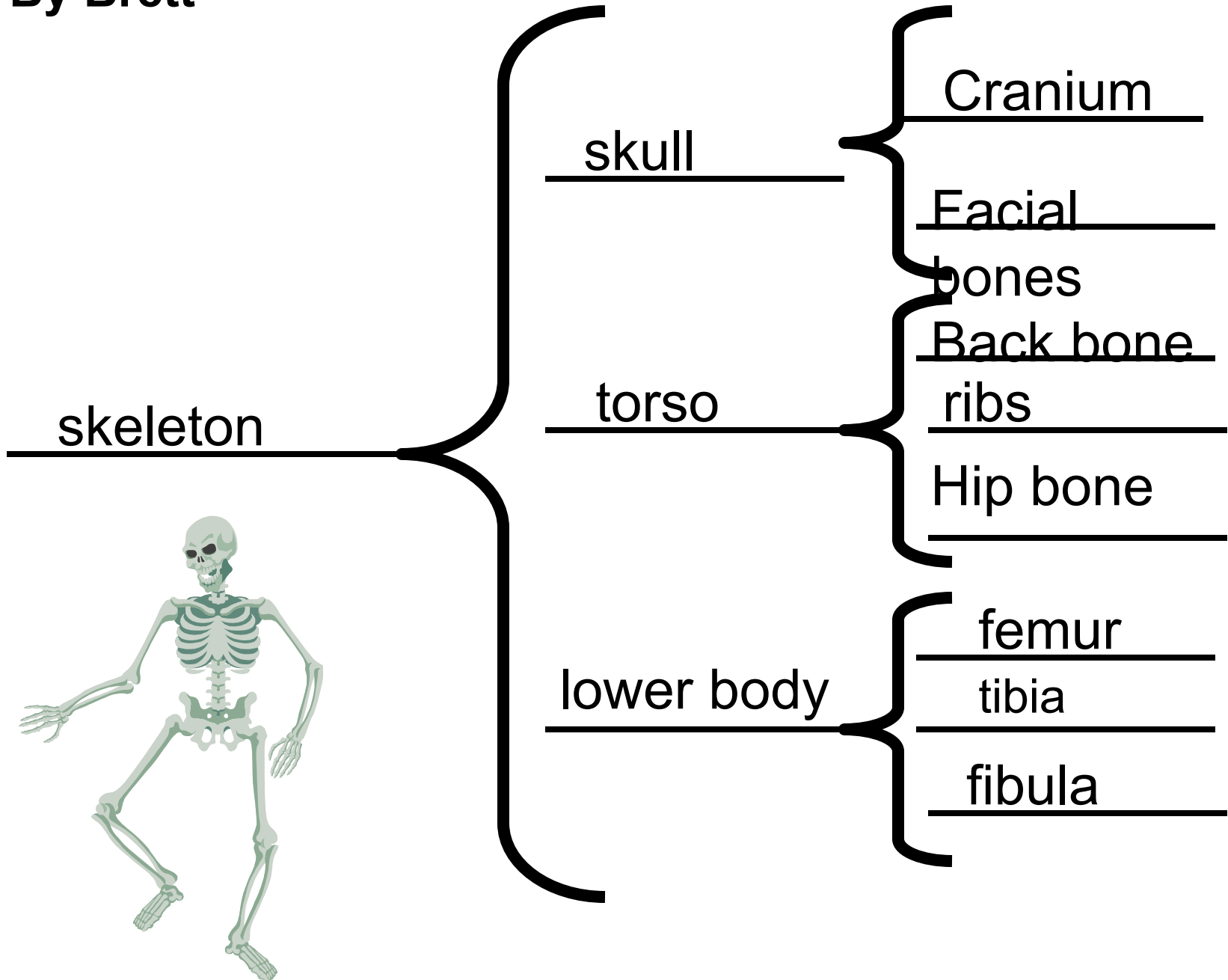
Sub-parts

Parts

THINKING PROCESS:

Part/whole relationships,
structure

By Brett



octopus



8 tentacles { suction
cups

beak

gills

head { eyes

ink

mantle (skin)

Science



Light Microscope

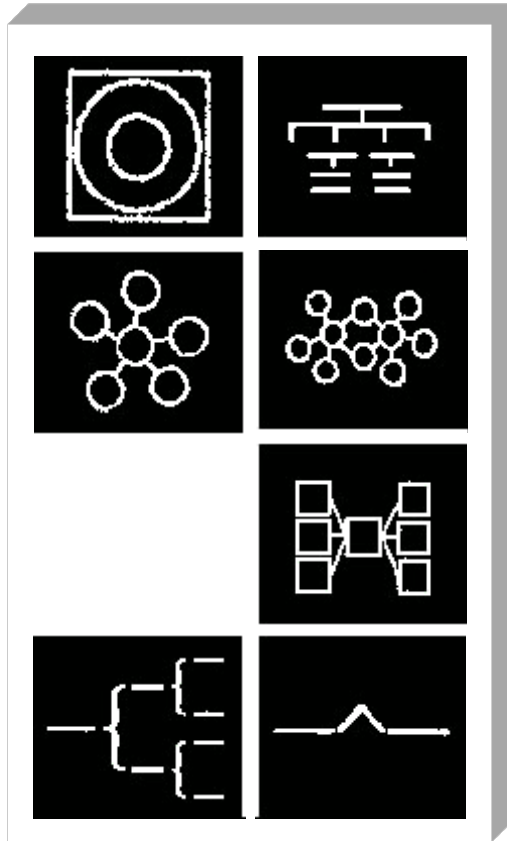
base

lenses

eyepiece

mirror

controls



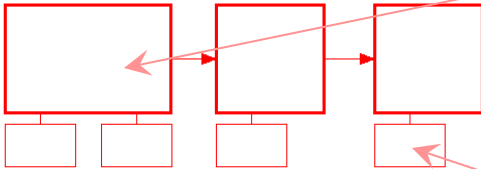
The Flow Map

For seeing events in sequence

Notemaking Guide for Learning Thinking Maps

Flow Map

LOOKS LIKE:



NOTES:

Major Stage

Substages

**Plots, Processes,
Chronology**

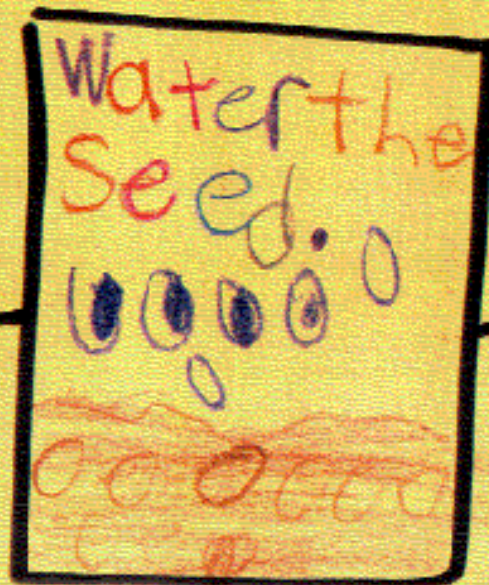
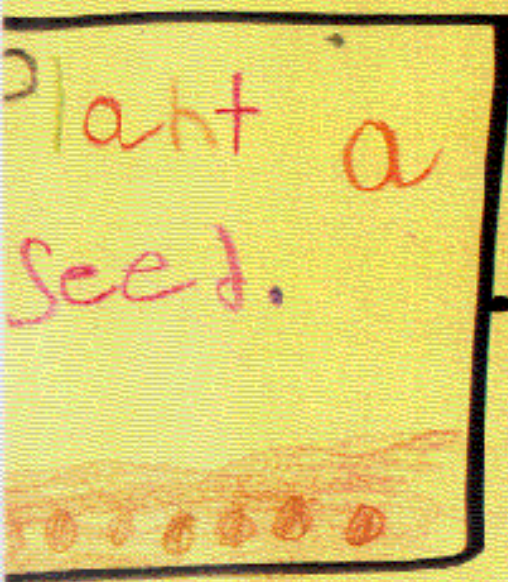
THINKING PROCESS:

**Sequence, Order, Cycles,
etc.**

Can go in any direction

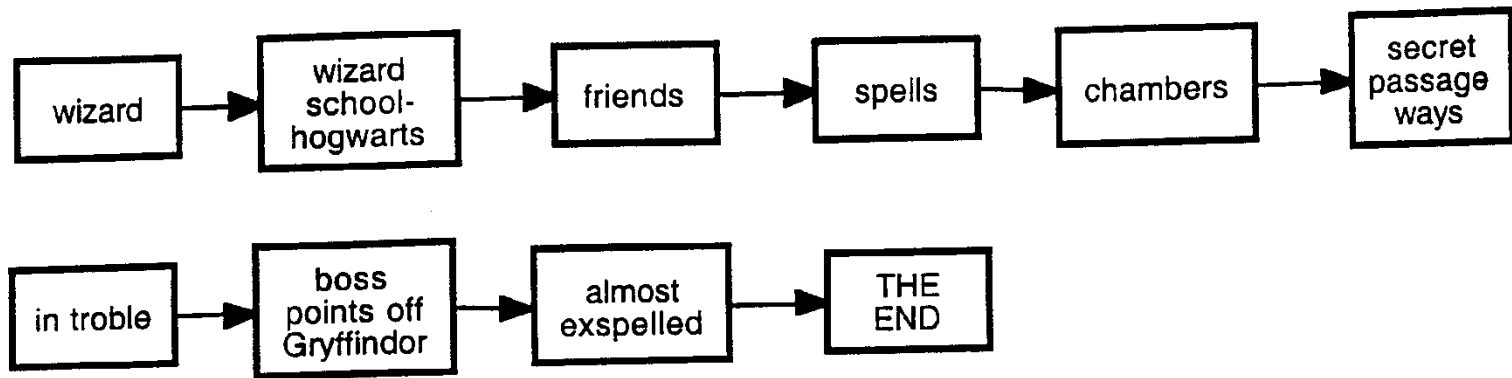
Flow Map

How a seed becomes a flower





Yates Mills Elementary School Raleigh, NC, USA



Harry Potter

One day there was a boy named Harry Potter. He was a normal boy, until one letter changed his life. This letter was about a school. A wizard school, called Hogwarts. He was amazed! Harry Potter was a wizard! So he traveled to the school on a train. At the train he met his first friends. Their names were Ron Weasley and Hermione Granger. He thought it was cool that he got to cast spells! There were many different chambers and some funny passwords like lemon drop. The secret passage ways were cool but Harry, Ron, and Hermione got in trouble for lurking in the hallways at night. There were five points taken off Gryffindor. They were almost expelled. They will never do that again.

THE END!

Ellie

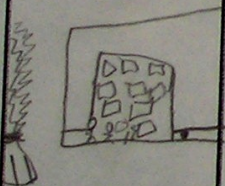
A Flow Map about our day at the Tate Modern

First we got on
the coach and
we had to wait
a long time!

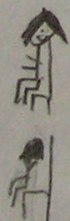
Then we crossed
some busy roads.
And then we had
to wait until it
opened and then
we went to see
some amazing
classical tower very cold
plastic boxes.

Finally we crossed
the busy roads again.
And we got on
on the bus and
watched finding
Nemo and hannah
was sick!

I Looked
out at all
the people.

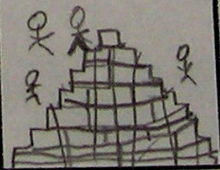


I played
games
with my
friends.



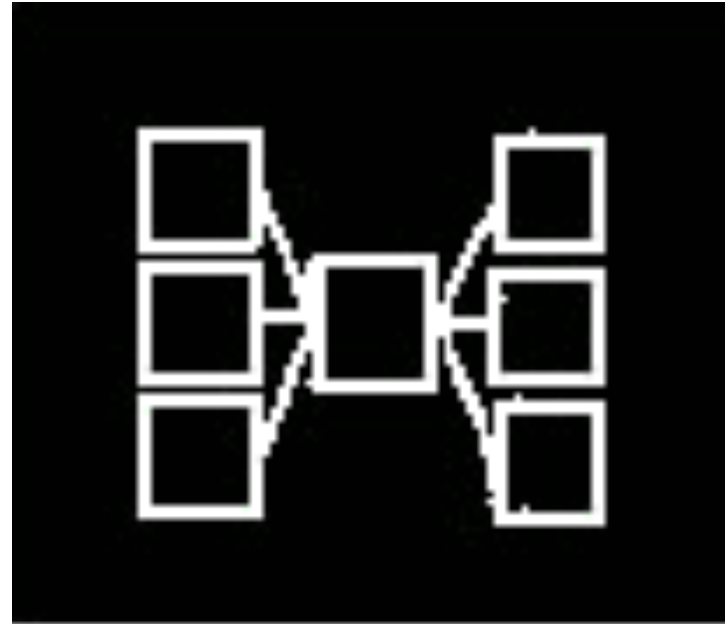
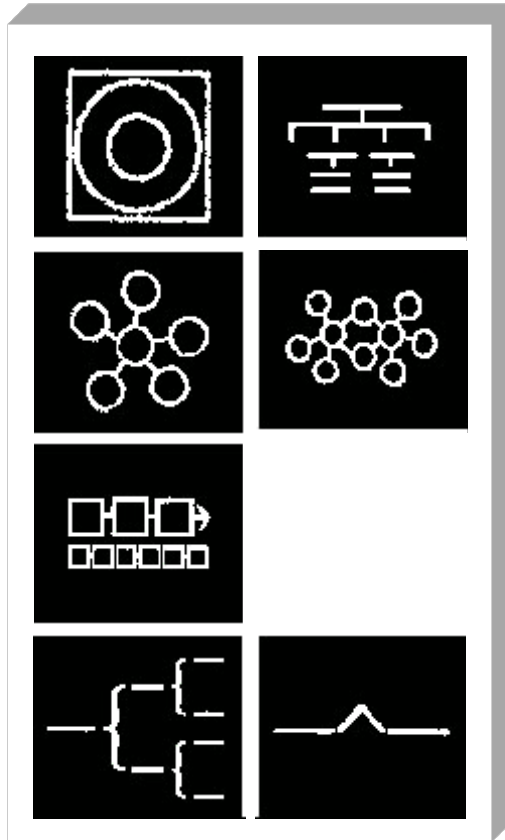
and
some of
the boxes
jiggantick
snowy
creamy
white
neat
mammoth
boxes.
Some of
the boxes
where no neat

And
Rachel
white bead
built the
boxes with
glue.



finally
we got
to see
the
river
towers.

and
then
we
went
back
to school

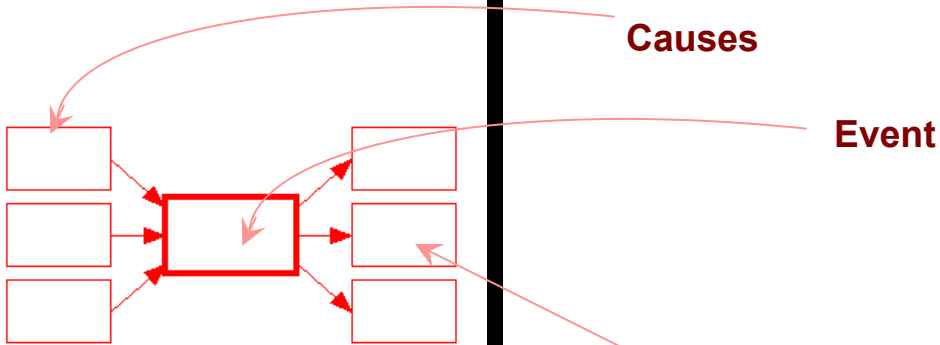


The Multi-Flow Map
for understanding
cause and effect

Notemaking Guide for Learning Thinking Maps

Multi-Flow Map

LOOKS LIKE:



THINKING PROCESS:

Cause & Effect Reasoning,
Prediction

NOTES:

Causes

Event

Effects, Outcome

Causal Explanation

Projecting Consequences

Analyzing Effects

“if-then”

“when... then”

Can be one-sided

Cause

Effect

houses
were made
out of ~~fire~~ wood.

6 People died.
was burnt
down.

There was
straw on the
floor.

The Great
Fire of London

The Great Fire of London

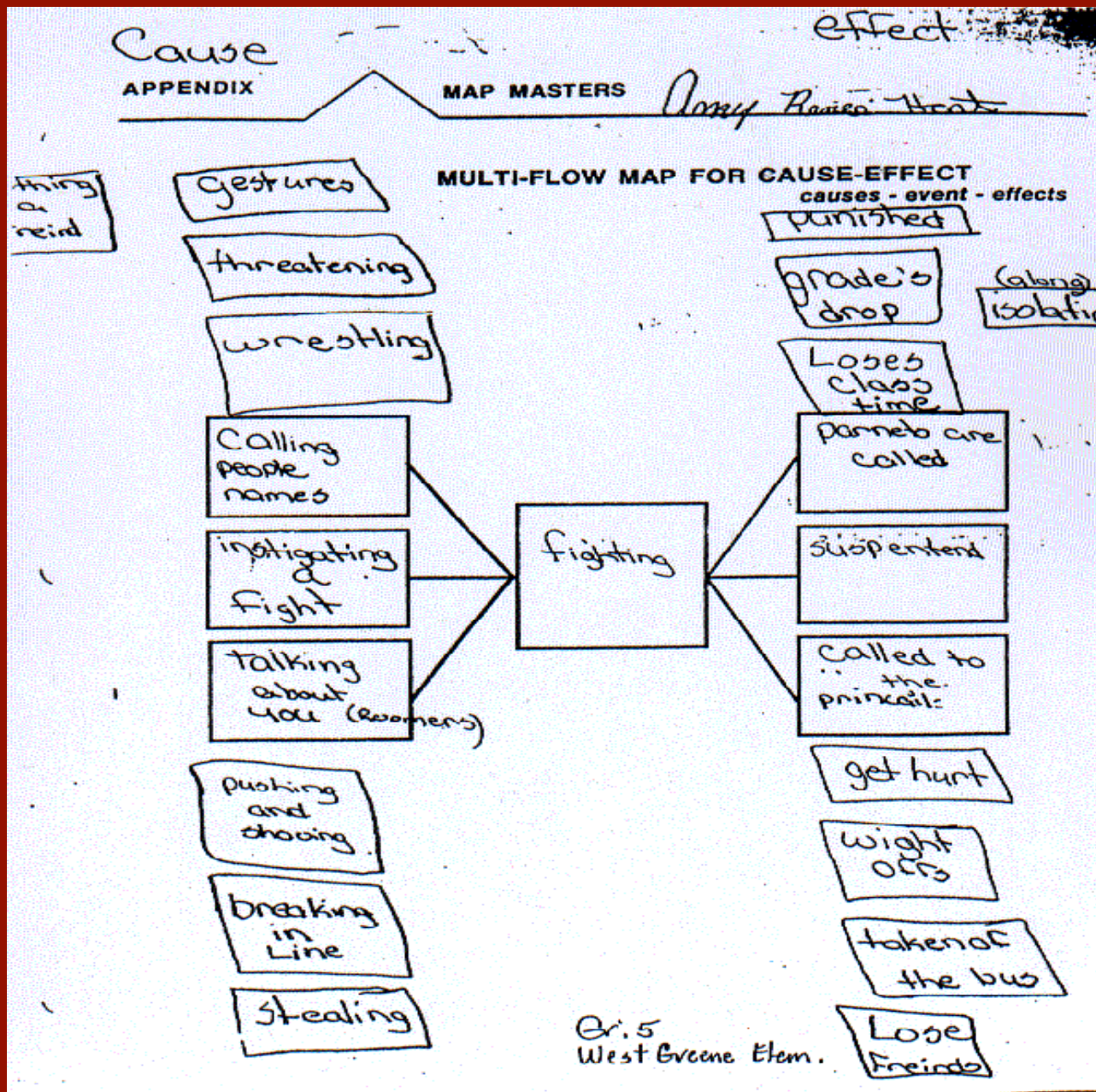


most of London
was burnt
down.

It was
a hot summer.

The city had
to be re-built
city with
bricks.

Conflict Resolution



Behaviour Reflections

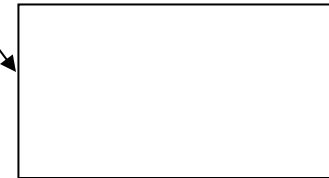
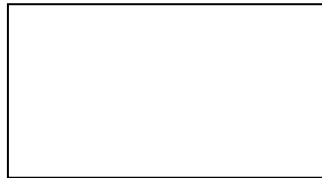
***Reasons for my
behaviour***

Name _____

Date _____

***Consequences of my
behaviour***

***Description of my
behaviour***



Plan for improvement

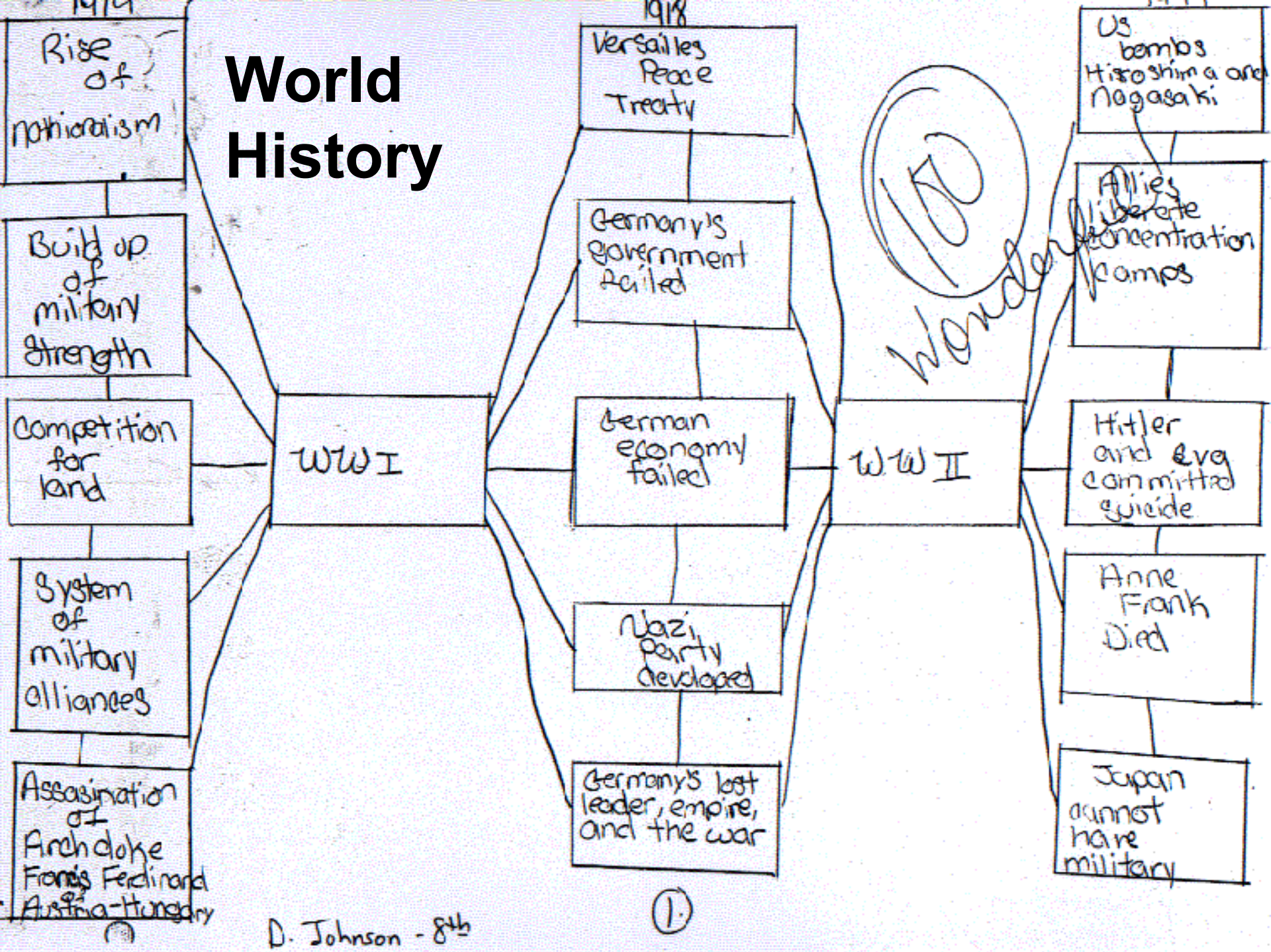
—

Pupil _____

Teacher _____

Parent _____

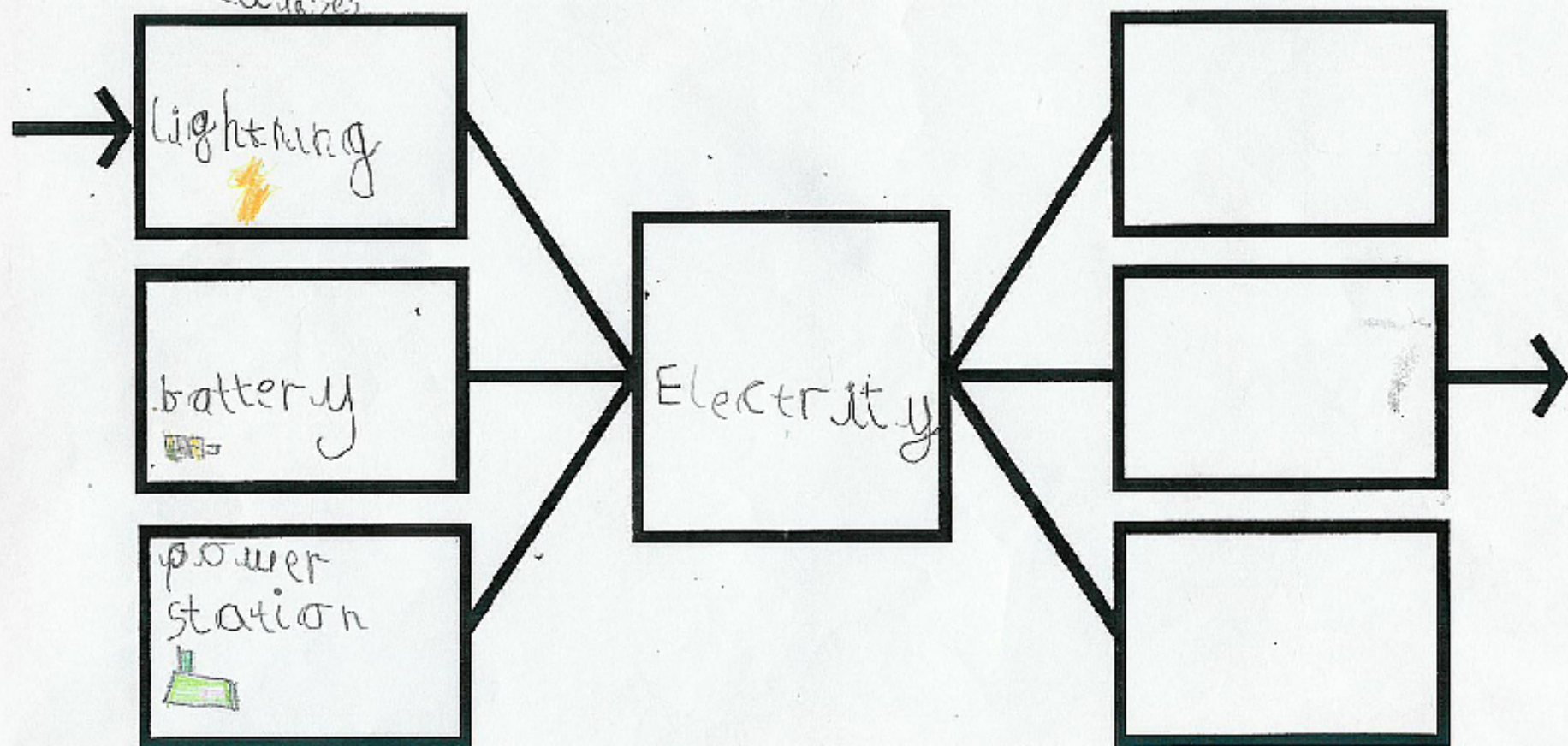
World History



07.11.05 Kieran

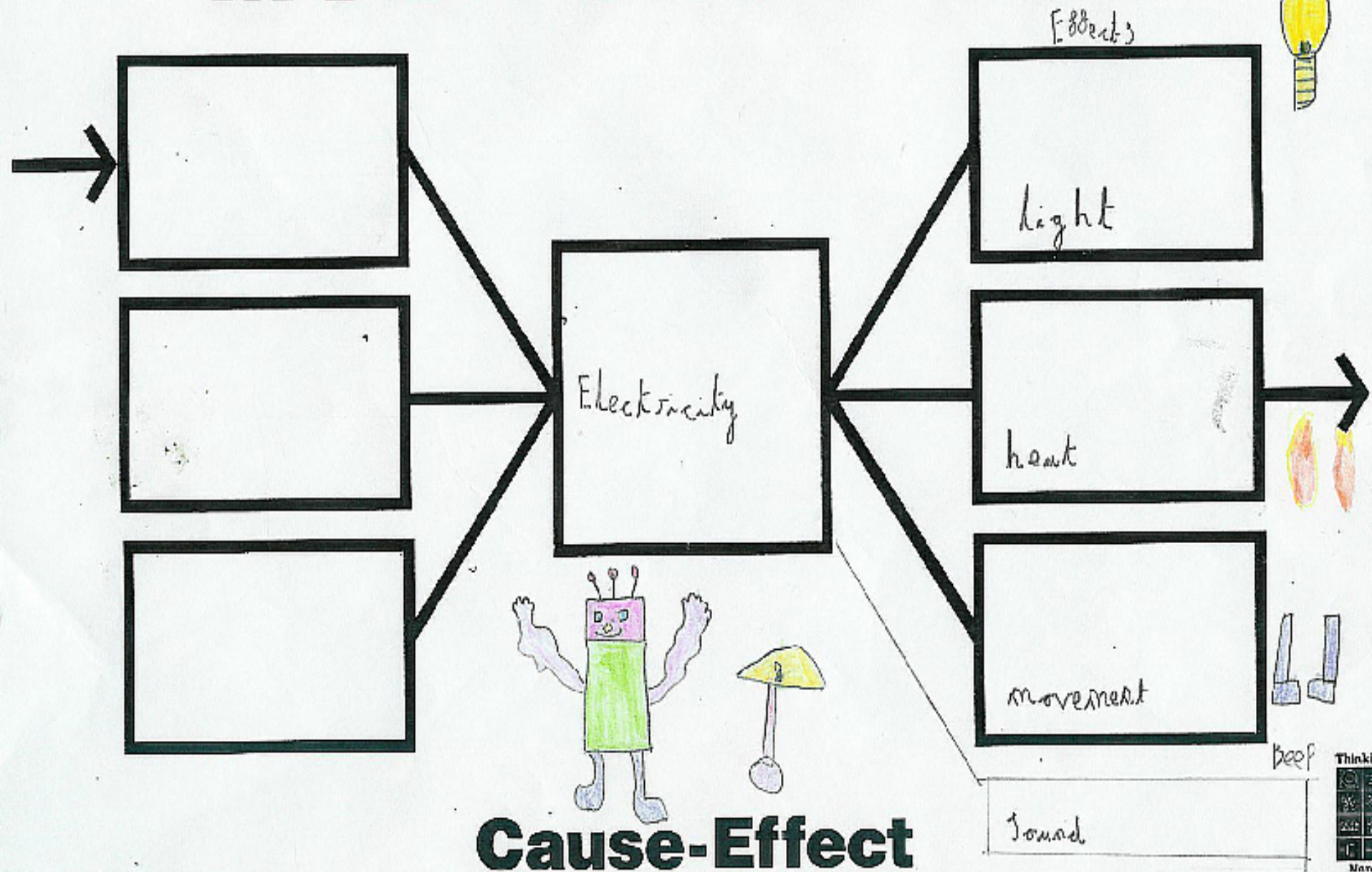
MULTI-FLOW MAP

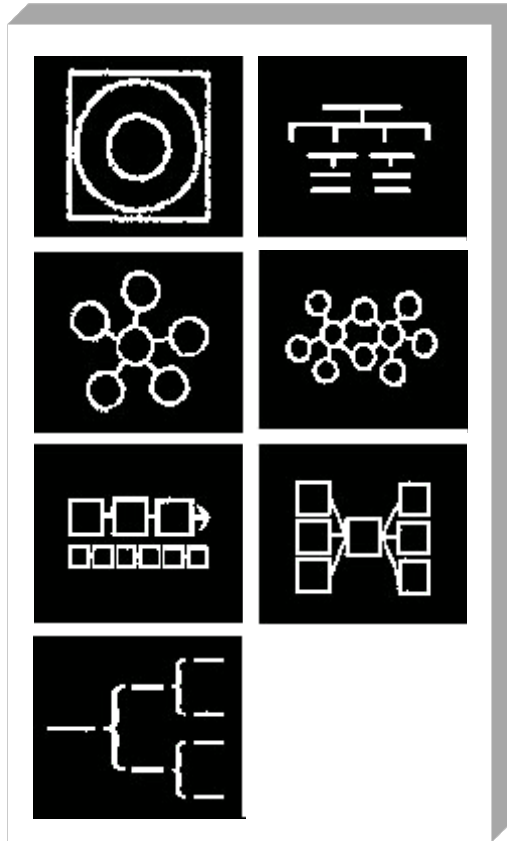
Causes



Cause-Effect

MULTI-FLOW MAP





The Bridge Map
for seeing analogies

Notemaking Guide for Learning Thinking Maps

Bridge Map

LOOKS LIKE:



RF:

THINKING PROCESS:

Seeing Analogies,
Transferring Similar
Relationships

NOTES:

Similar relationships

Relating or Common
Factor

How are they
related?

APR 23 1997

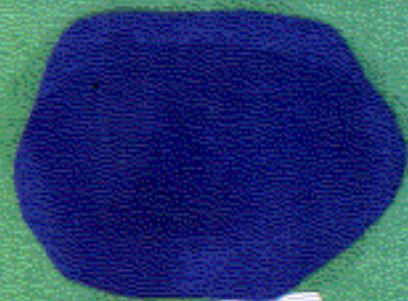


rain



sun

AS



water



light

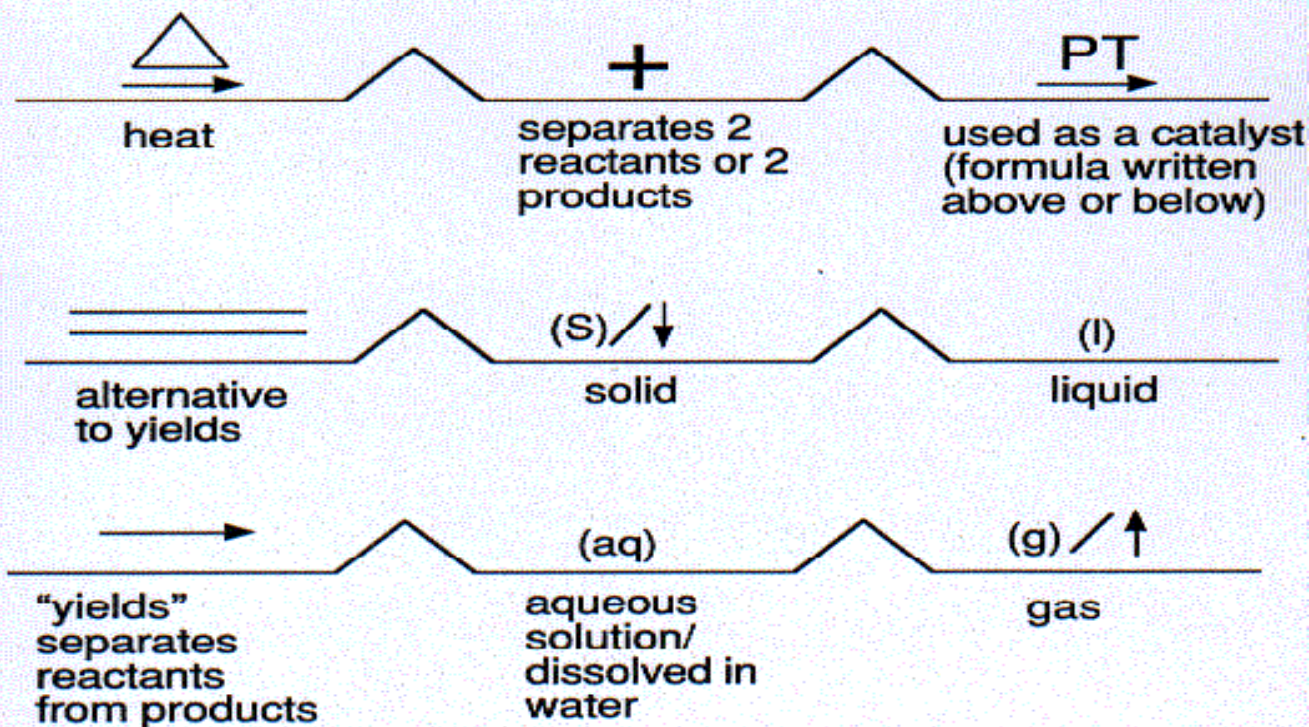
relating factor:

gives

Jos min

Chemical Equations

Chemistry



RF: Symbol for

Friday 30th June

Bridge Map

Melissa

Tagged
sharp

as

curious
strange

as

scream
shout

as

cackle
laugh

Murky
dark

as

dash
run

as

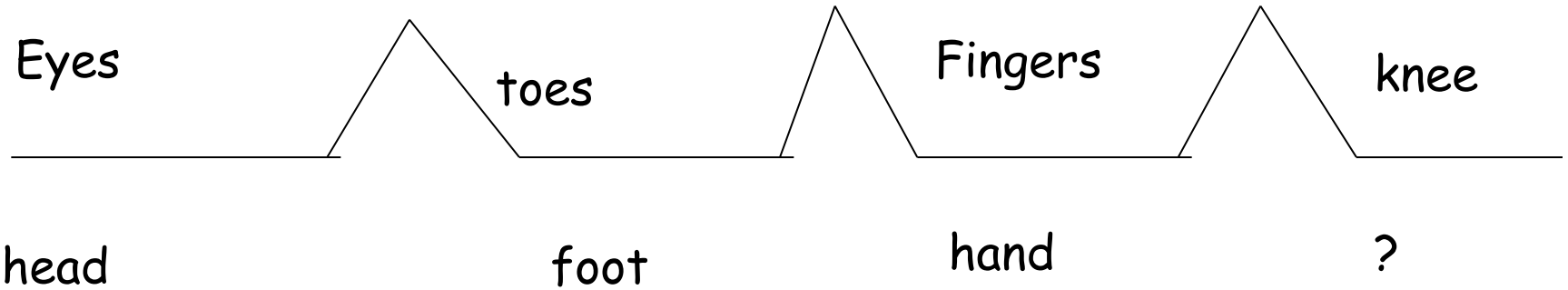
place
site

as

stride
walk

is a better word
relating factor

Analogies



Relating factor: is/are a smaller part of the

is the colour of

Red

as

Gold

as

a strawberry in a
big strawberry
patch. Hannah

a catherine
wheel on
bonfire night.

James C.

Dark Blue

as

Light Blue

as

Black

as

the midnight sky
before the
fireworks exploded!
Amy

the sea crashing
on the rocks.
Ellie

the starry night
when we are all
fast asleep.
Francesca

Green

as

Yellow

as

Brown

a crocodile in the
sea snapping his
jaws.
Adam

the shining,
shimmering sun.
Juliet

yummy, yummy
chocolate.
Archie