





# Oaklands Junior School: A Thinking School

Learning to Think  
Thinking to Learn

# Welcome!

*“If everyone is thinking alike, then  
somebody isn’t thinking.”*

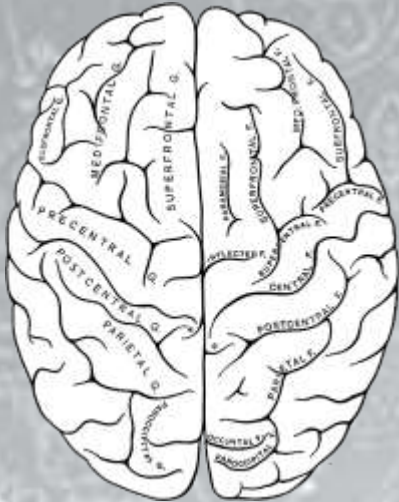
*George S. Patton*



# Thinking Maps



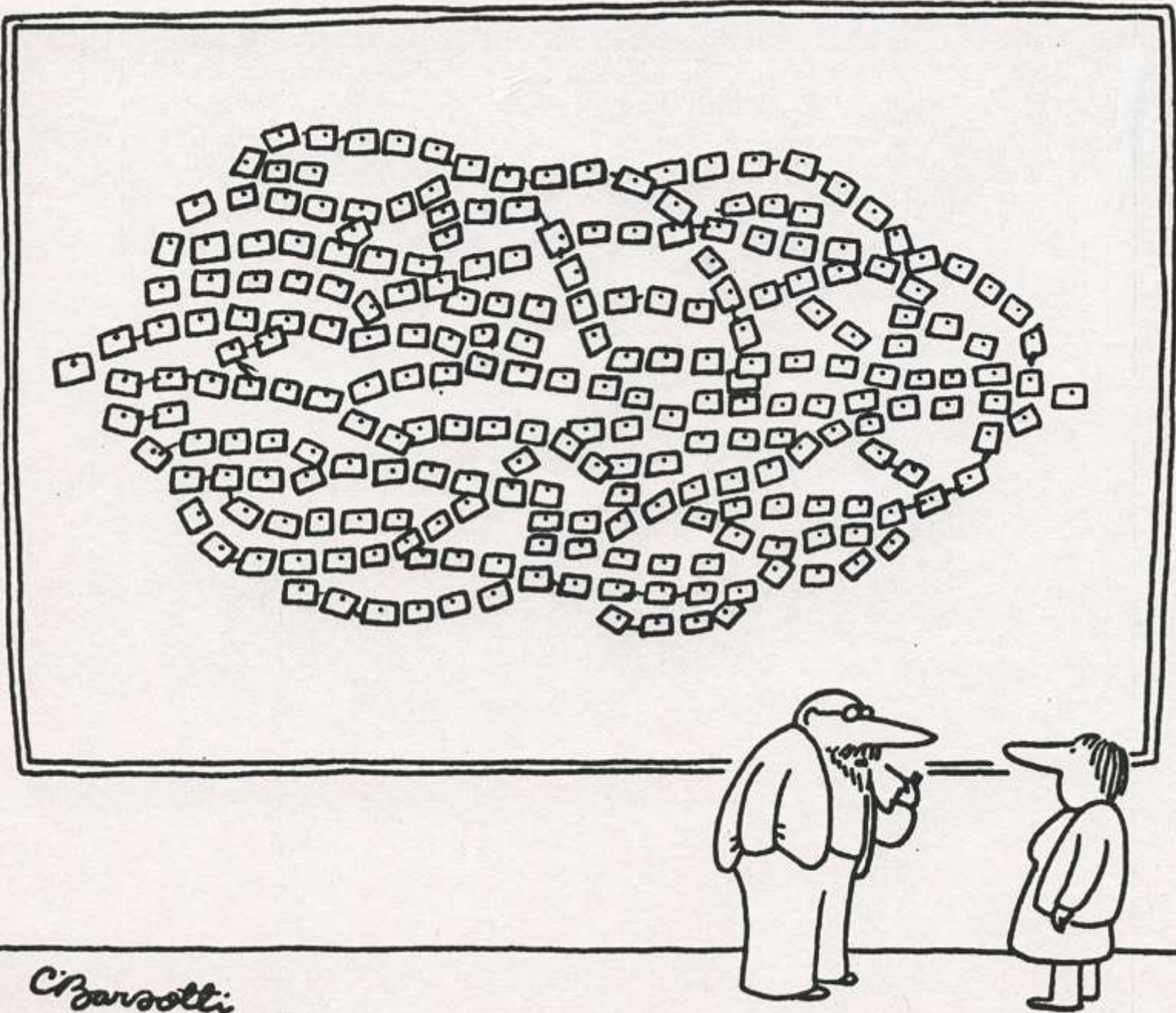




**Visual Tools directly facilitate  
the interplay between  
brain and mind**

**the brain is unconsciously  
making neural networks**

**the mind is consciously  
patterning information**



*C. Pavolli*

*"It's plotted out. I just have to write it."*



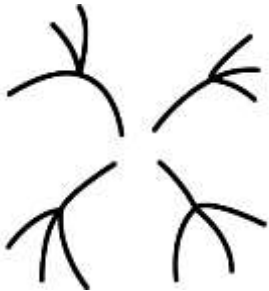


# Visual Tools

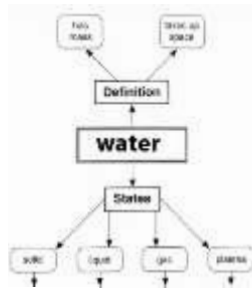
Visual tools are non-linguistic symbol systems. There are 3 basic categories, each with specific purpose and visual configurations.

# visual tools

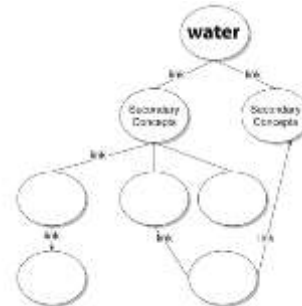
**brainstorming  
webs for  
creative thinking**



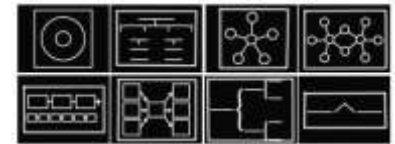
**graphic organizers  
for  
analytical thinking**



**concept maps  
for  
conceptual thinking**



**Thinking Maps®  
a common language  
of Visual Tools**



A man in a white shirt is writing on a whiteboard in a meeting room. The whiteboard has a diagram with handwritten text including "Budgeting", "Motivation", "Plan", "prioritizing", and "Diversity & Responsiveness".

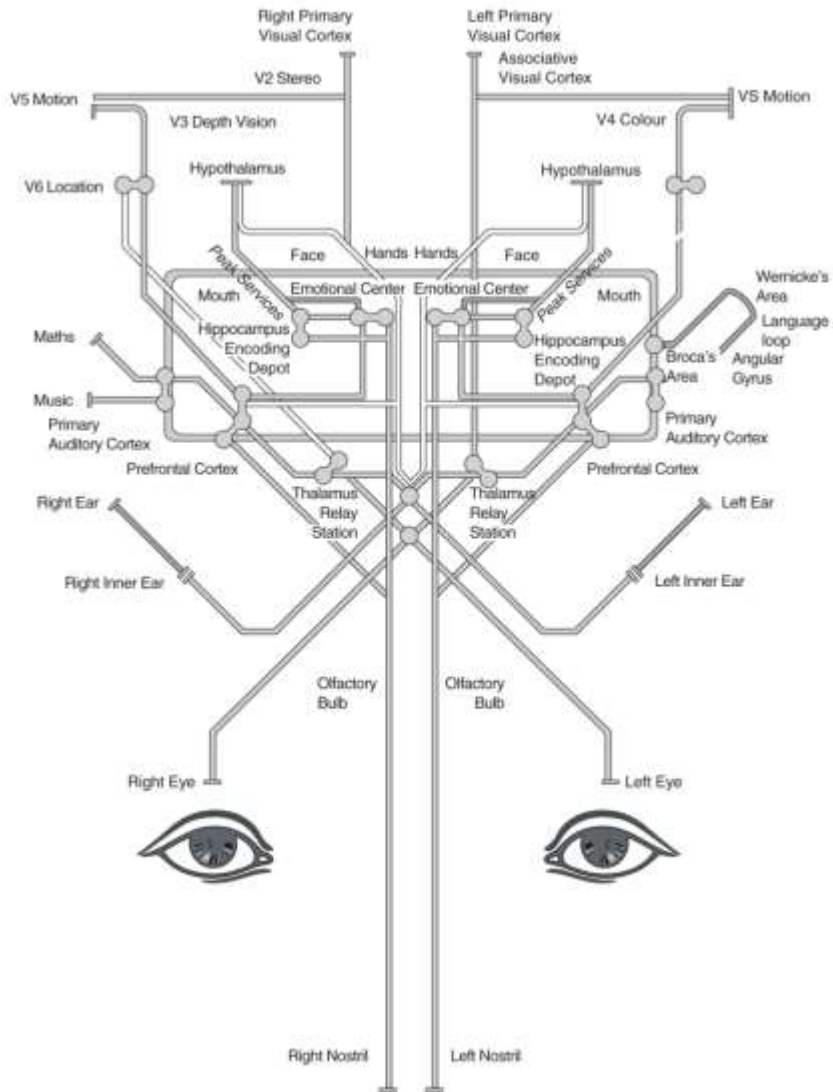
**90% of all information**  
that comes to our brain is **visual**

**40% of all nerve fibers**  
connected to the brain are linked to the **retina**

**36,000 visual messages per hour**  
may be registered by the **eyes**

*Eric Jensen*

*Teaching with the Brain in Mind*



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

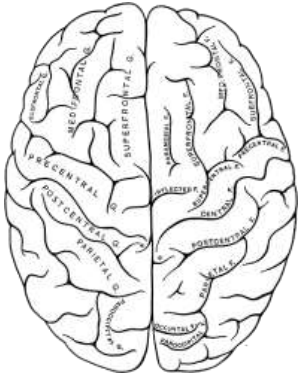
*Pat Wolfe, Ed.D.*

*Teaching with the Brain in Mind*

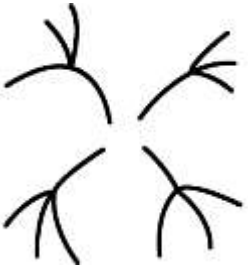


**“Many would argue that we’ve used such a small part of our mental capacity because of our insistence on linear thinking.”**

**Margaret Wheatley**  
*Leadership and the Sciences*



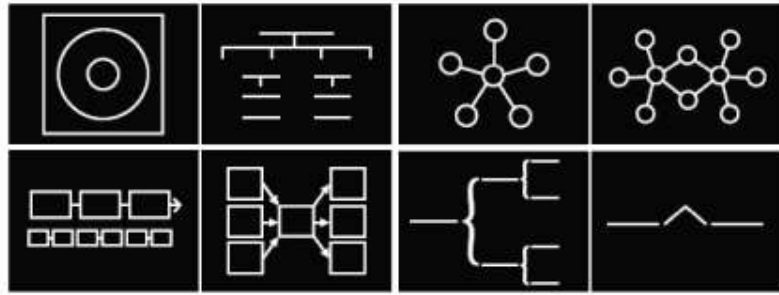
**Vygotsky argued convincingly that our thoughts are influenced by the kinds of tools we use...We can see that when we perform physical tasks, such as gardening or brushing our teeth, how we deal with the task and whether we succeed are both influenced by the tools we use.**



**But we do not always recognize that tools also can influence how we perform mental tasks, how we think about them, and whether we complete them successfully.**

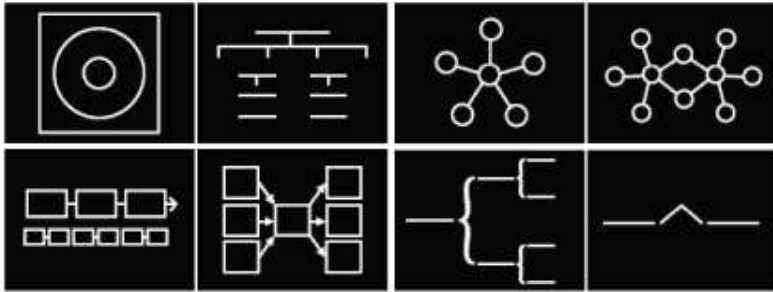
*James Hiebert, et. al.*

*Making Sense*



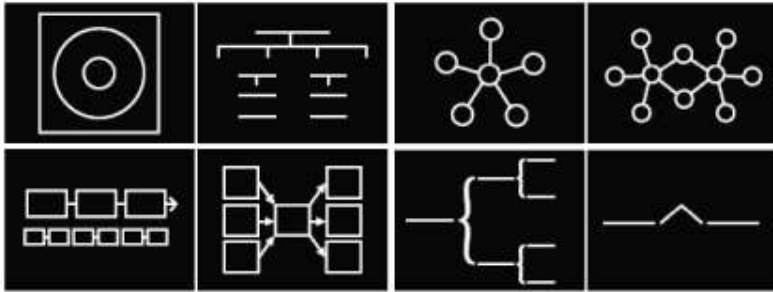
Thinking Maps<sup>®</sup> provide a common *language* that **integrates** the visual tools.

The Thinking Maps<sup>®</sup> are associated with particular cognitive processes.



**Thinking Maps<sup>®</sup> is not a curriculum, but rather, a set of tools to allow teachers to present their existing curriculum in a more meaningful way.**





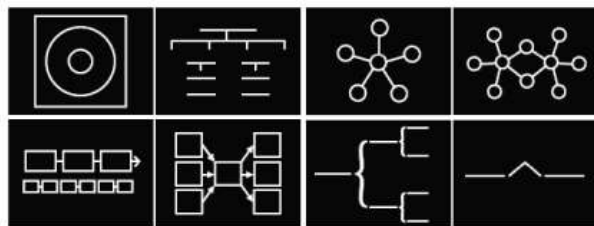
**Better learning will come not so much from  
finding better ways for the teacher to**

**INSTRUCT...**

**...but from giving the learner better ways to**

**CONSTRUCT.**

*Seymore Papert, 1990*



**QUESTIONS FROM TEXTS,  
TEACHERS AND TESTS**

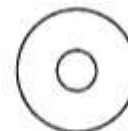
**THINKING PROCESSES**

**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**

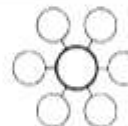
Circle  
Map



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

**DESCRIBING  
QUALITIES**

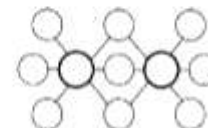
Bubble  
Map



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**

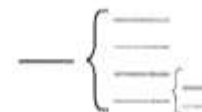
Tree  
Map



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

**PART-WHOLE**

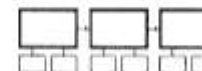
Brace  
Map



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

**SEQUENCING**

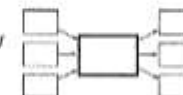
Flow  
Map



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

**CAUSE AND EFFECT**

Multi-Flow  
Map

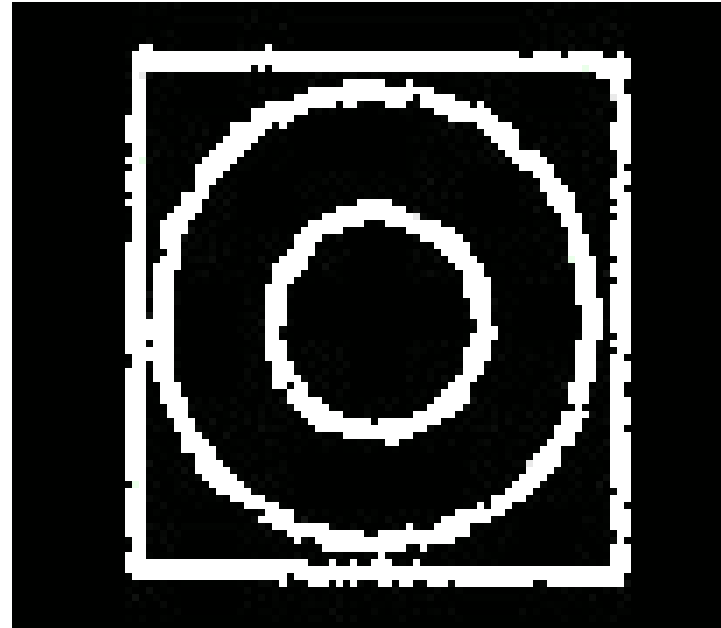
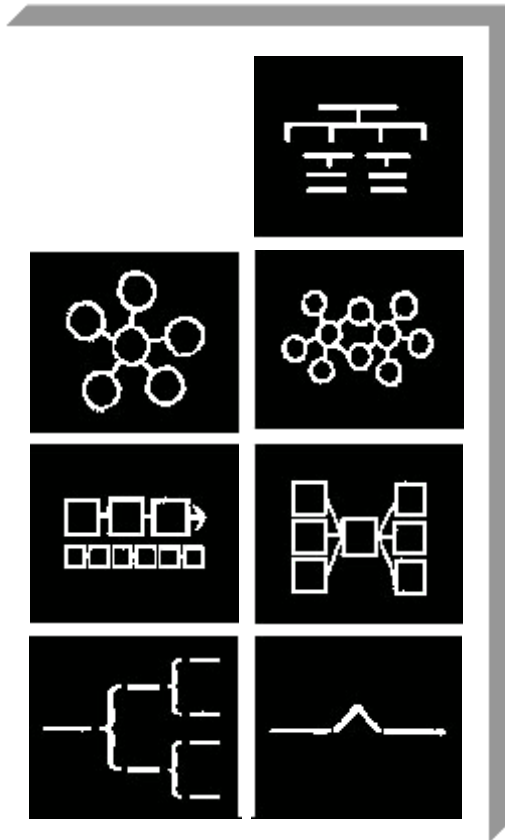


What is the analogy being used? What is the guiding metaphor?

**SEEING  
ANALOGIES**

Bridge  
Map

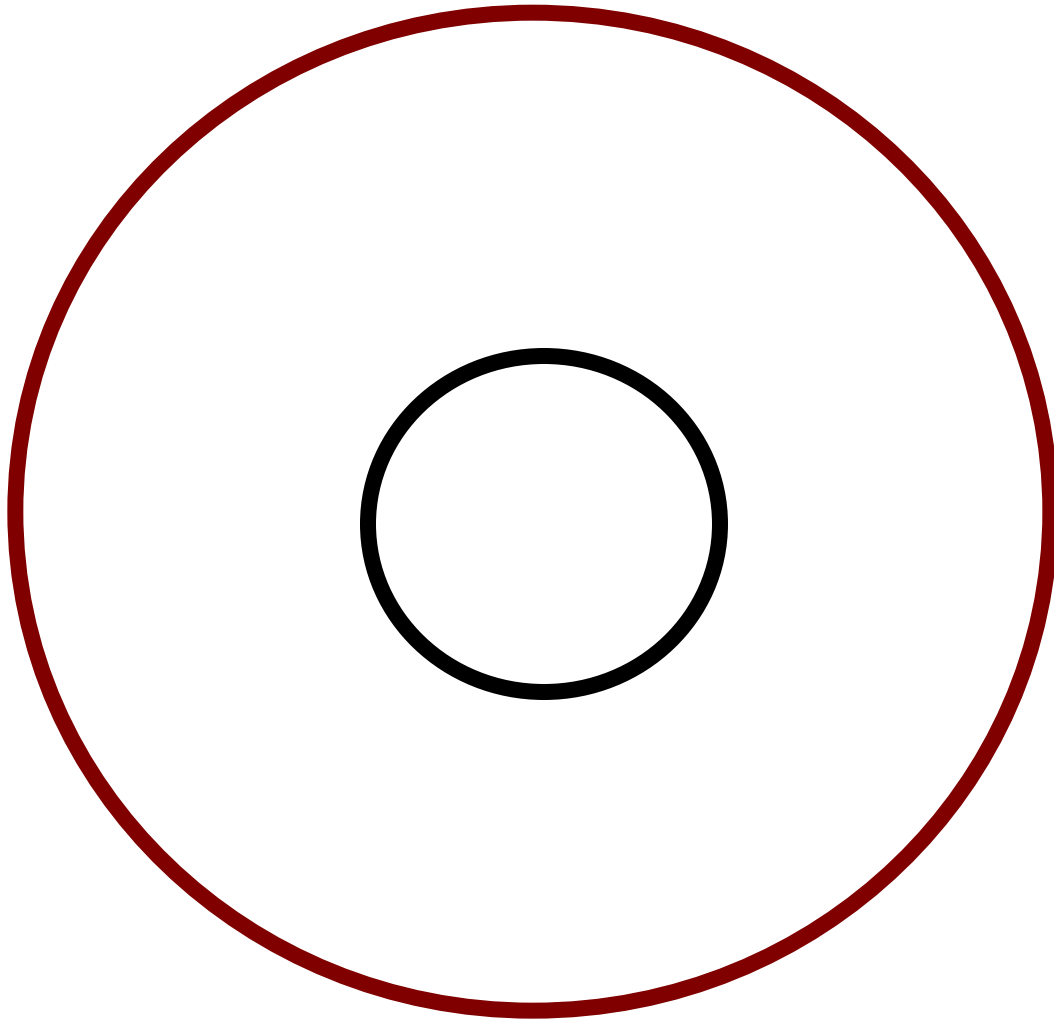




# The Circle Map

for defining in context

# Defining in Context



**Circle Map**



**happy**

**Good at sports generally**

**Not really religious**

**friendly**

**Like reading**

**competitive**

**loud**

**I can be cheeky to some teachers**

**Can be argumentative to my parents**

**musical**

**Bharti**

**Going out with my mates**

**Sympathetic to my friends**

**A good listener**

**Academically bright**

**Fun to be with**

Grand Ma

Grand Ma

Dad



Grandpa

friends

Couch

MOM

MaMa

PaPa

COACH

FRIENDS

L.A. PLAYING CALI.



MUSIC

MOVIES

COMPUTER



MATH  
CARS



NINTENDO 64

GAME  
CUBE  
DANCING



COMPUTER

HARRY POTTER



SKATEING

SOLLER

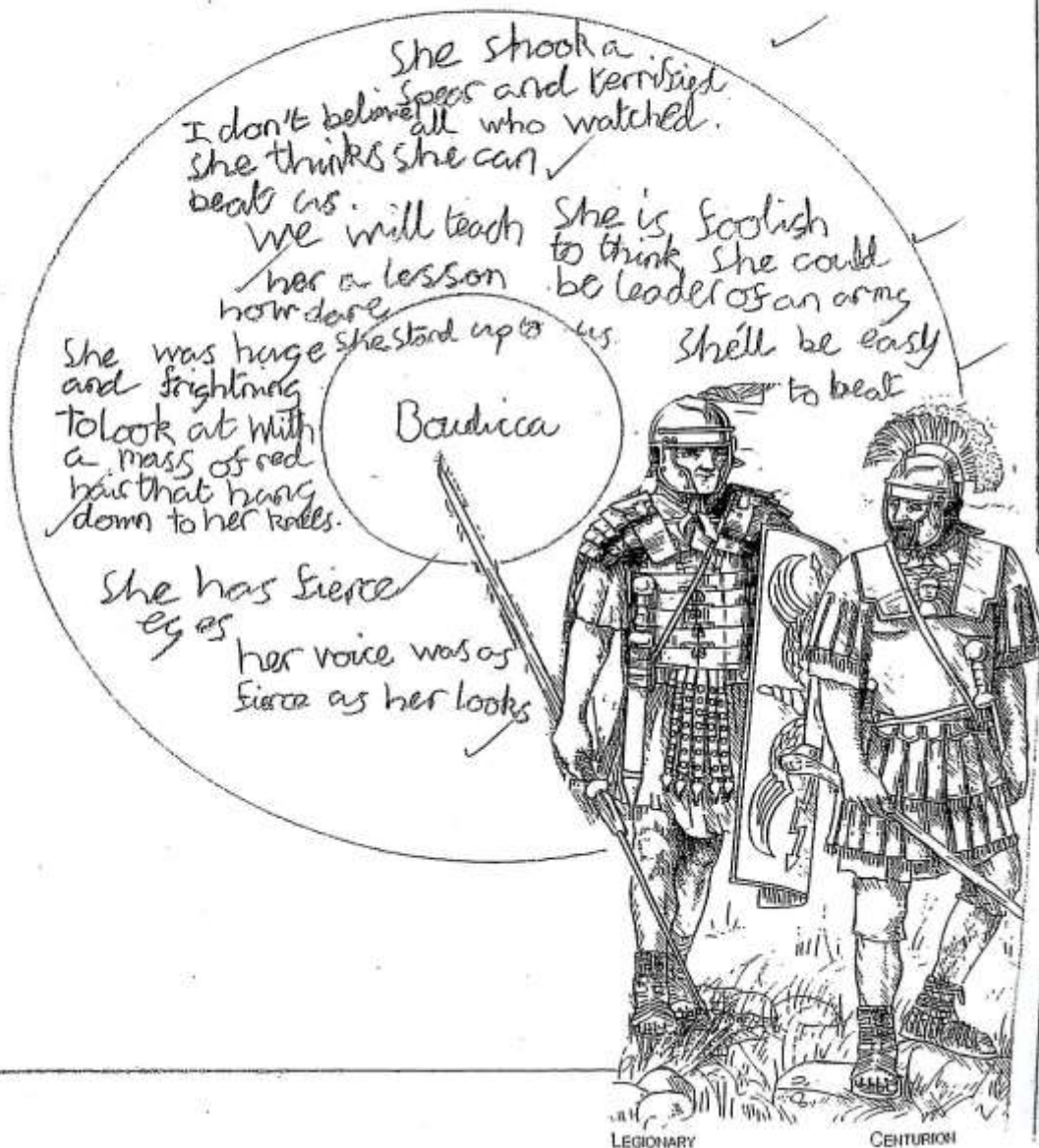
MEXICO

FAMILY

TEACHERS

Brendan

Boudicca from A Roman perspective



She shook a  
Spear and terrified  
all who watched.

I don't believe  
she thinks she can  
beat us.

We will teach  
her a lesson  
how dare  
she stand up to us.

She is foolish  
to think she could  
be leader of an army

She'll be easy  
to beat

She was huge  
and frightening  
to look at with  
a mass of red  
hair that hung  
down to her knees.

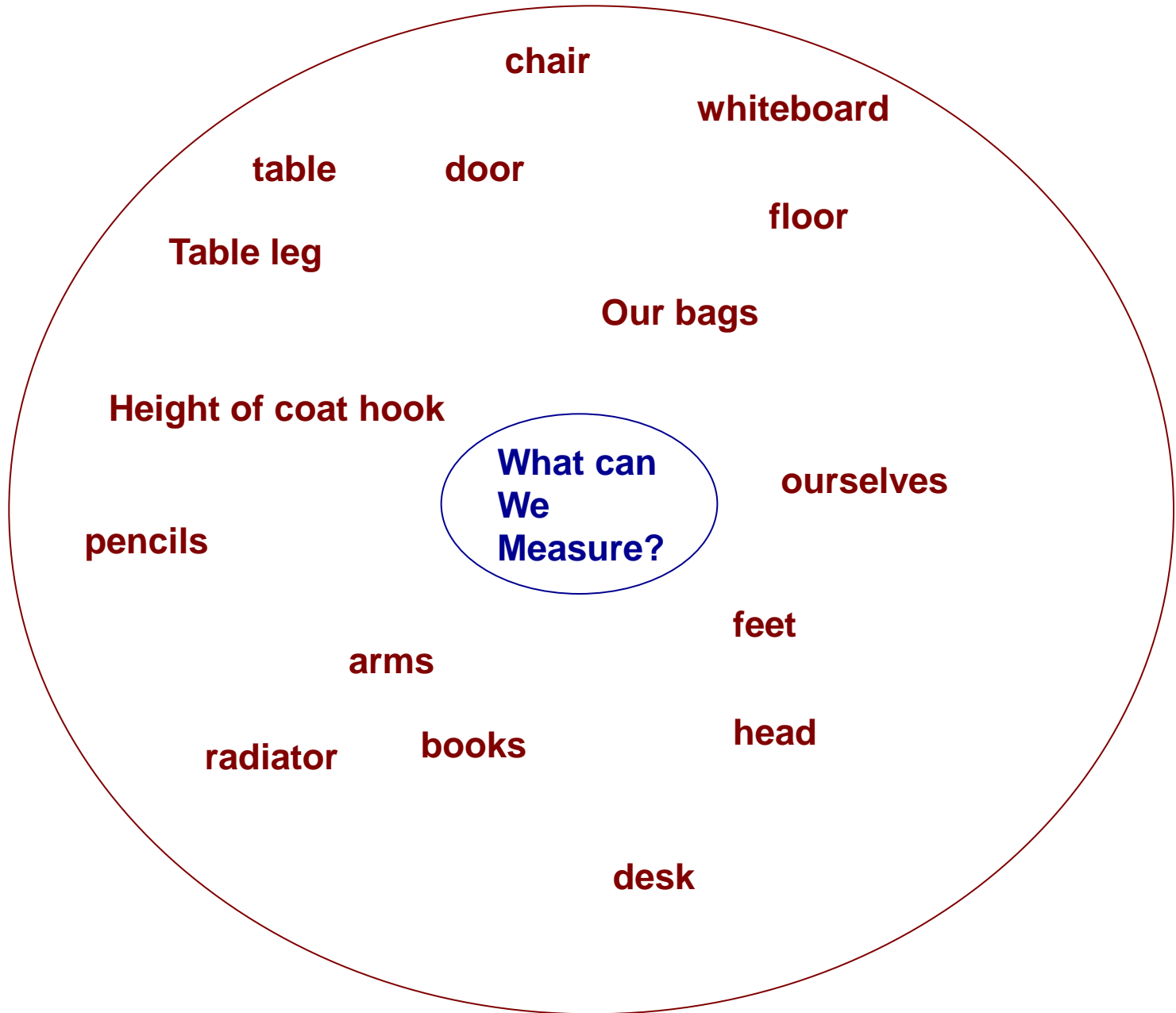
She has fierce  
eyes  
her voice was as  
fierce as her looks

LEGIONARY

CENTURION



# **Our classroom**



# Who measures things?

School keeper

Mum and dad

chair

whiteboard

table

door

floor

Table leg

Our bags

Height of coat hook

What can  
We  
Measure?

ourselves

pencils

feet

arms

head

radiator

books

desk

workman

teacher

thick

tooth

throw

threw

theatre

thin

thirty

bath

then

this

thread

th

the

thunderstorm

three

Thursday

thrown

thirteen ✓

tionary

tea

We saw

Rachael statues  
Whiteread's and  
boxes sculptures

bronze  
ball like  
a dam  
'Lucio Fontana'

picnic  
lunch  
on the  
steps

collection  
of little  
boxes

The  
Tate  
Modern

getting to  
school early

we watched  
Finding Nemo  
on the coach

wobbly  
bridge

We saw the  
River Thames  
and boats

7 laughing  
men

The 'big  
egg'



...working together to achieve a goal!



...being friends

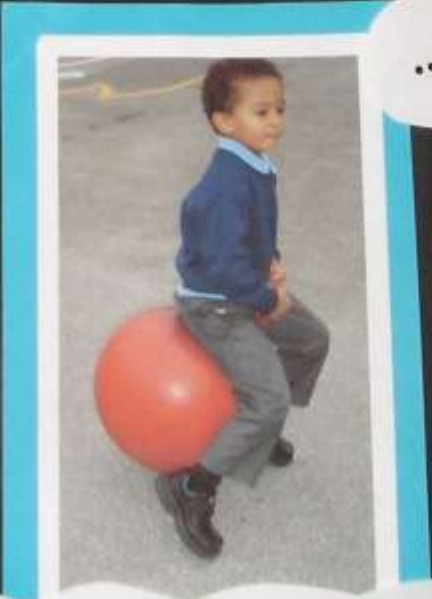


...playing together

**We like...**



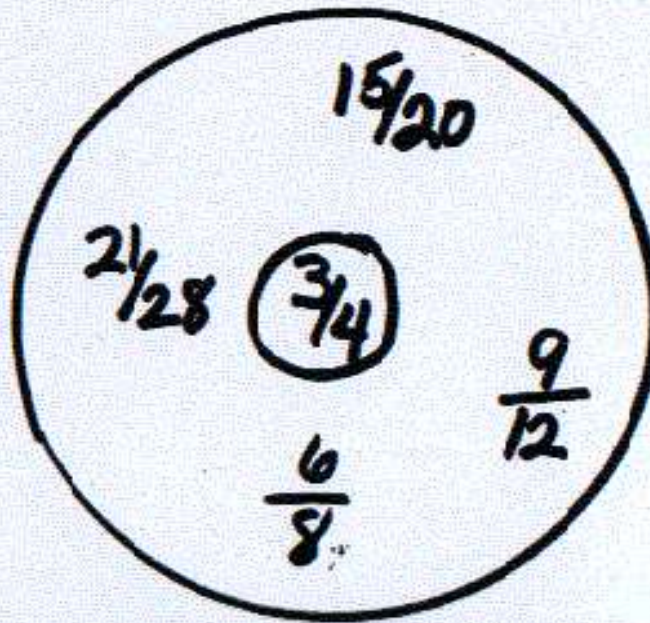
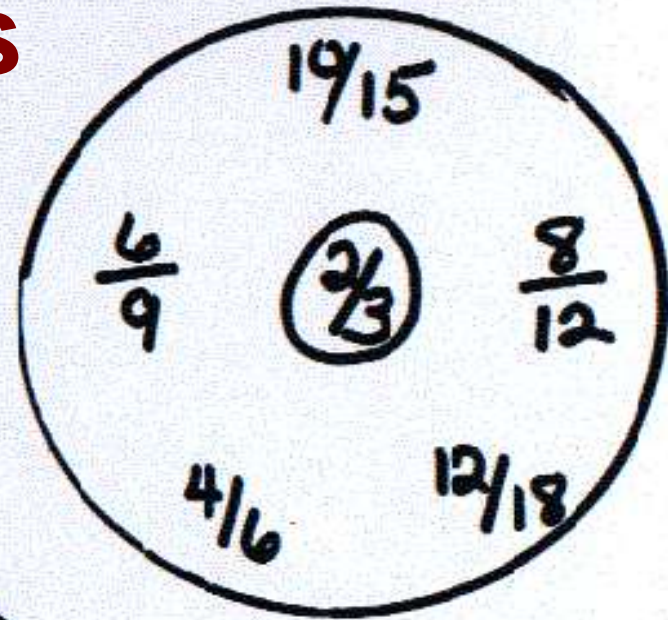
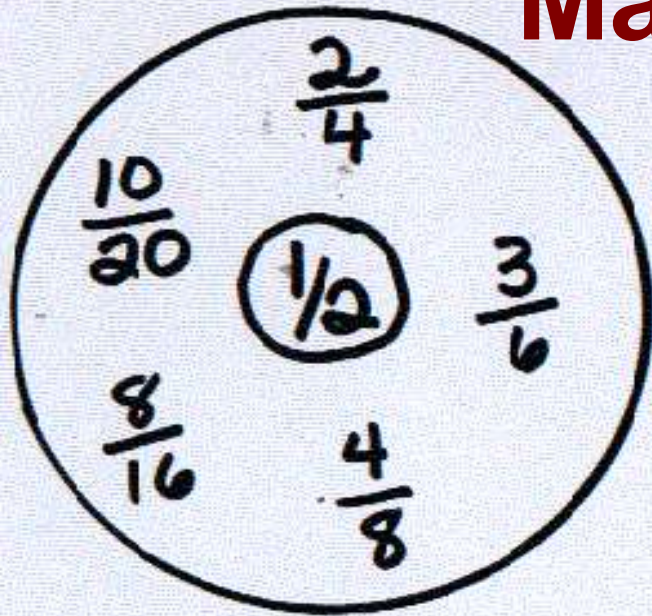
...making models



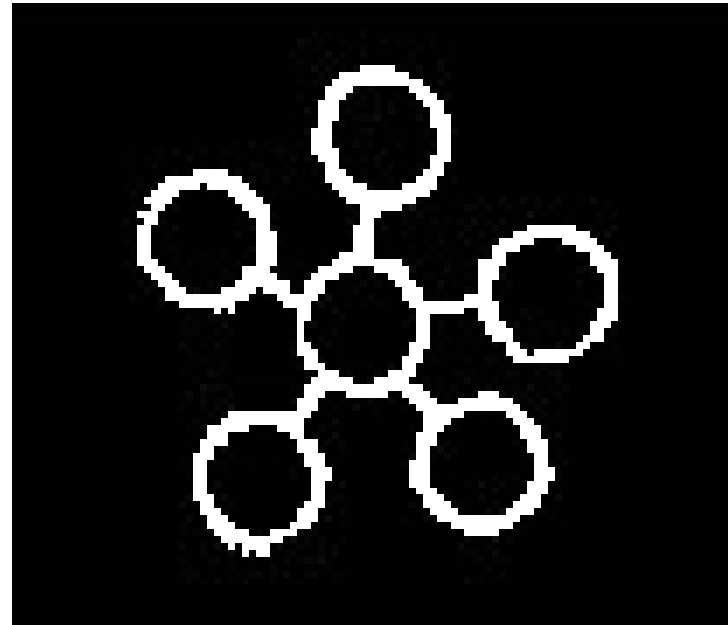
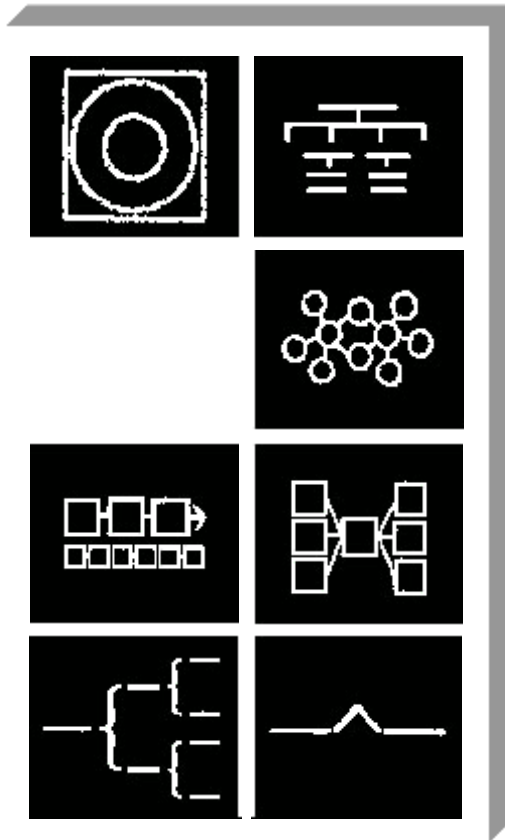
...trying new things

# Equivalent Fractions

## Mathematics

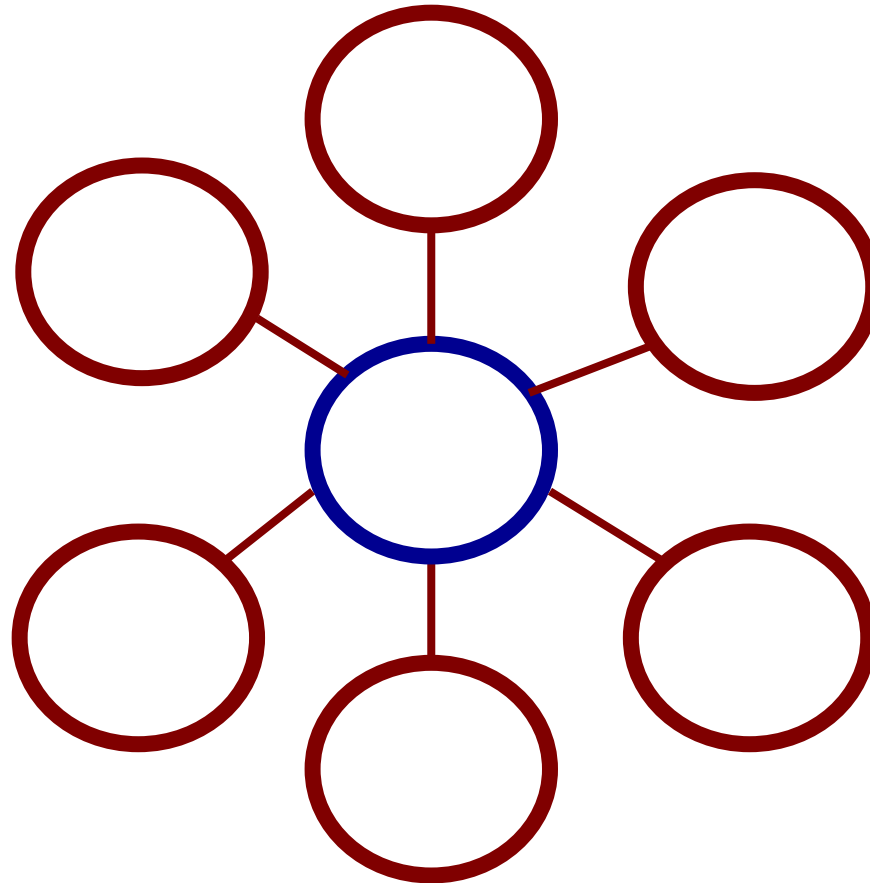


Circle Map



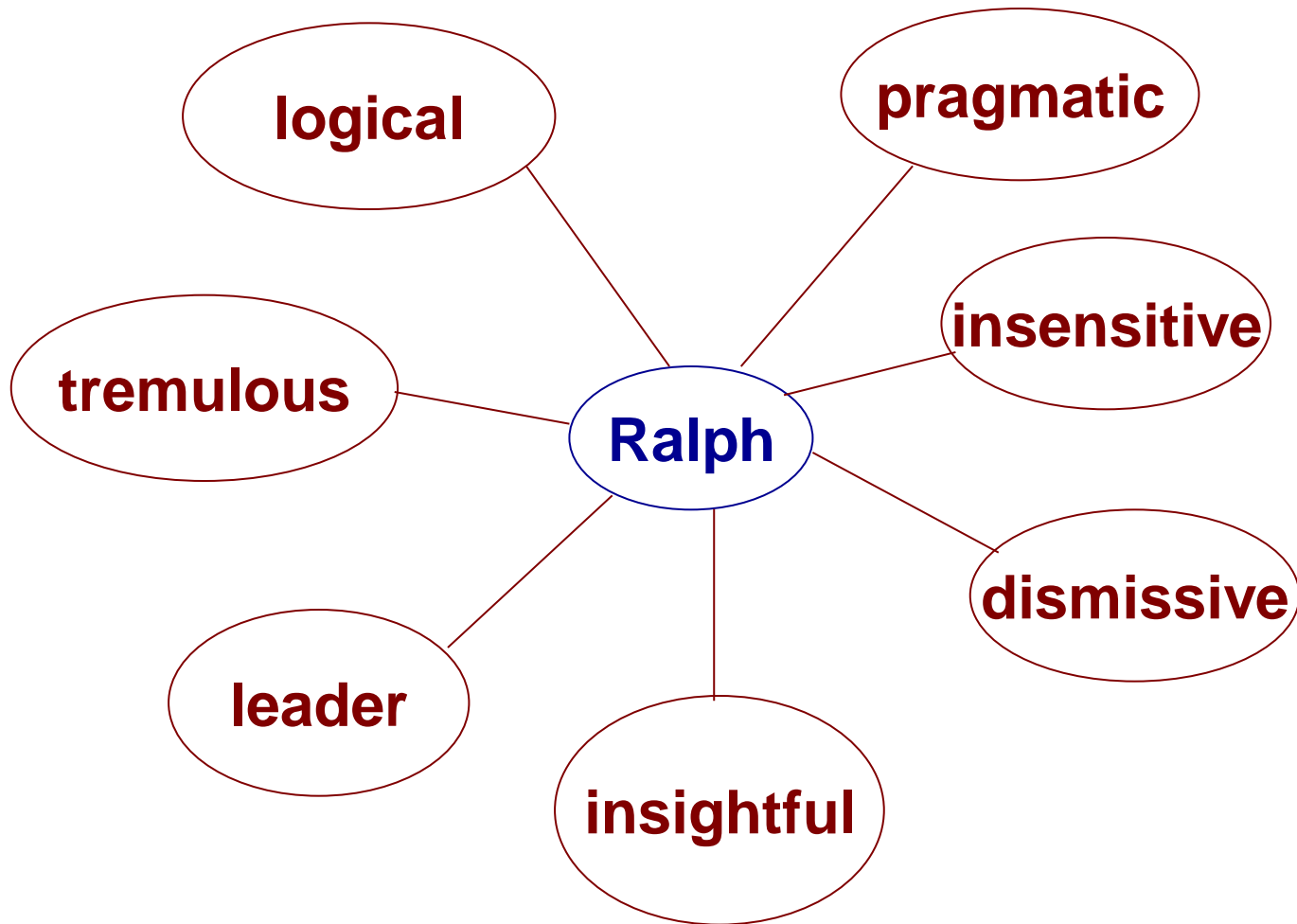
**The Bubble Map**  
for describing things

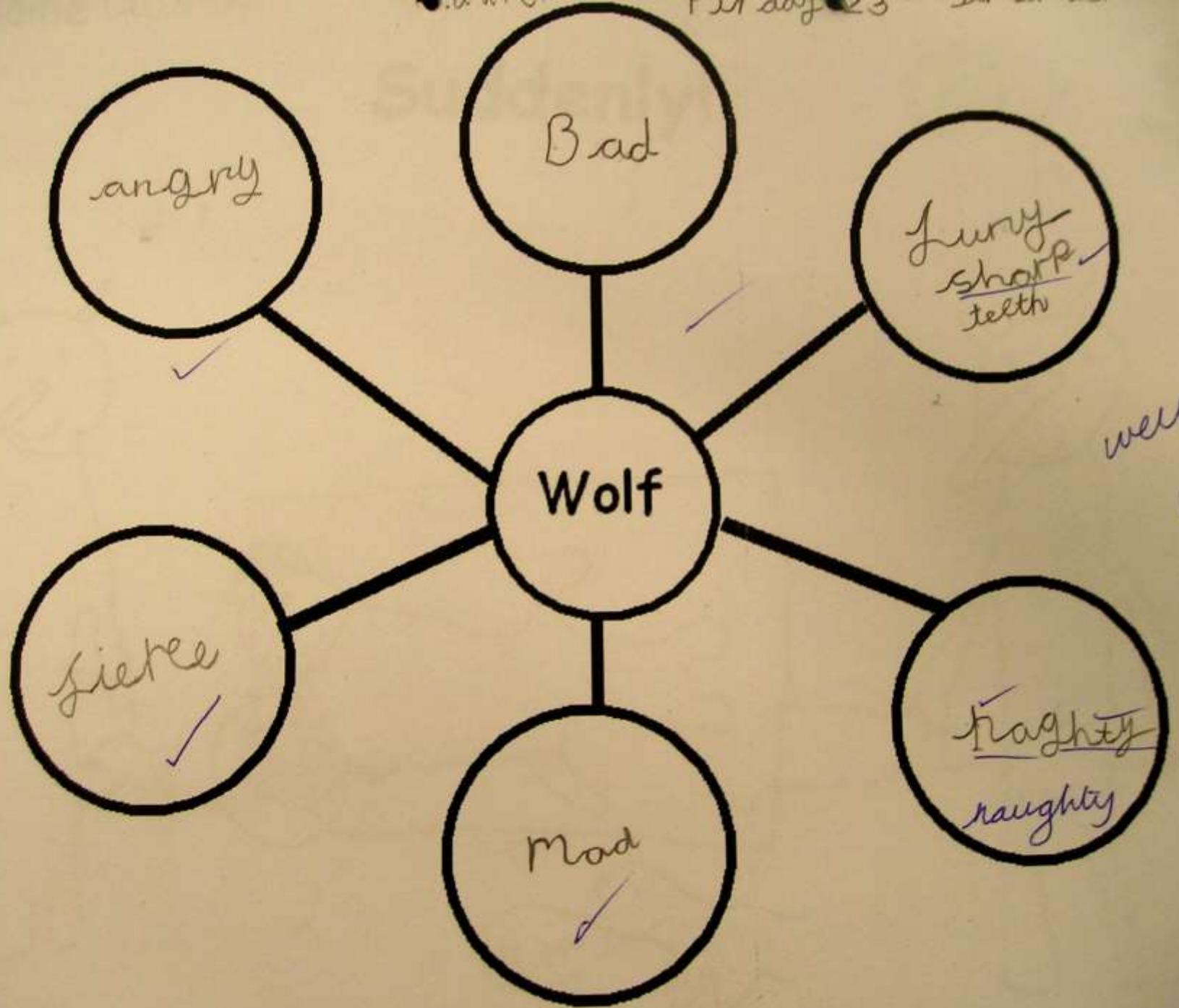
# Describing



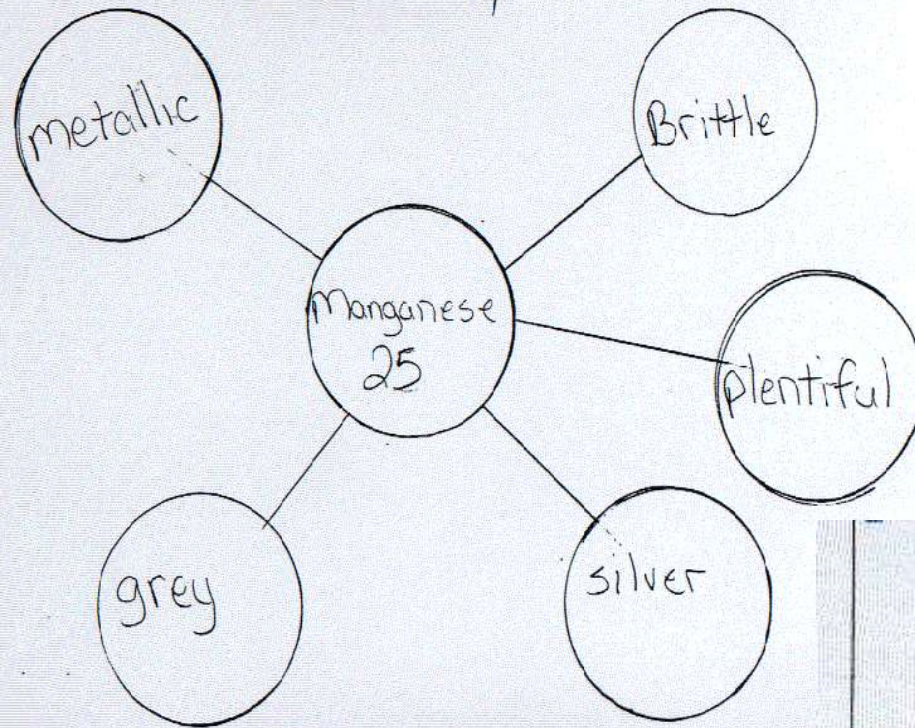
# Bubble Map







## Bubble Map

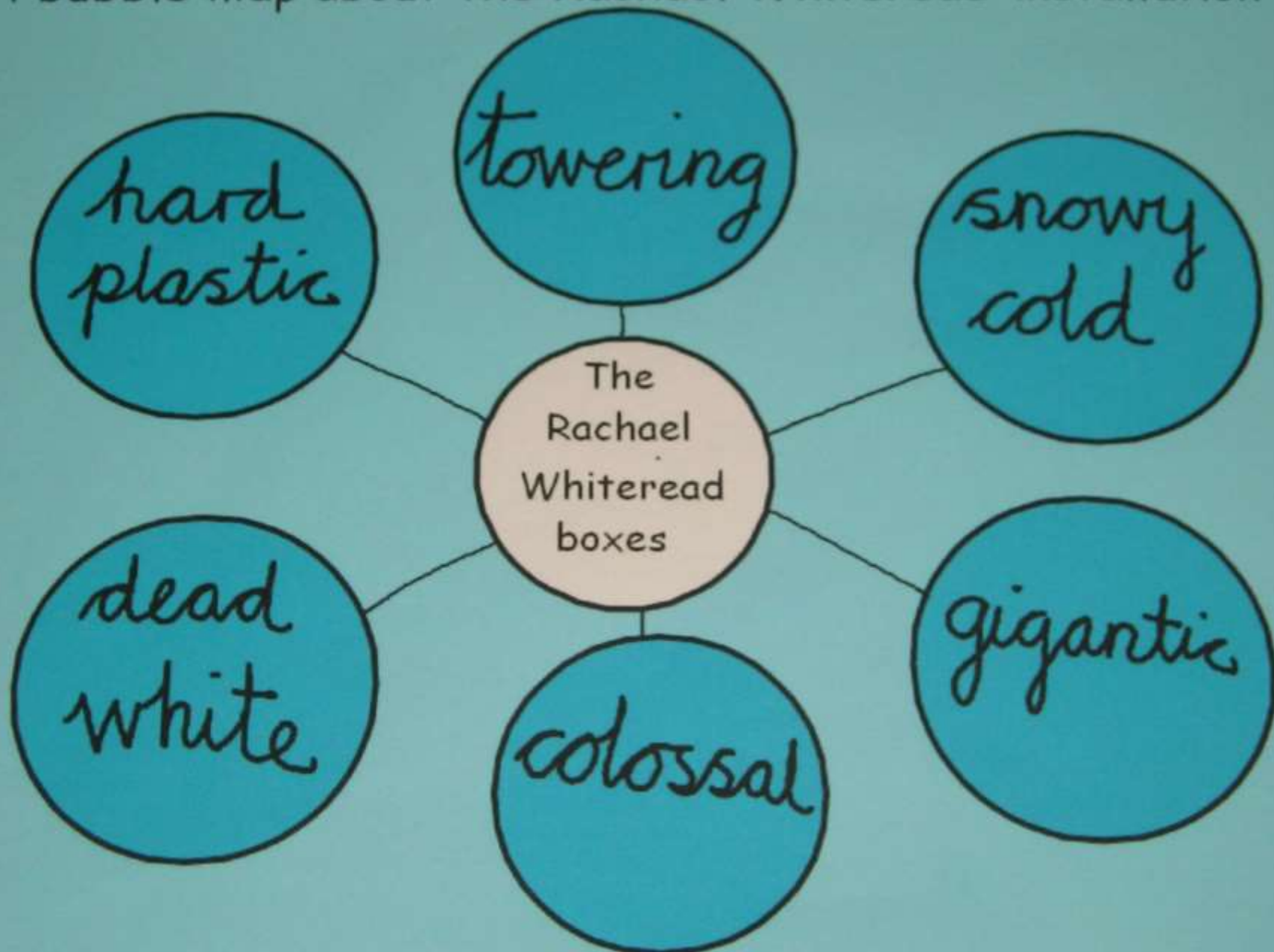


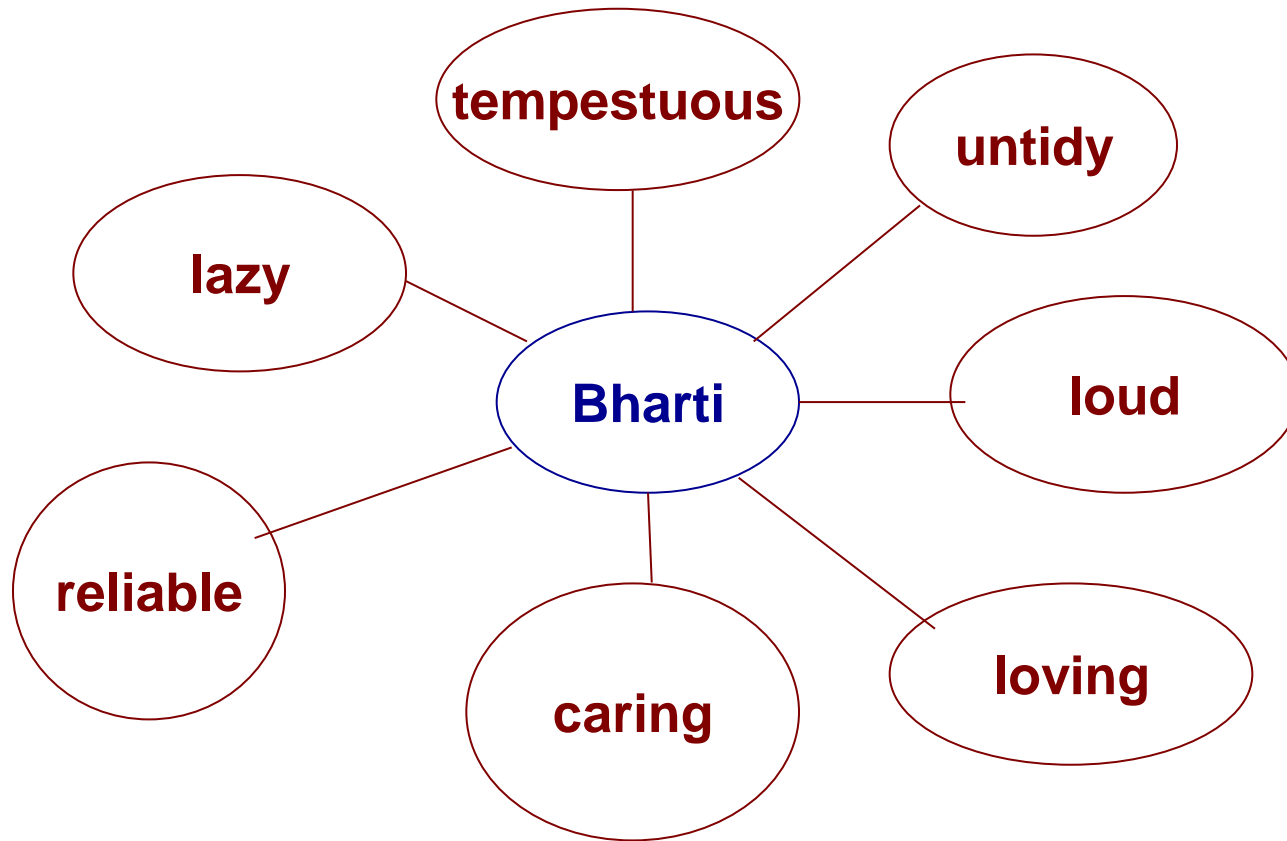
## Science

### Manganese 25

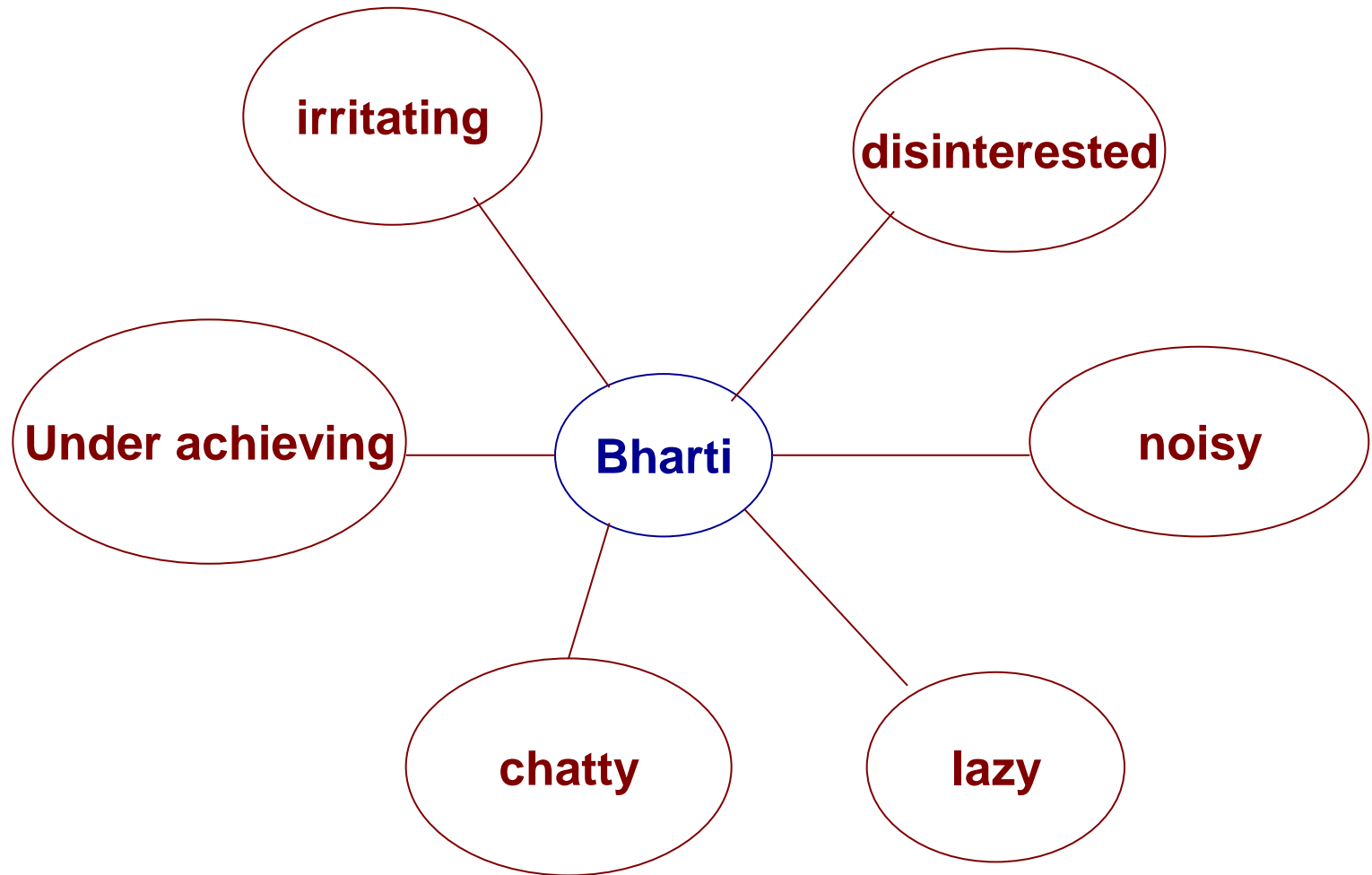
Manganese is a brittle, silver grey, metallic element. It has many industrial uses. Manganese is a plentiful element that is found throughout the earth's crust. Manganese is used in the form of alloys and compounds. Manganese removes oxygen and sulfur from steel. Manganese can exist in four different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

A bubble map about the Rachael Whiteread installation





**How would my mother see me?**

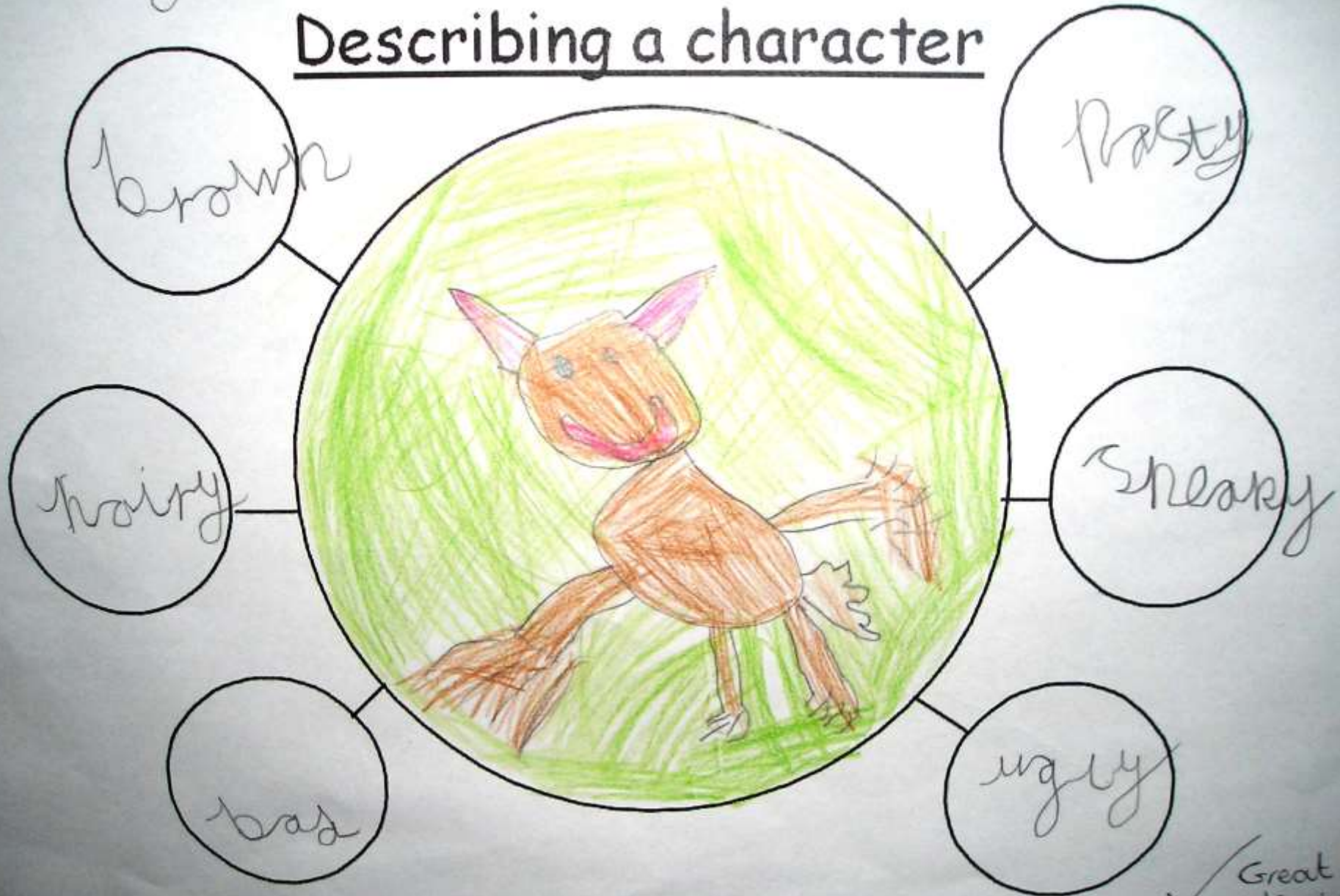


**How would my History teacher see me?**

Name Amy

17/01/06  
M

# Describing a character



✓ Great adjectives



brave

happy

scared/  
frightened

loved

talented

curious

scarred

homeless

magical

anxious

sad

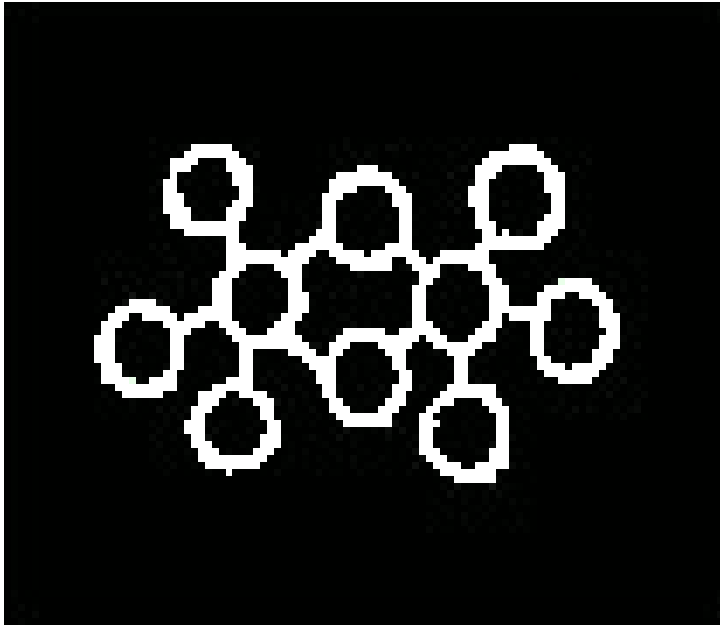
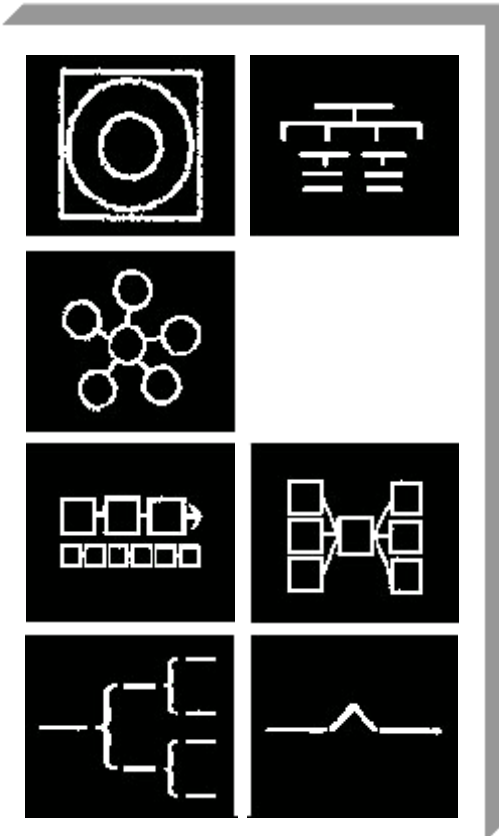
daring

famous

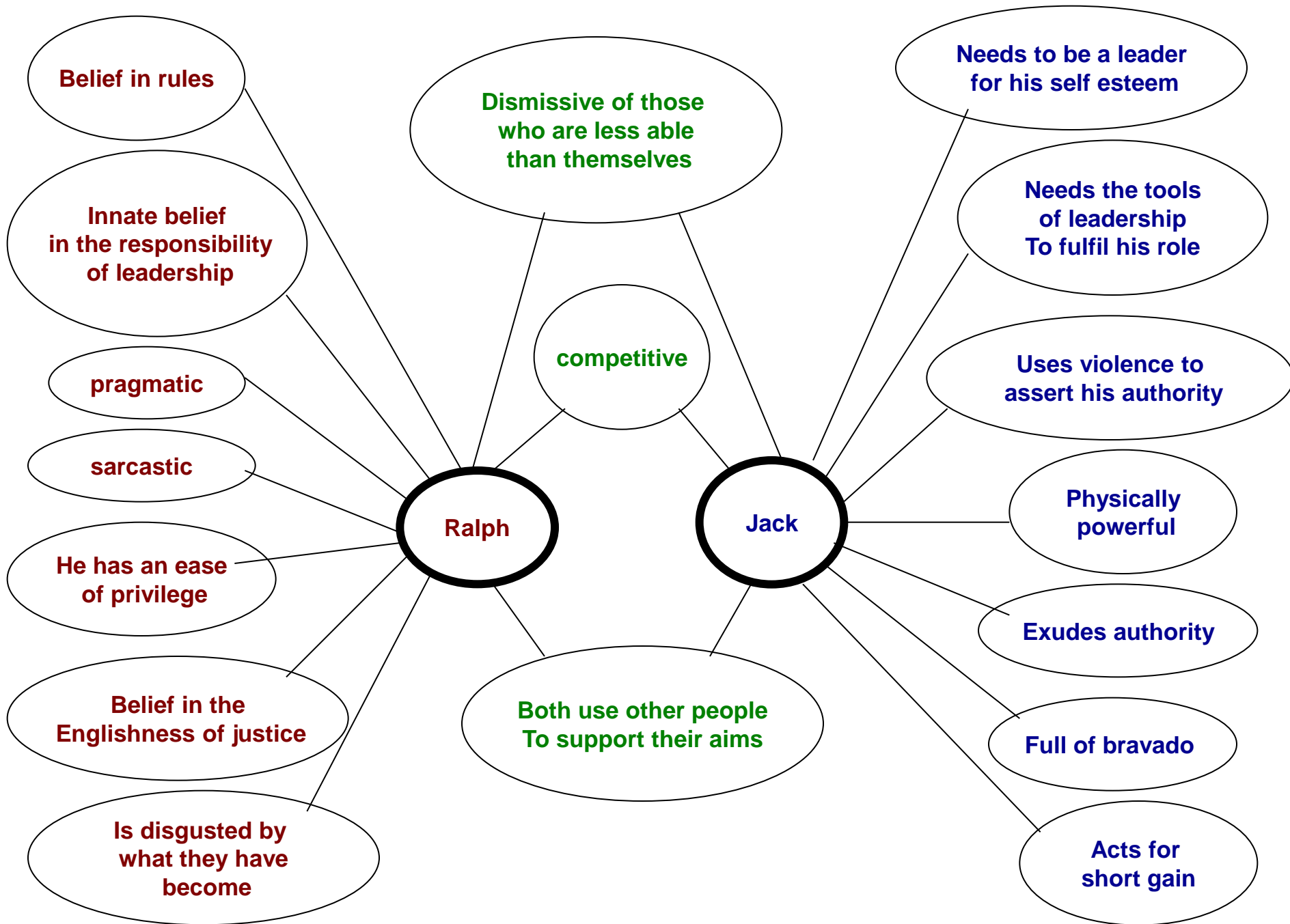
Hagrid

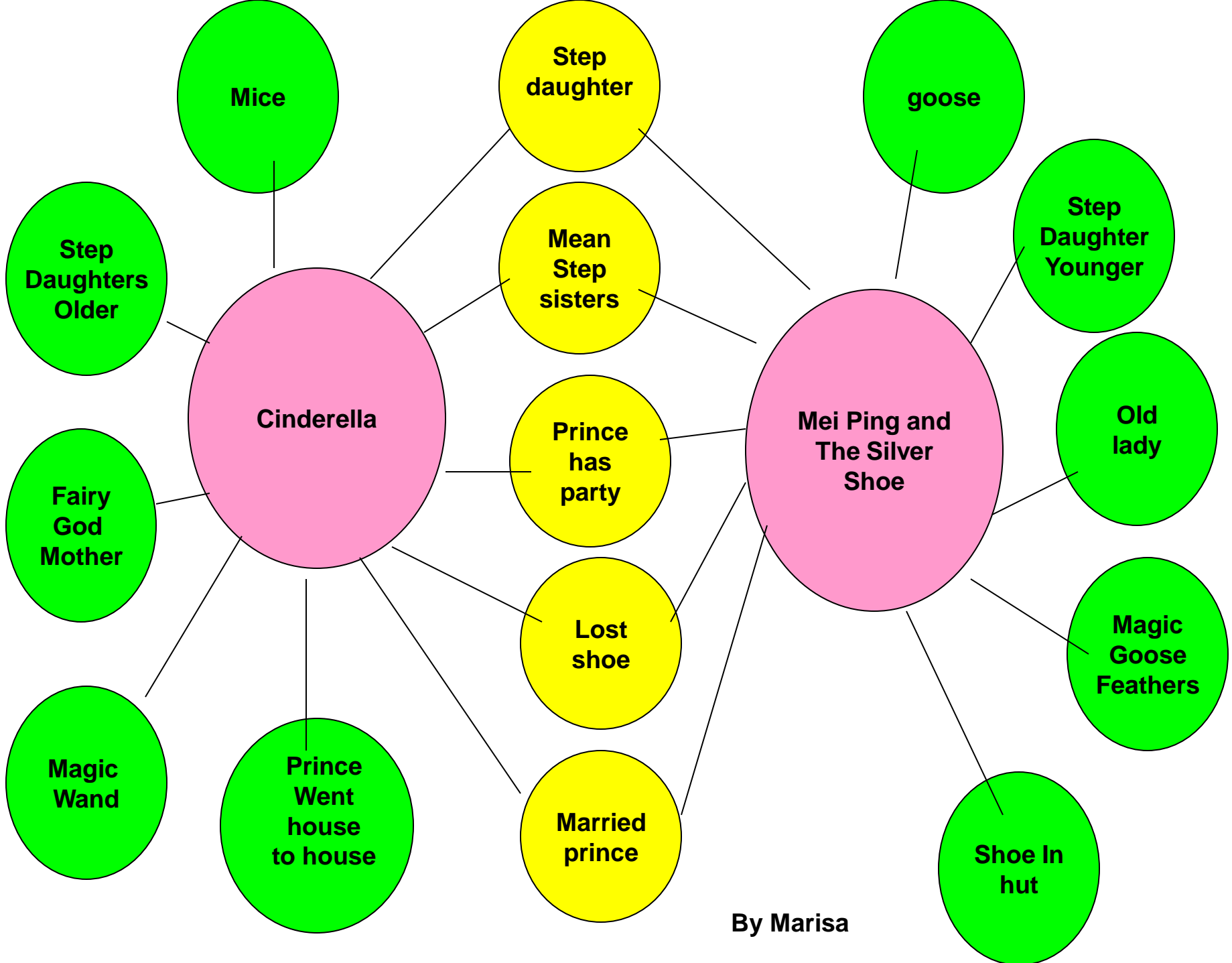
Hagrid was hated  
by the wizard  
because he was  
muggle



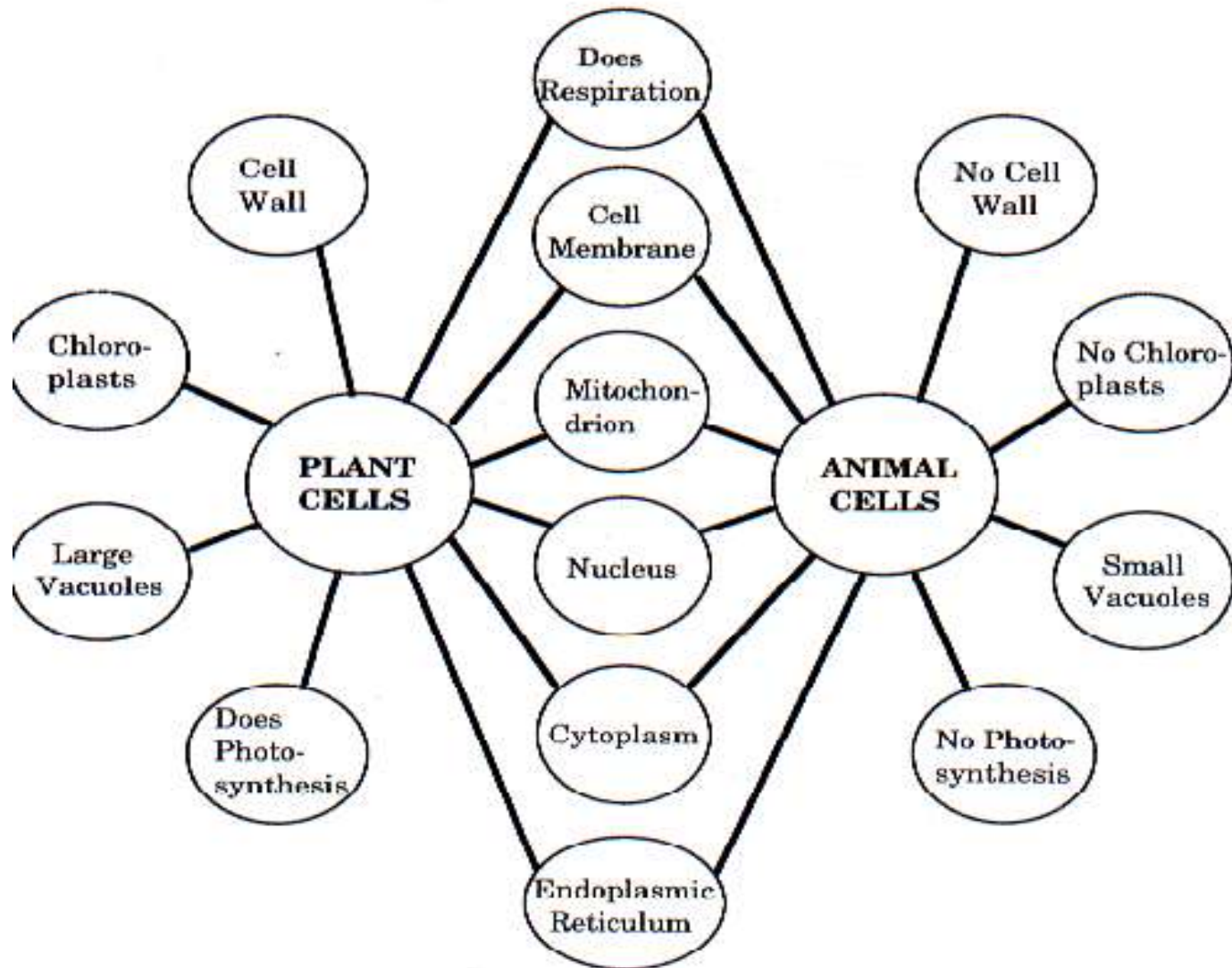


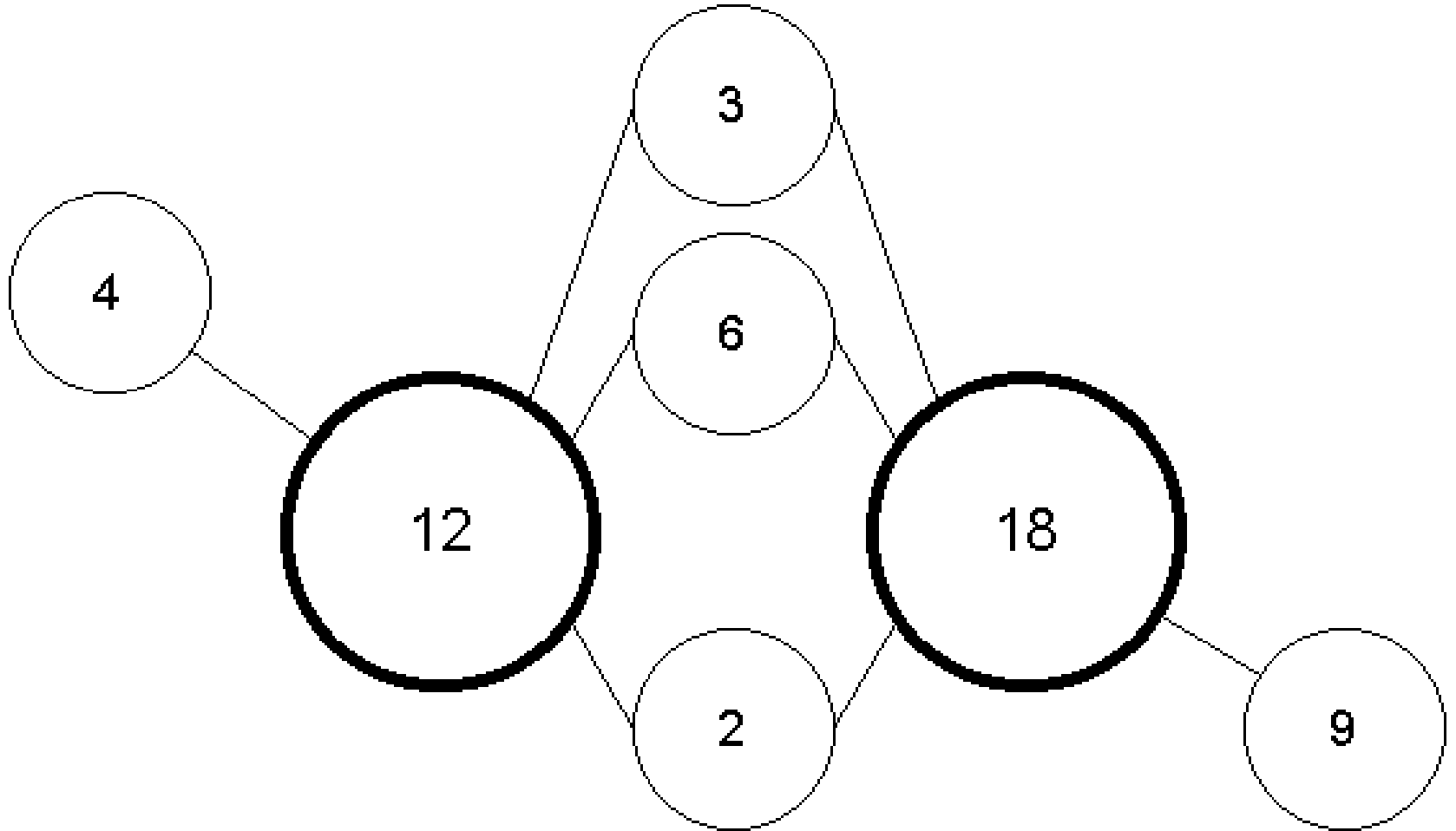
**The Double Bubble Map**  
for comparing & contrasting



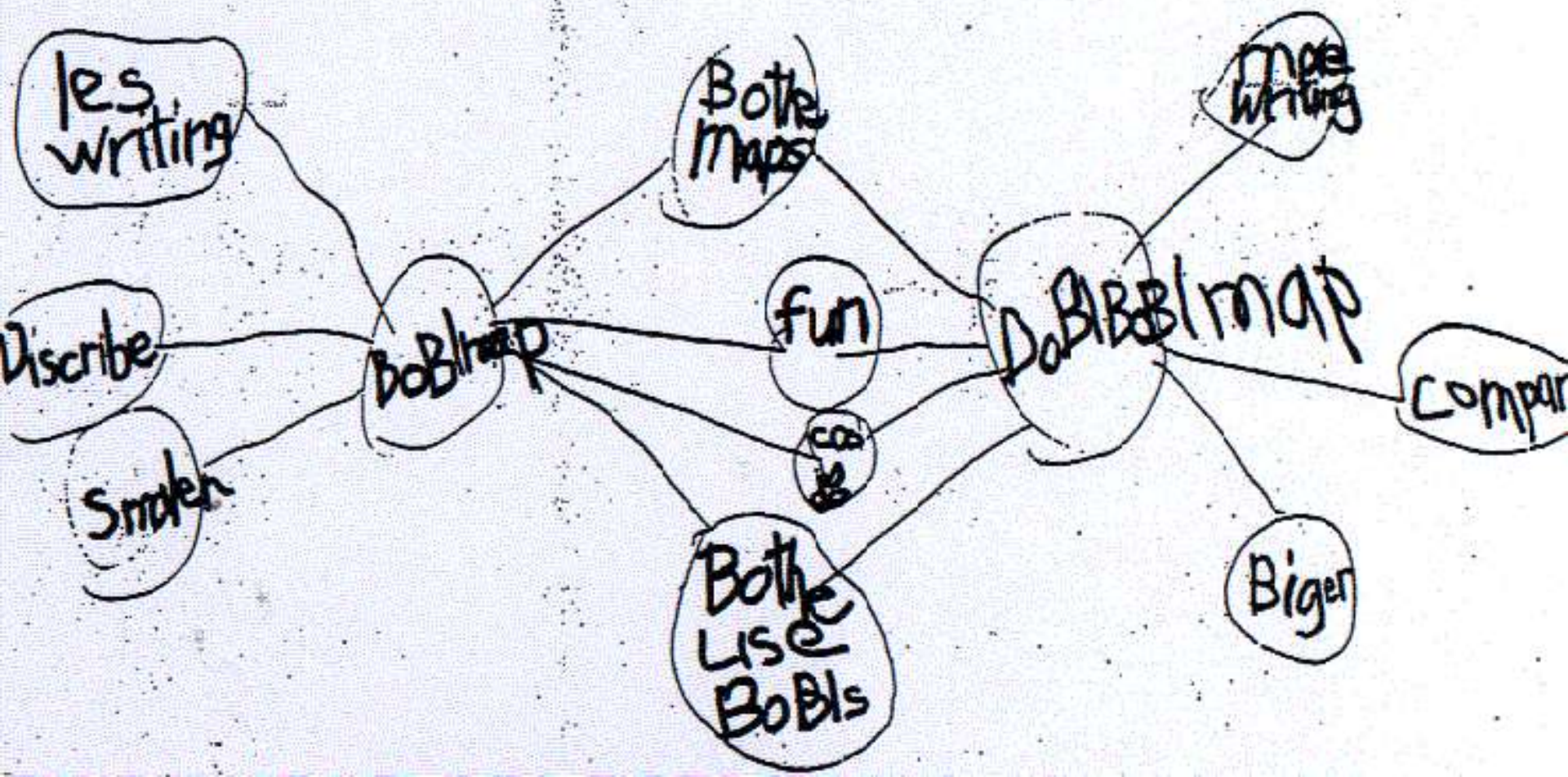


# Biology



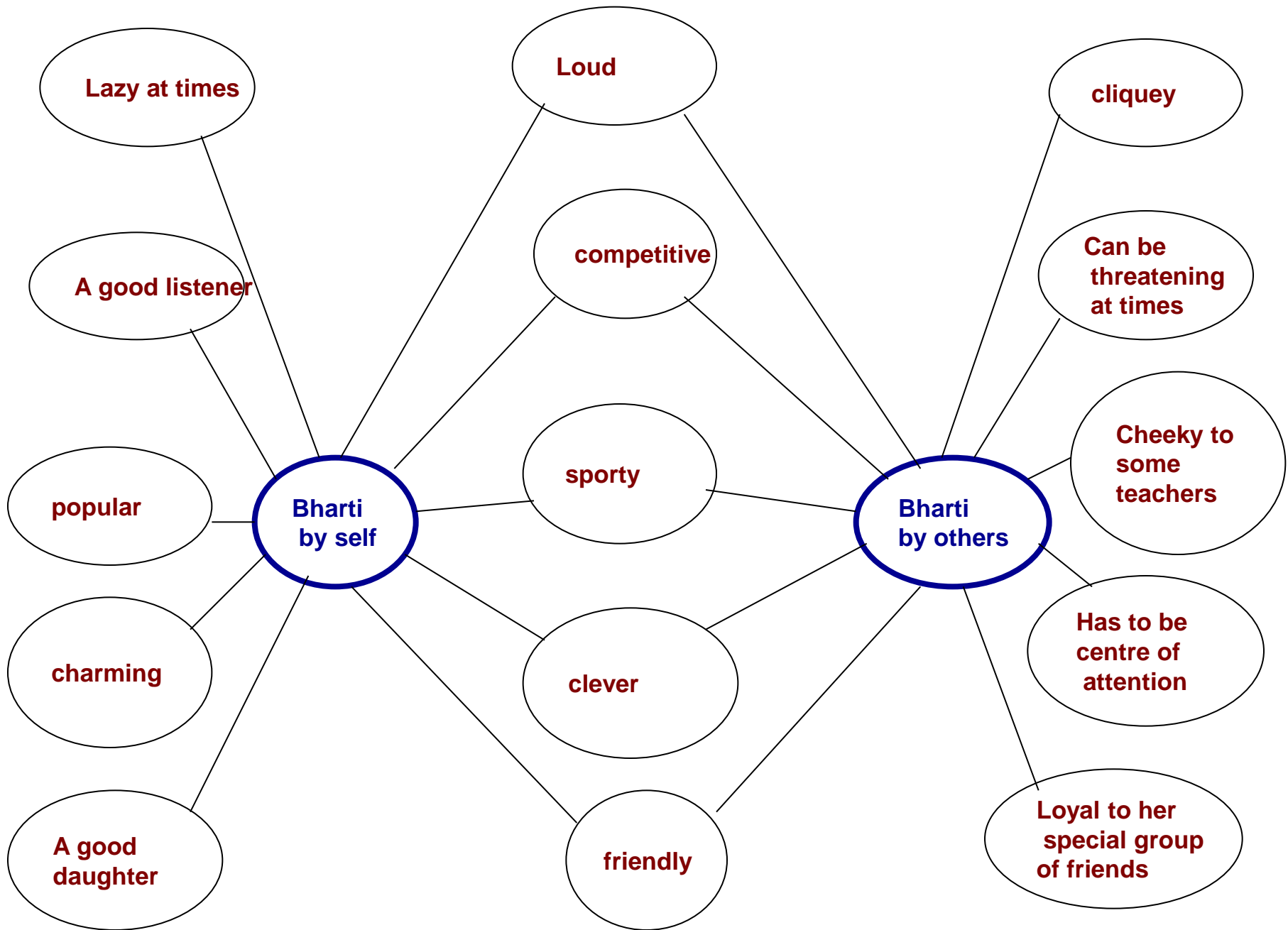


# DOBI BOBI MAP



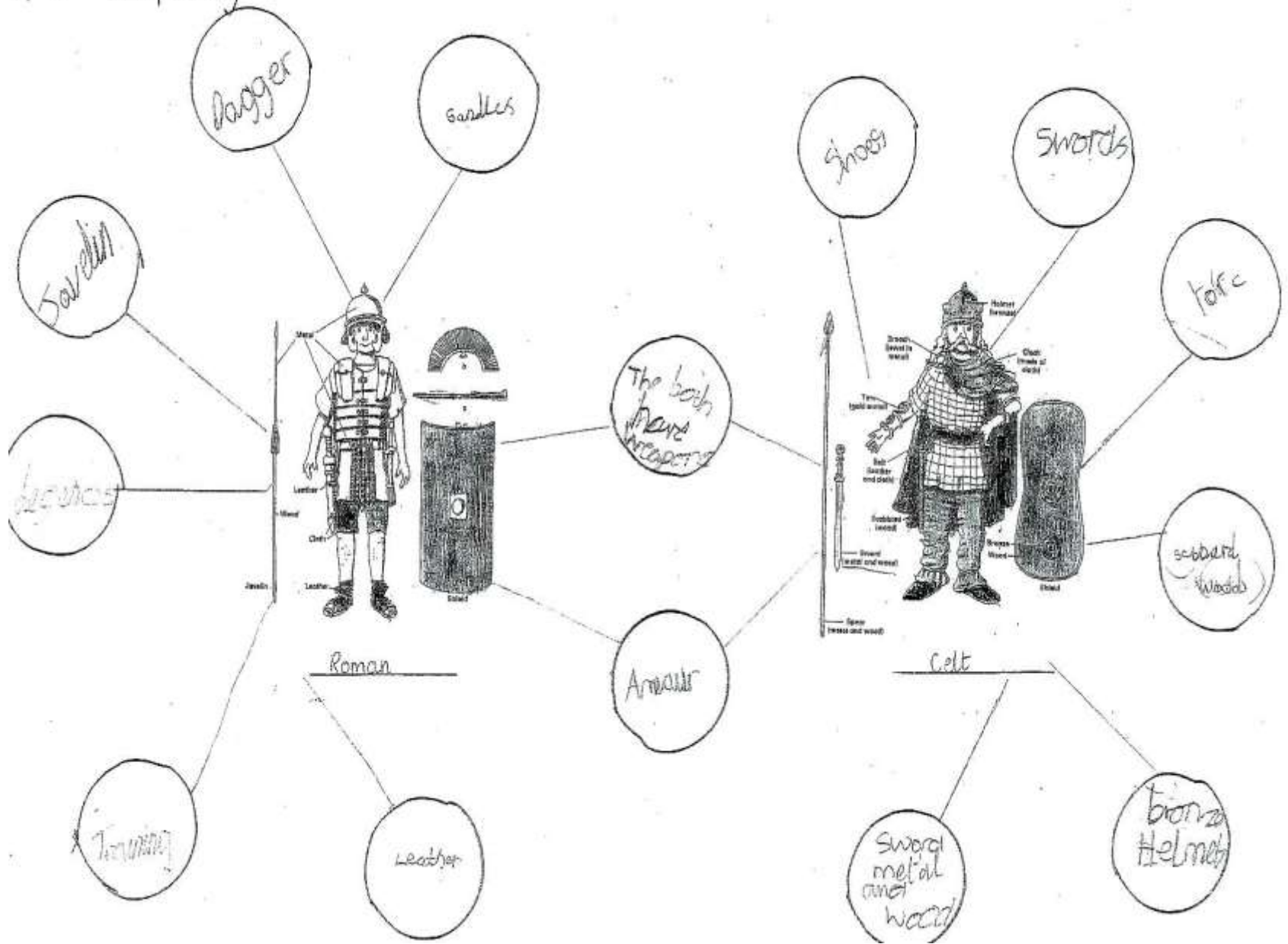
Alex

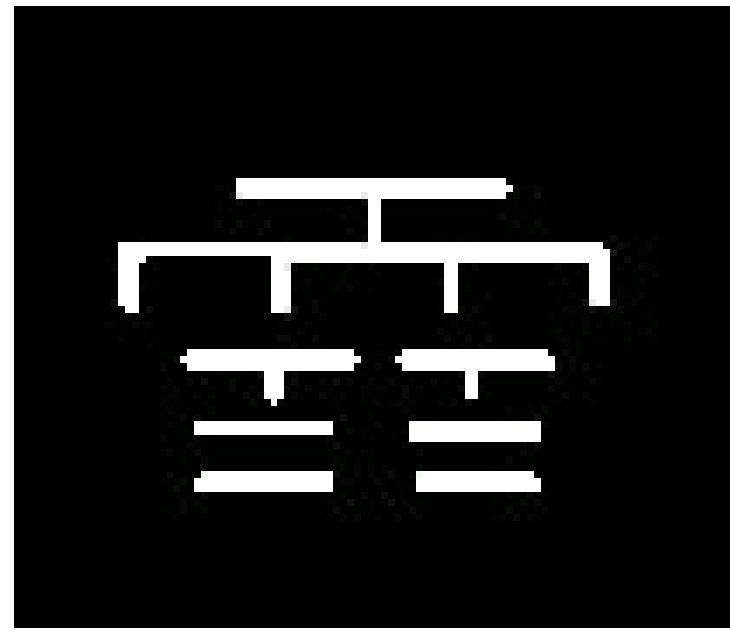
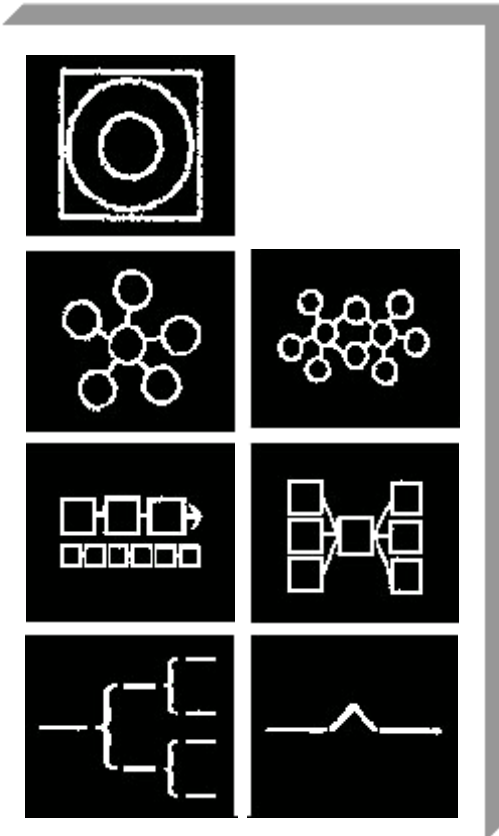
With a BOBI Map you do less writing on the other hand a DOBI BOBI map you do more writing. A BOBI Map you describe things while a DOBI BOBI Map you compare things. A BOBI Map is smaller than a DOBI BOBI





# 4-4 Comparing





# The Tree Map

for classifying things

# Dolphins

look likes  
dark brown  
or black

is seven to  
thirty feet  
long,

are  
mammals

feels  
wet rubber  
skin

smooth  
skin

eats  
fish  
fed ten to  
twenty-six  
pounds a  
day

eats fish  
with medicine  
in it

amazing  
brain 20%  
bigger than  
humans brain

is sleeping  
half brain is  
awake other half  
sleeping

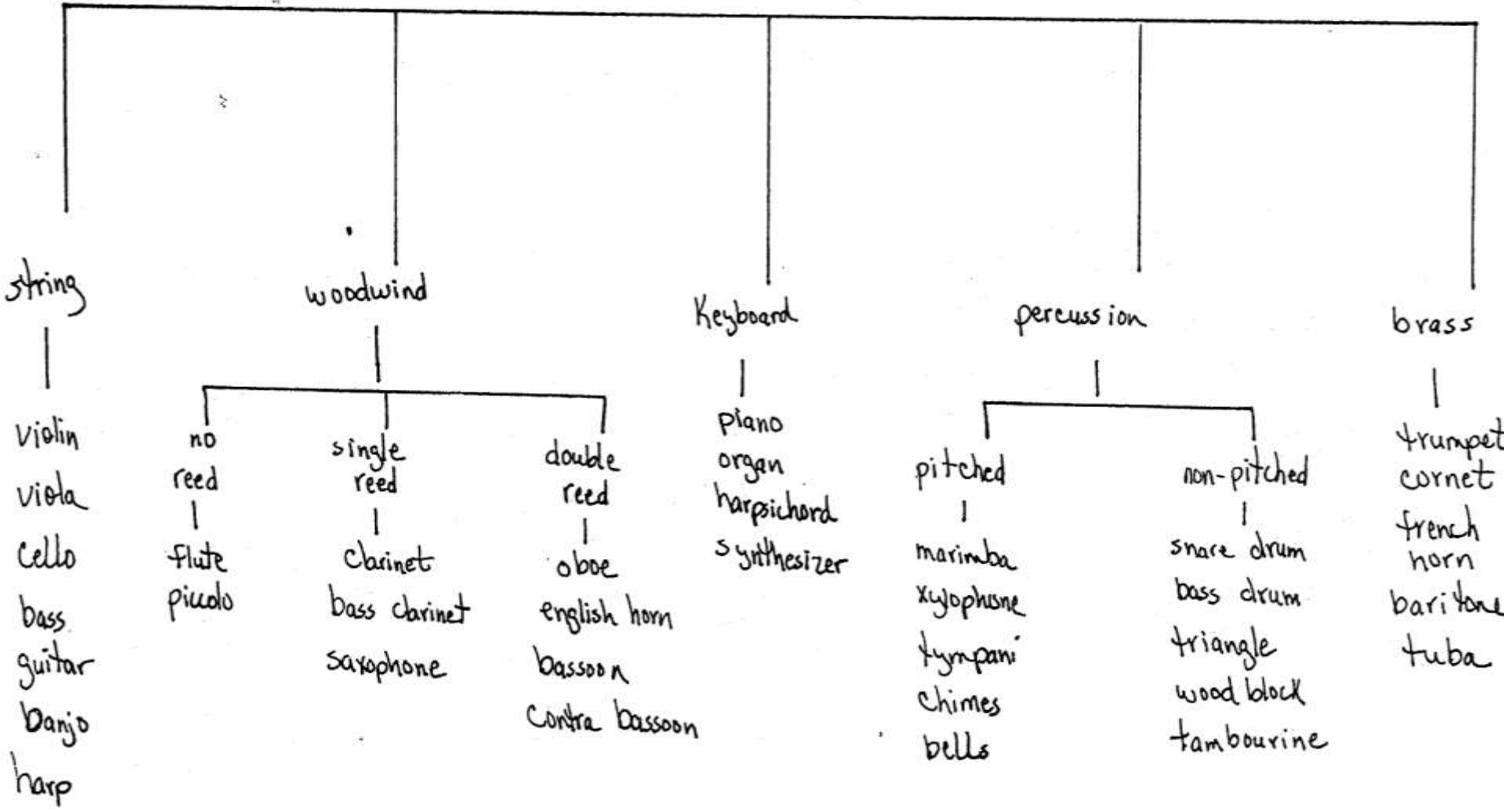
mammals

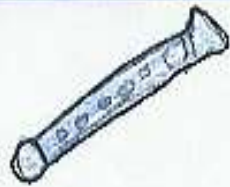
breath ev  
seven or  
eight  
minutes

have ha  
around th  
mouth

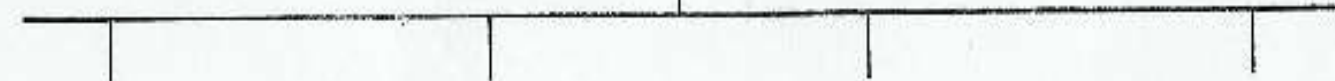
have hair  
and lungs

# Musical Instruments





Instruments



Blowing

Hitting

Shaking

Plucking

cornet

flute

tamborene

Saxophone

trumpet

bag pipes

drum

wood block

tamborene

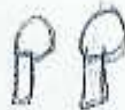
maracas

tamborene

Cabasa

banjo  
guitar

Sitar



maracas



tamborene



Cabasa

# Tree map

## Apostrophes.

### Omission

can't ✓

I'm ✓

I'll ✓

isn't ✓

It's ✓

I've ✓

wave ✓

they're ✓

that's. that's.

he's. ✓

### Possession

Peter's book, shadow ✓

man's offer ✓

father's car ✓

woman's hand ✓

Soldier's sword ✓

~~his~~ man's parents ✓

Crab's shop ✓

Did not ←

didn't sink ✓

Rodney's shirt ✓

Rodney's foot ✓

well done  
Ryan.  
~~etc.~~

# NARRATIVE WRITING

## SCORING CRITERIA

### Main Idea

The writer must clearly establish a focus as it fulfills the assignment of the prompt.

He/She must stick to the subject matter presented in the prompt in order to strengthen the main idea.

### Supporting Details

The writer provides sufficient elaboration to present events clearly.

Details must be related to the subject matter and what happens in the narrative.

The effective use of concrete, specific details strengthens the power of the response.

### Organisation

A clear sequence of events is essential for a successful narrative.

The narrative must advance step by step through time.

The writer establishes a sense of beginning, development, and ending in the composition.

### Coherence

The sentences are logically connected.

The writer establishes relationships between and among the ideas, causes, and/or statements in the composition.

The writer may use common devices to achieve coherence: pronouns, synonyms, connectives, transitional words.

long and short oo sound

'oo' short

(look, book)

- cookie
- booming
- football
- book
- took
- soot
- hood
- chook
- shoot

'oo' long

(moon, zoom)

- zoomin
- meep
- loop
- bea
- hooky
- glooh
- boom.
- soon
- poa



Purrfect fit.

Good words and  
fabulous sentences.



## Questions for leadership candidates

### Personal qualities

What are the essential qualities that a leader needs to have?

What qualities do you have which would make you a good leader?

What qualities would you need to develop?

### Experience

Please give some examples of leadership roles you have had

What have you learnt about the role of a leader from these experiences?

### Self knowledge

How do you know that you would make a good leader?

What have people said to you in times of emergency or stress which supports your application ?

# **A good story**

```
graph TD; A[A good story] --> B[Language]; A --> C[Characters]; A --> D[Sequencing];
```

## **Language**

**Adjectives**

**Verbs**

**Adverbs**

**Direct speech**

**Language which describes a specific character**

## **Characters**

**Characters need to have 'conflict'**

**Some characters will be more important than others**

**Characters can think differently from what they say**

**Characters have different personalities**

## **Sequencing**

**The beginning makes you want to hear or read more**

**It is not confusing**

**We don't always know what is coming next**

**The ending is surprising**

## Kind of Learners

Student who can

read, write and count

make decision

communicate well

think critically/creative

accept new ideas

take risks

Co-operate with others

Students who are

confident

creative

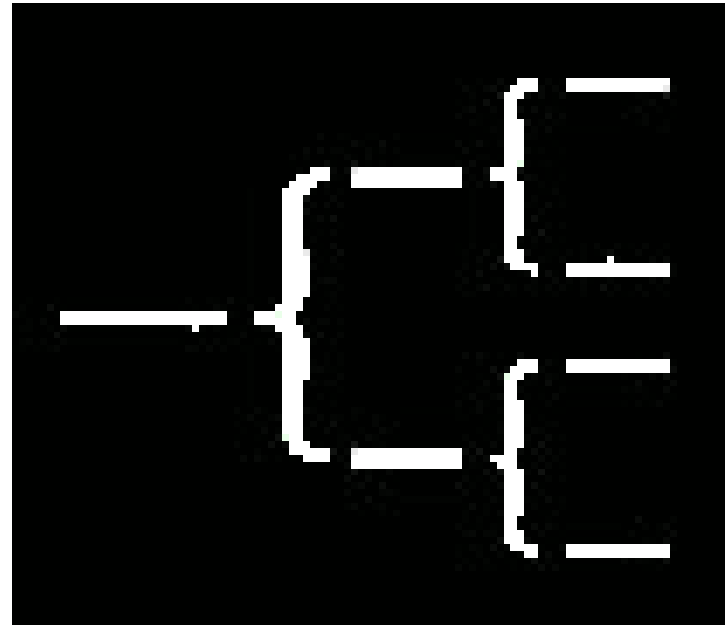
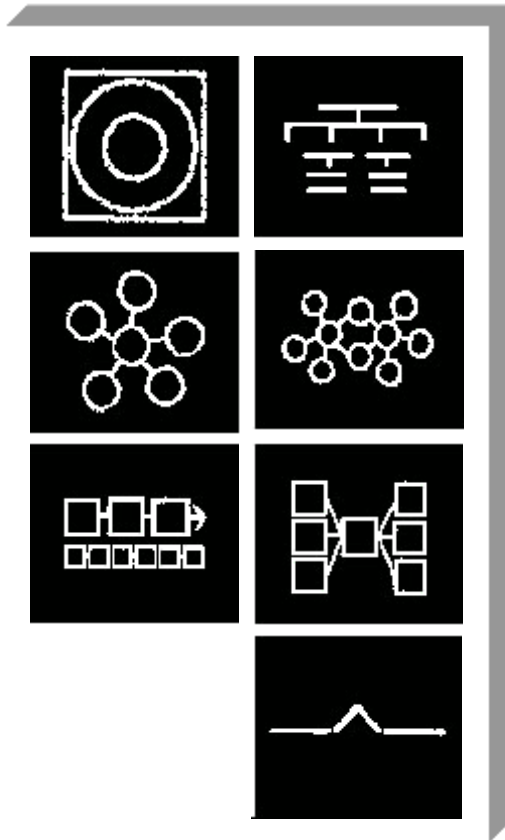
independent

innovative

reliable

responsible

brave - out spoken



## The Brace Map

for seeing parts of a whole

By Brett

skeleton

skull

Cranium

Facial

bones

torso

Back bone

ribs

Hip bone

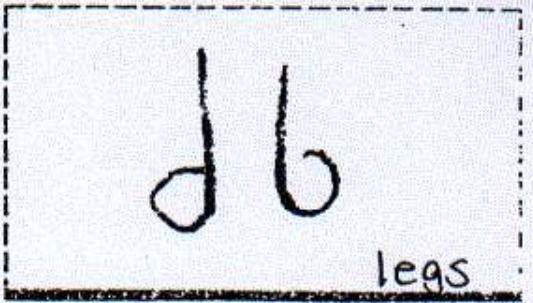
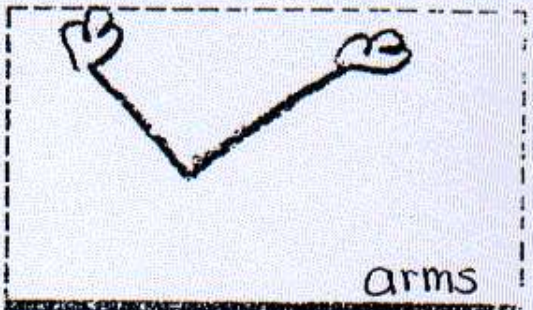
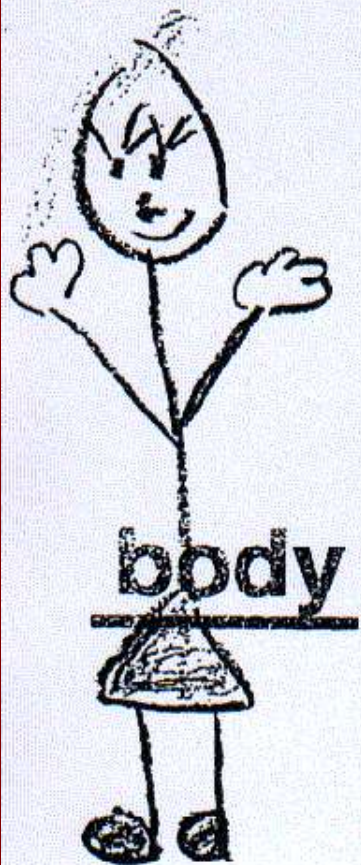
lower body

femur

tibia

fibula





octopus



8 tentacles { suction cups

beak

gills

head { eyes

ink

mantle (skin)

# Science



Light Microscope

base

lenses

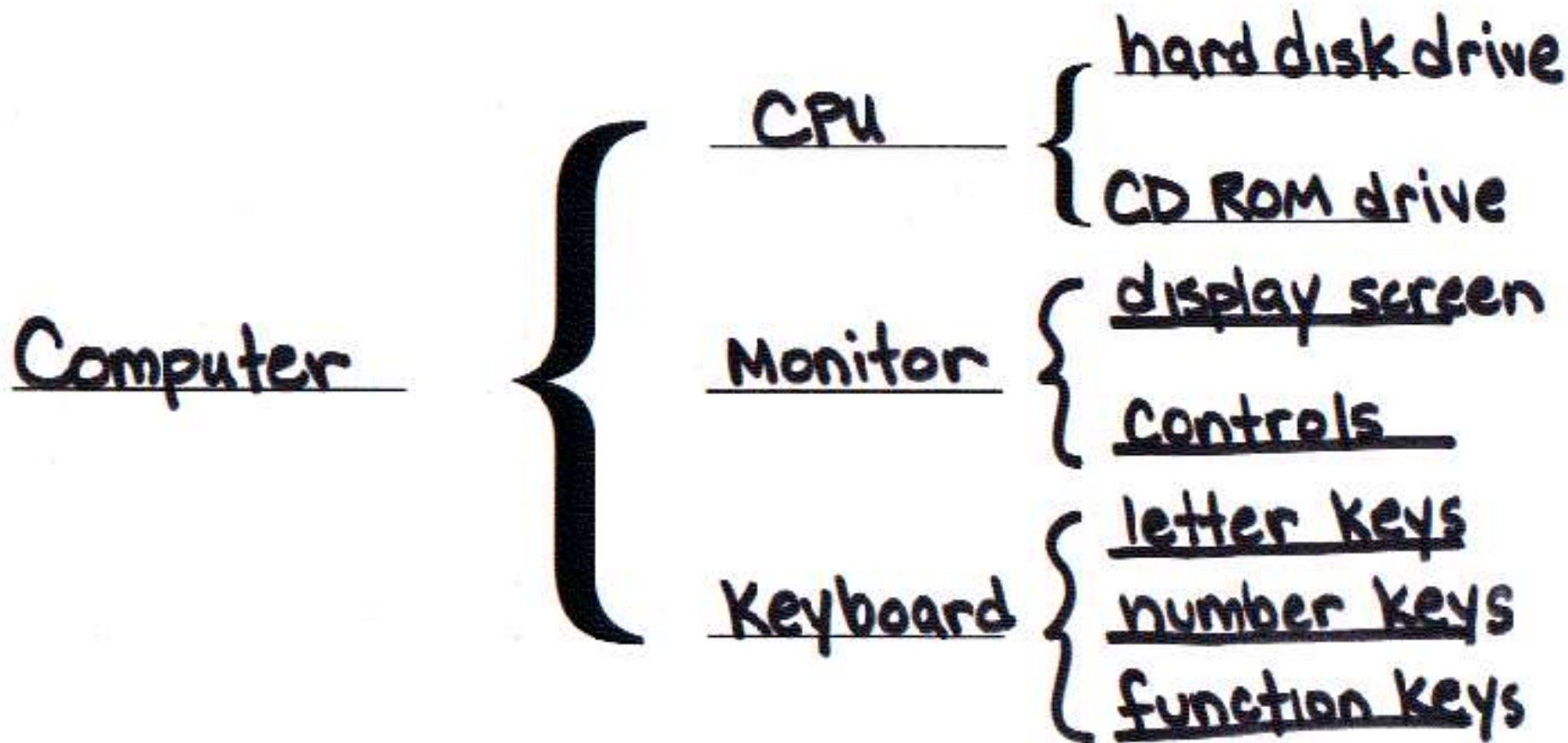
eyepiece

mirror

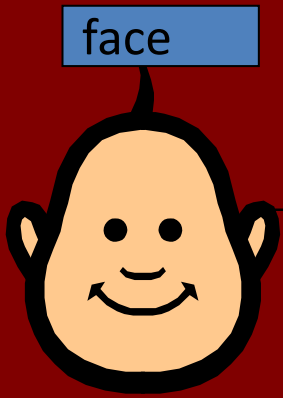
controls



# Technology



Brace Map for Physical Analysis of Whole, Parts, and Subparts of Objects



face

eyes

ears

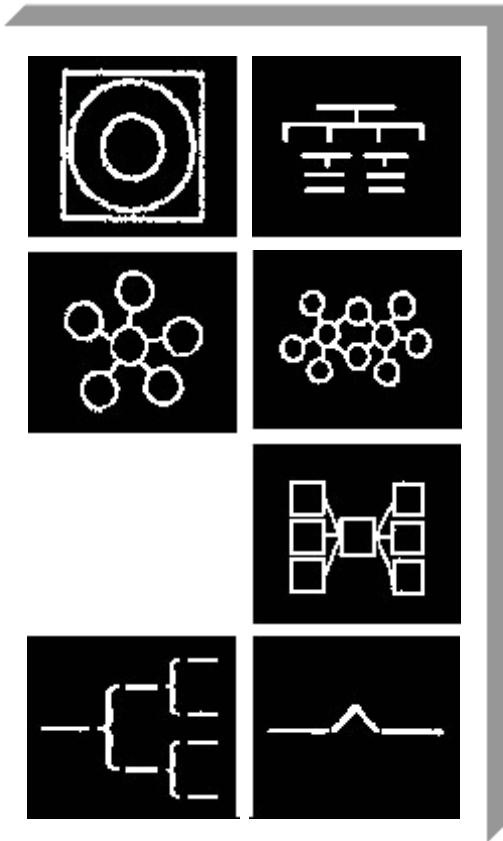
nose

mouth

lips

tongue

teeth



# The Flow Map

For seeing events in sequence

Don't have a weather story, but to make the weather story...

As Water the level 2 will, your have been thinking about...  
Weather Clouds  
And  
Putting clouds in a traditional weather app

When you 2 also have the 2 physical process the...  
with photos relating about the weather



The birds  
for the sea



The ground  
for the sea



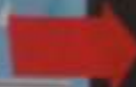
The children  
for the sea

The children have thought very carefully about...  
about thinking the weather clouds  
in the weather in the rain.  
They have also thought about  
how much water to use



When you 2 also have the 2 physical process the...  
with photos relating about the weather

The children have thought very carefully about...  
about thinking the weather clouds  
in the weather in the rain.  
They have also thought about  
how much water to use



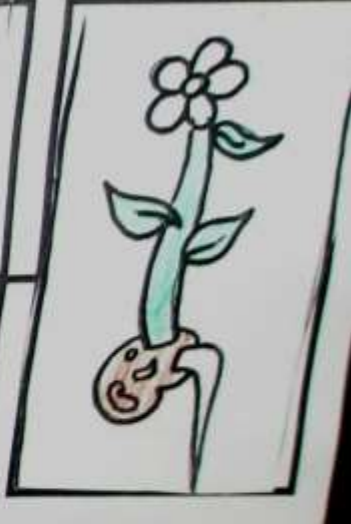
The children  
for the sea



The children  
for the sea



The children  
for the sea



Plant  
the Bean in to  
the soil

Next water  
the Bean and  
it will grow

The root will  
grow and a shoot will  
grow

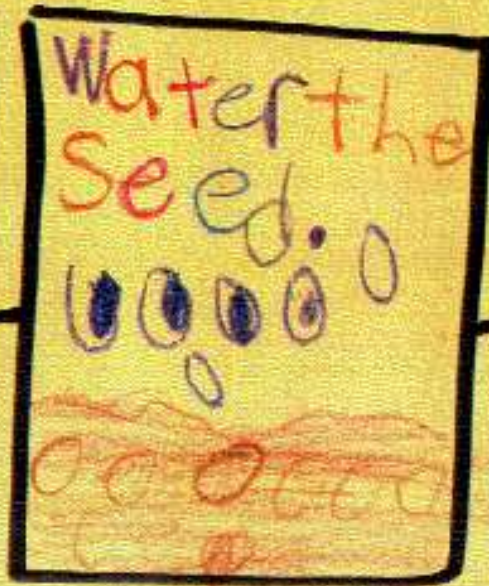
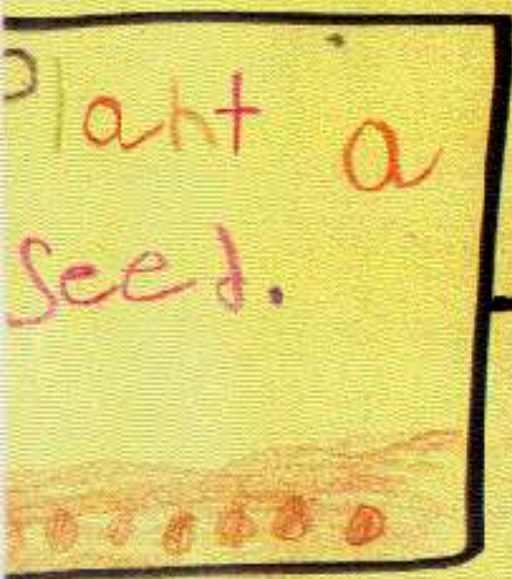
The Bean  
starts to grow  
leaves

This Bean  
now has a  
flower

Well done  
George

# Flow Map

How a seed becomes a flower





**Yates Mills Elementary School Raleigh, NC, USA**

**My mum asked me  
To wash up because  
we were going to  
visit my gran.**

**I refused because  
it wasn't my turn.**

**My mum accused  
me of being selfish**

**I said she always  
gave in to my brother**

**My brother made  
a sexist remark**

**My mum didn't  
criticise him**

**I flew into a temper  
and stormed out**

**My mum came  
after me  
after the Chart**

**I got grounded  
for a week**



Ellie

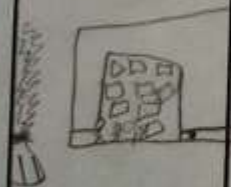
# A Flow Map about our day at the Tate Modern

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

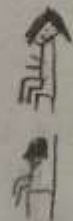
Then we crossed some busy roads. And then we had to wait until it opened and then we went to see some amazing great colossal towers cold plastic boxes.

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

I looked out at all the people

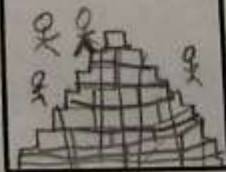


I played games with my friends.



and some of the boxes Jiggantick snowey creamey white neat <sup>was</sup> mammoth boxes. Some of the boxes where no treat

And Rachel Whitehead built the boxes with glue.



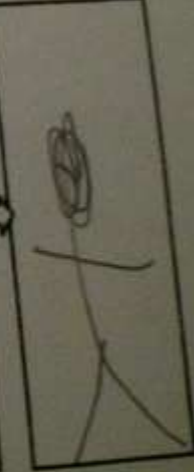
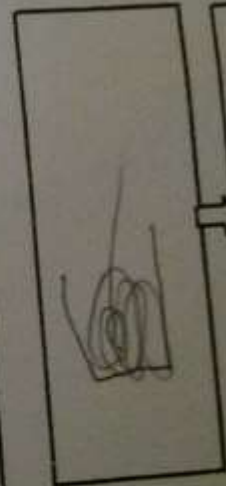
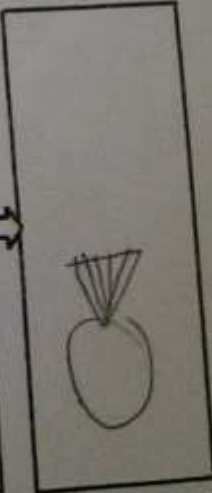
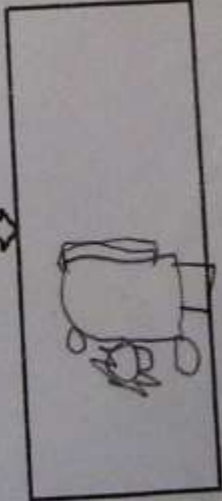
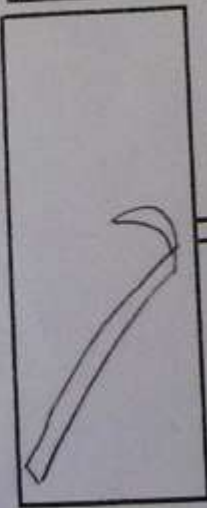
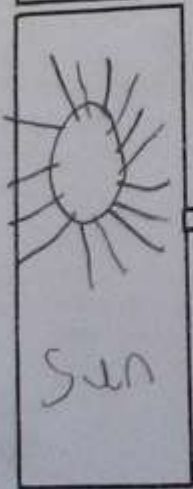
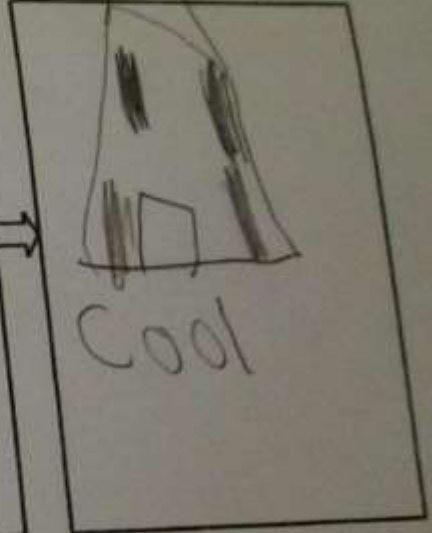
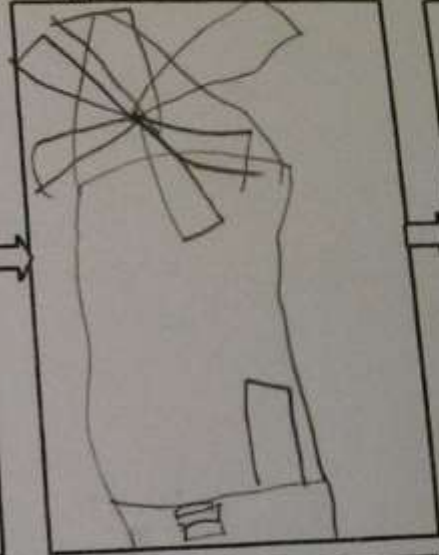
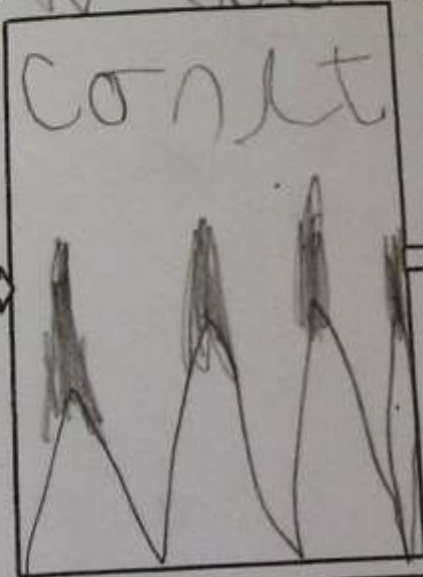
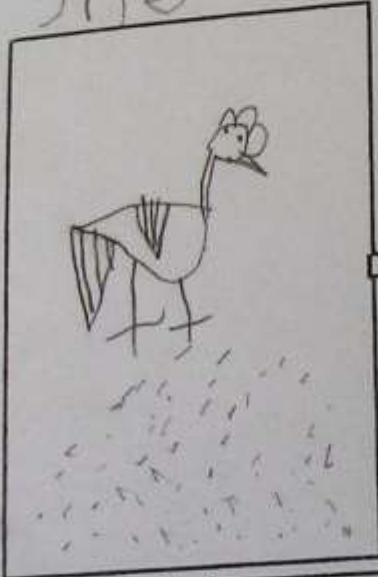
finally we got to see the river tenners.

and then we went back to school

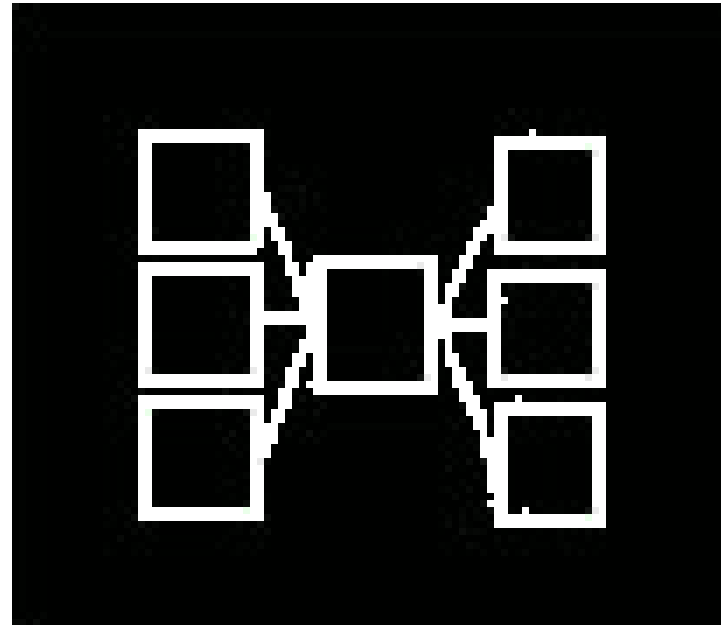
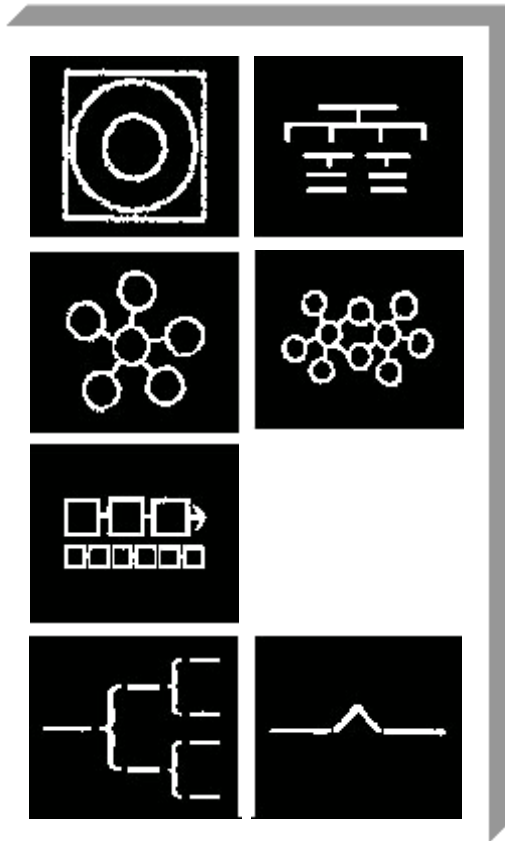
Laurel 10.10.05

# Making bread

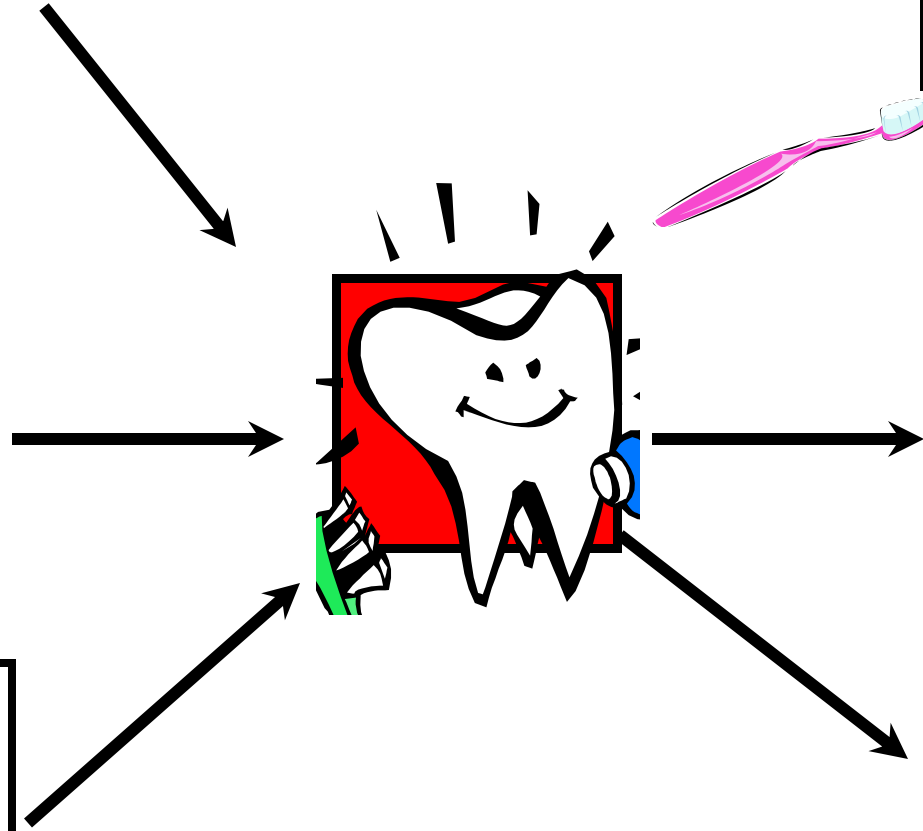
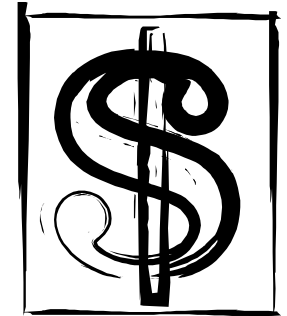
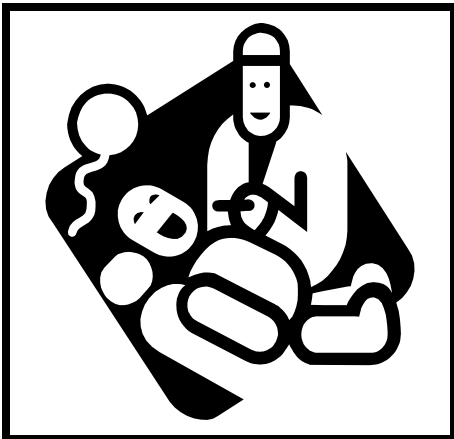
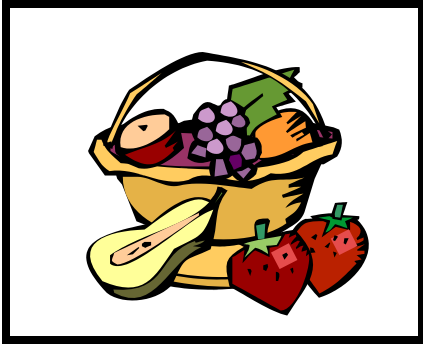
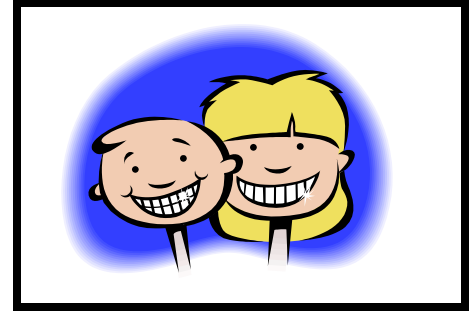
She ate w/ the crop



combine



**The Multi-Flow Map**  
for understanding  
cause and effect



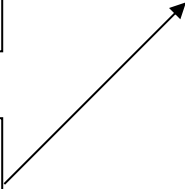
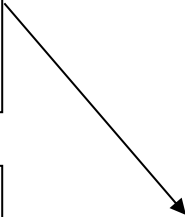
# Behaviour Reflections

**Reasons for my  
behaviour**

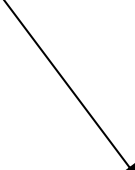
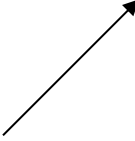
**Name** \_\_\_\_\_

**Date** \_\_\_\_\_

**Consequences of my  
behaviour**



**Description of my  
behaviour**



**Plan for improvement**

\_\_\_\_\_

\_\_\_\_\_

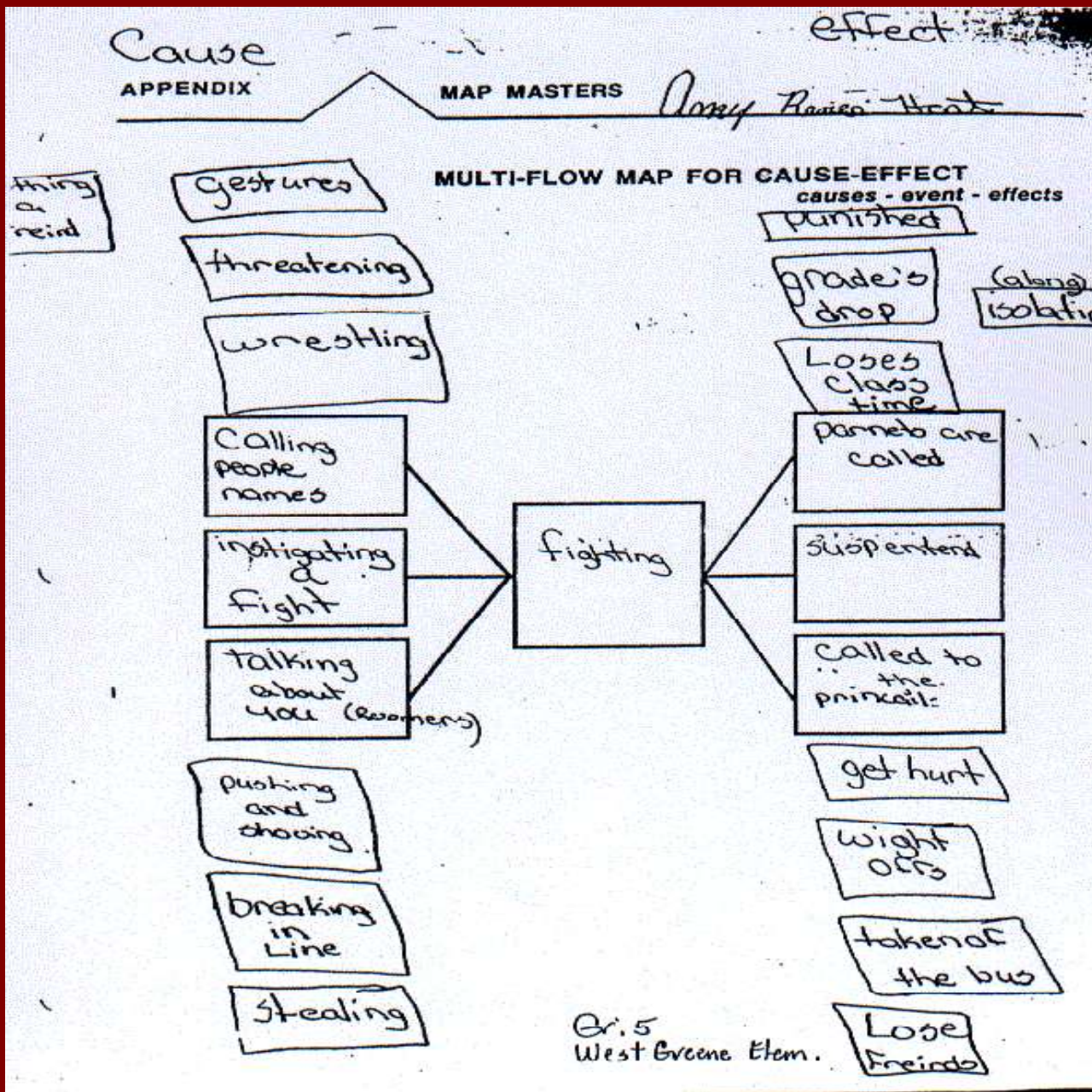
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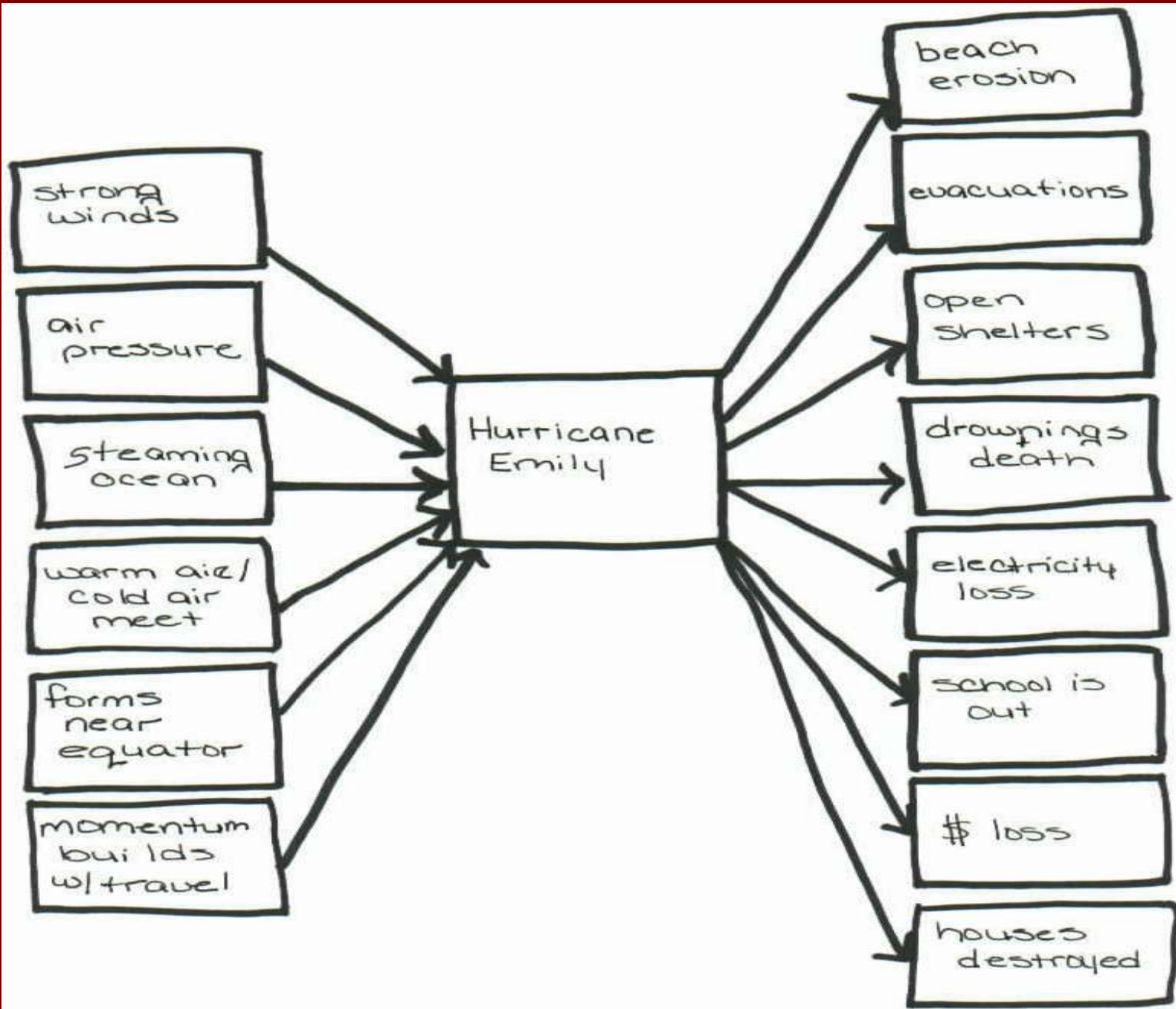
**Pupil** \_\_\_\_\_

**Teacher** \_\_\_\_\_

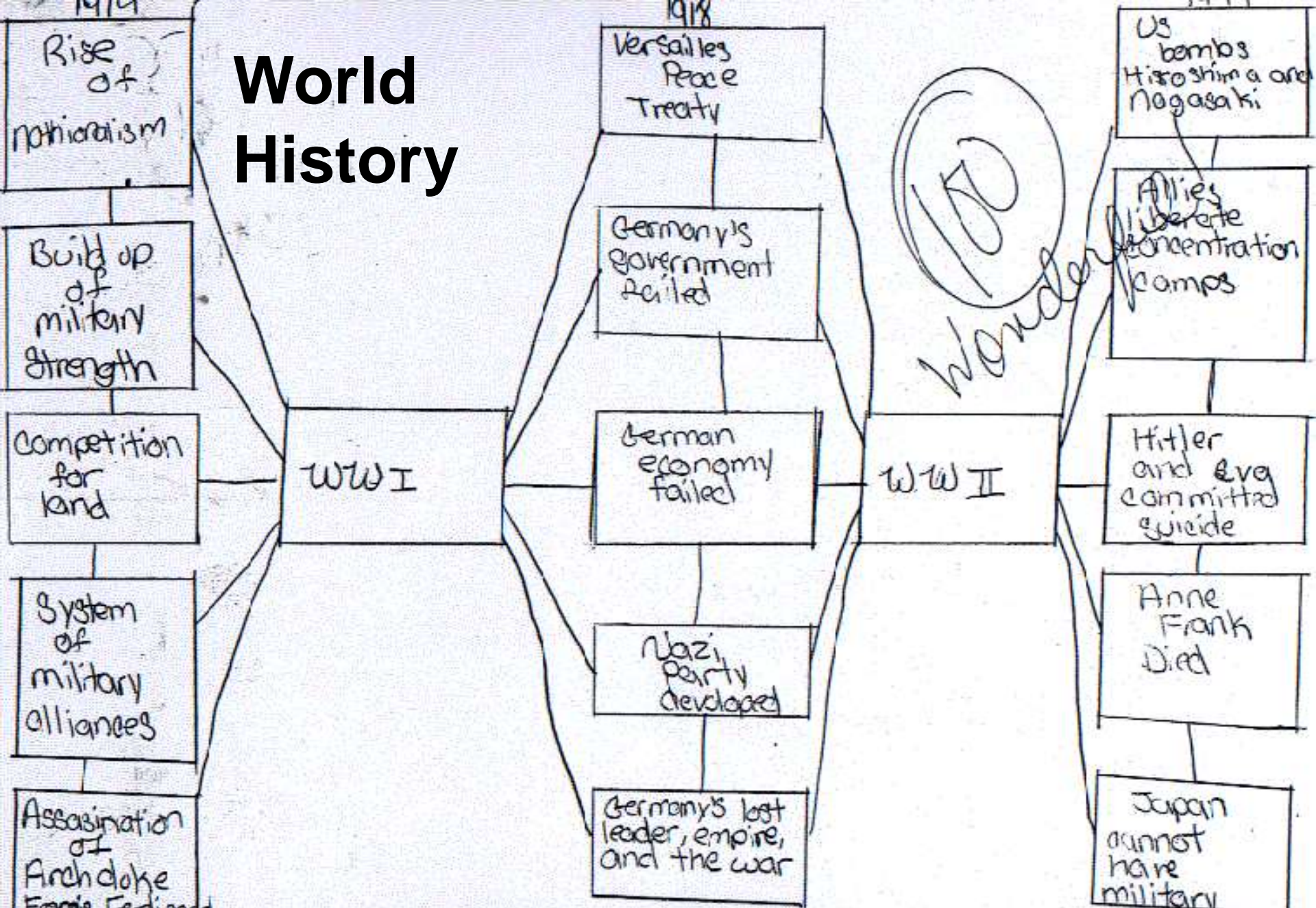
**Parent** \_\_\_\_\_

# Conflict Resolution





# World History

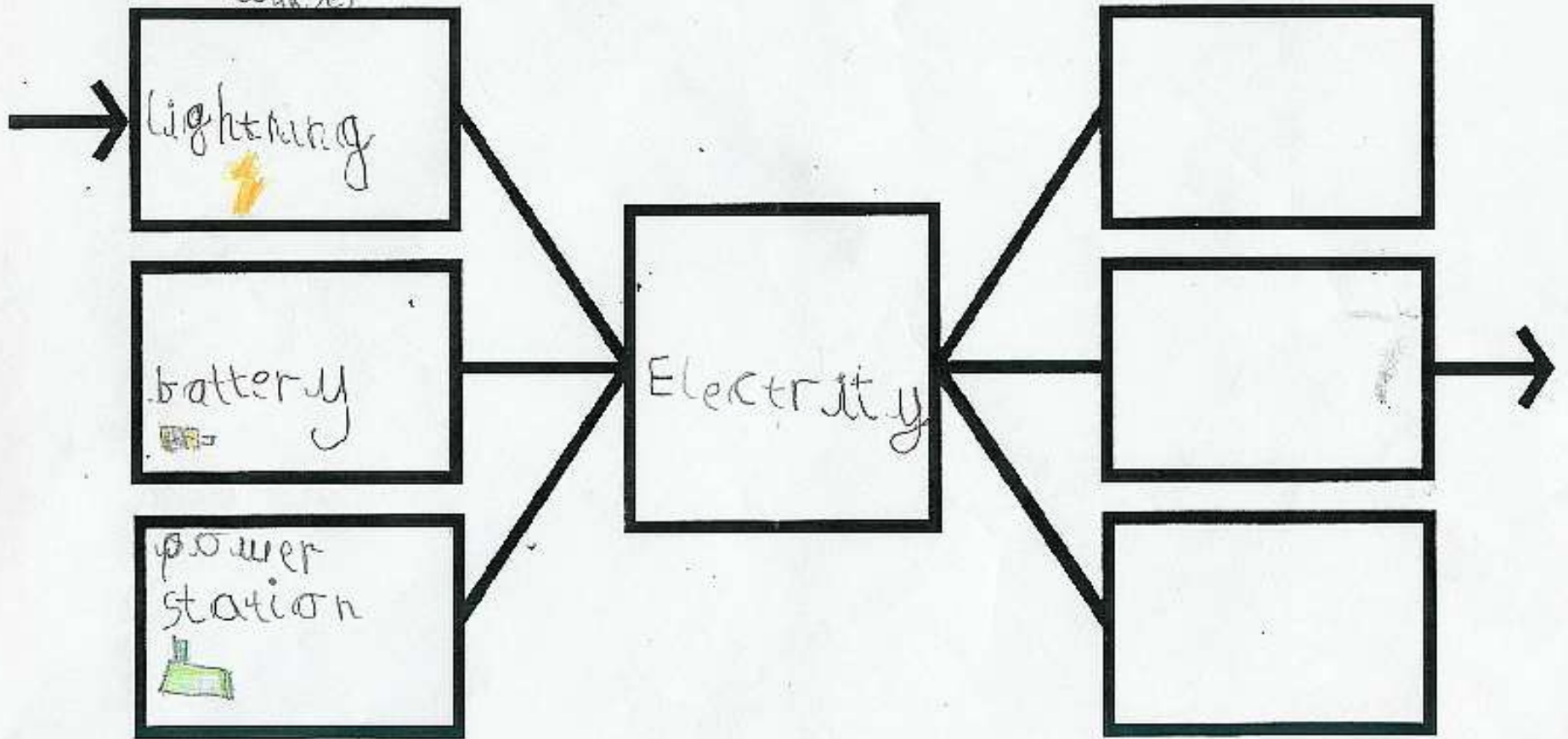




07.11.05 Kieran

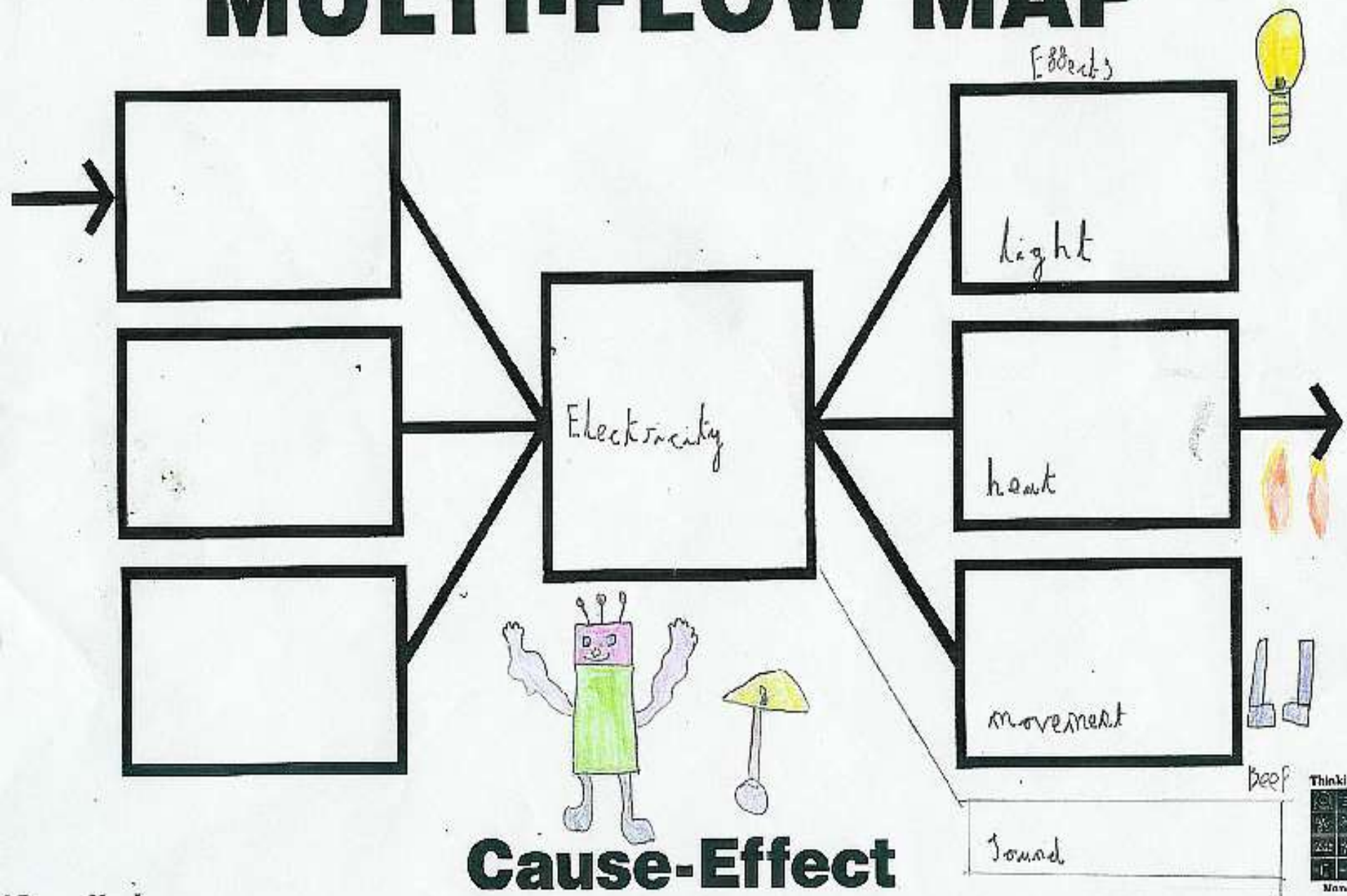
# MULTI-FLOW MAP

causes



**Cause-Effect**

# MULTI-FLOW MAP




## Cause

houses were made out of firewood.

There was straw on the street.

It was a hot summer.

### The Great Fire of London



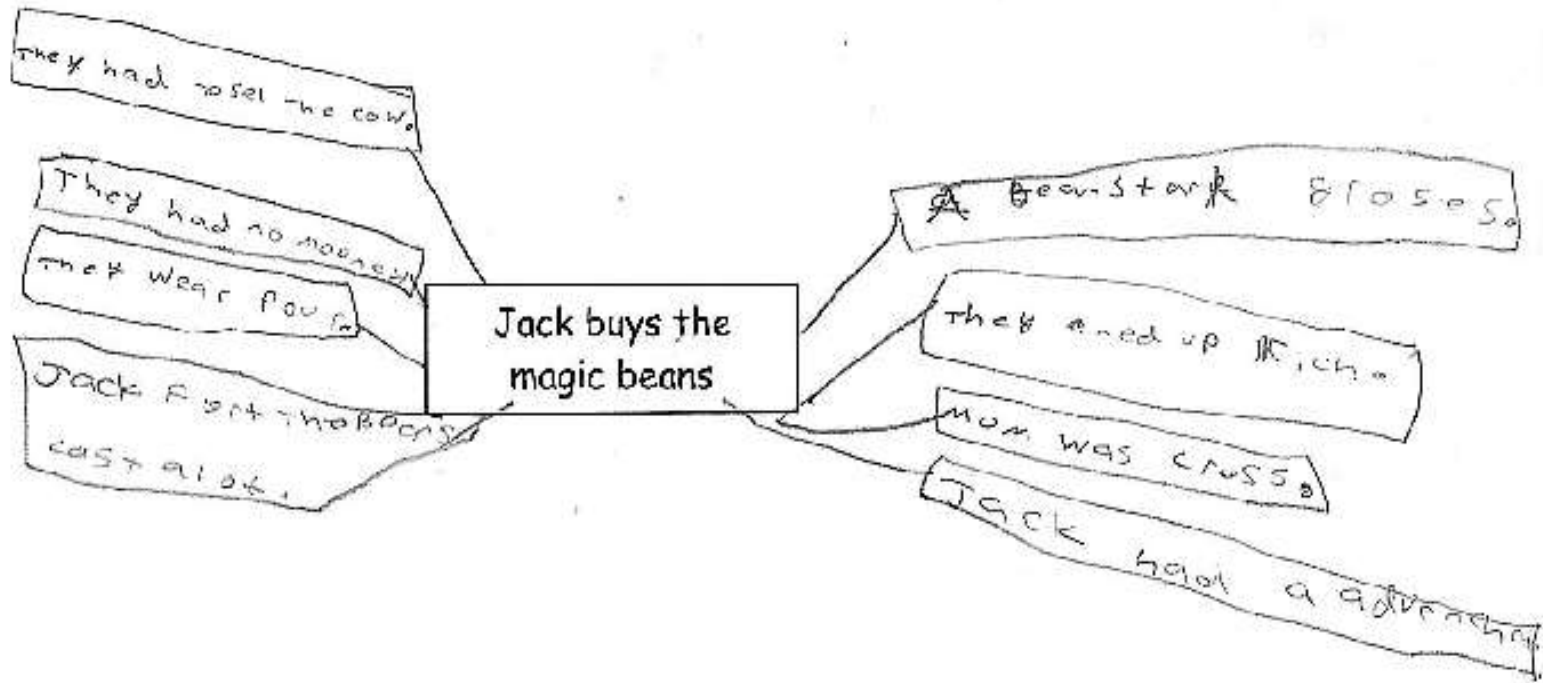
## Effect

6 people died.  
was burnt down.

most of London was burnt down.

The city had to be rebuilt with bricks.

Cause and Effect Map



Melissa

**I put too much water in**

**I did not measure my flour accurately**

**I opened the oven door too soon**



**I put too much water in**

**I did not measure my flour accurately**

**I opened the oven door too soon**

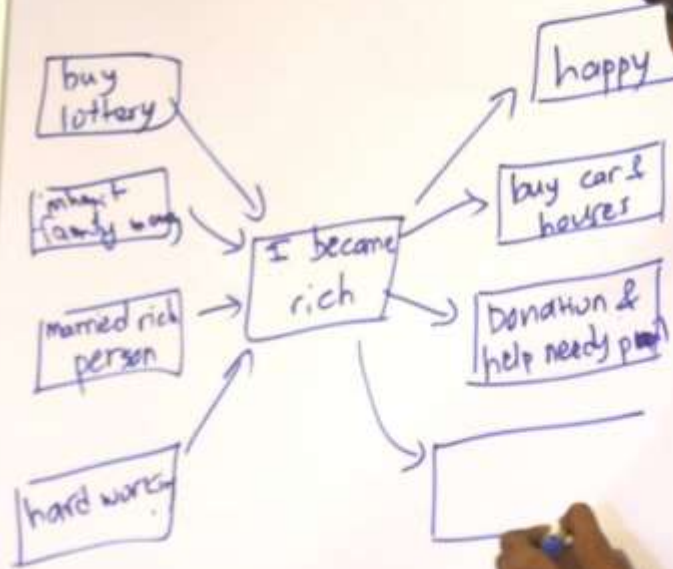


**I was upset**

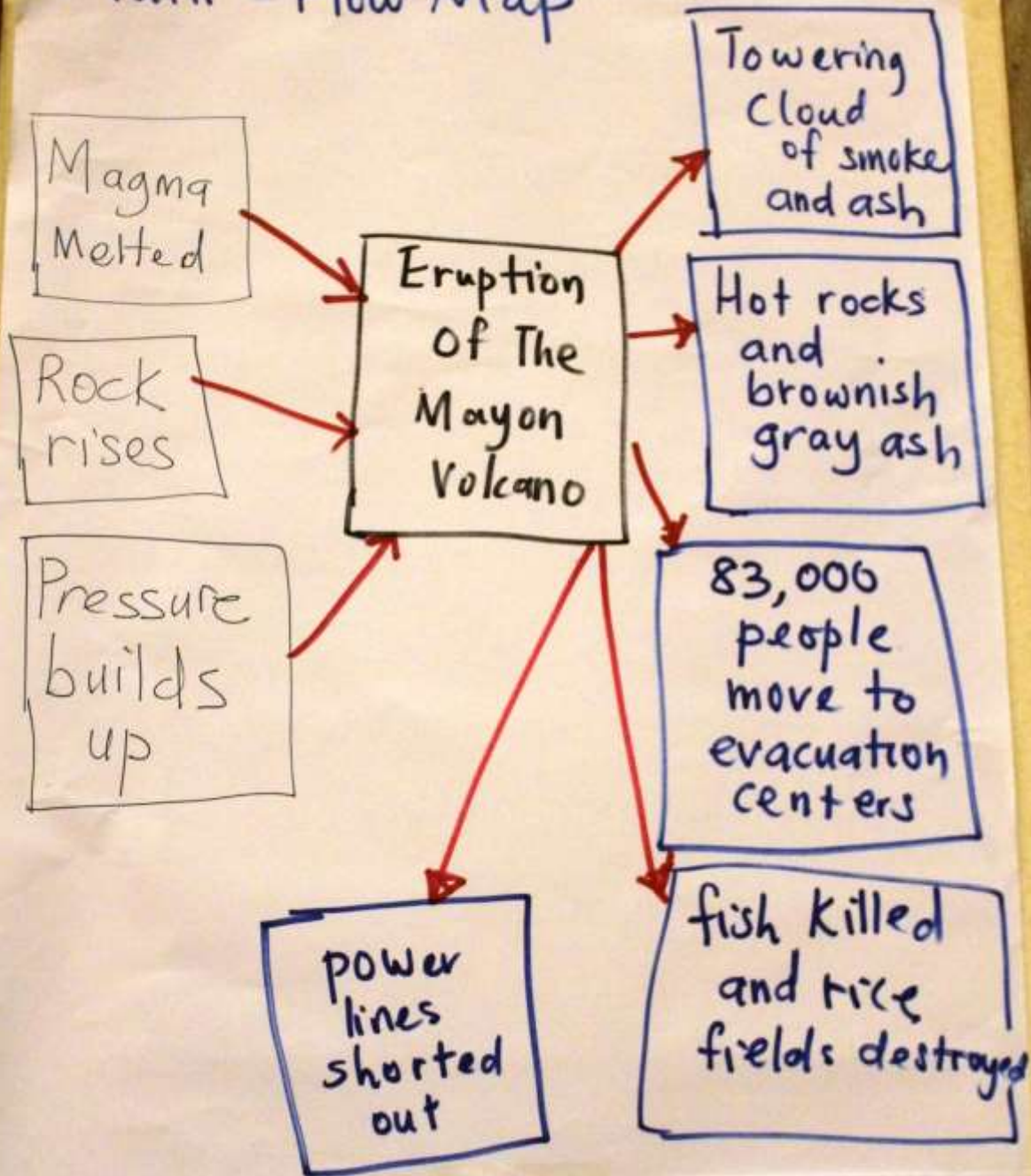
**Mum made another cake**

**It cost more money**

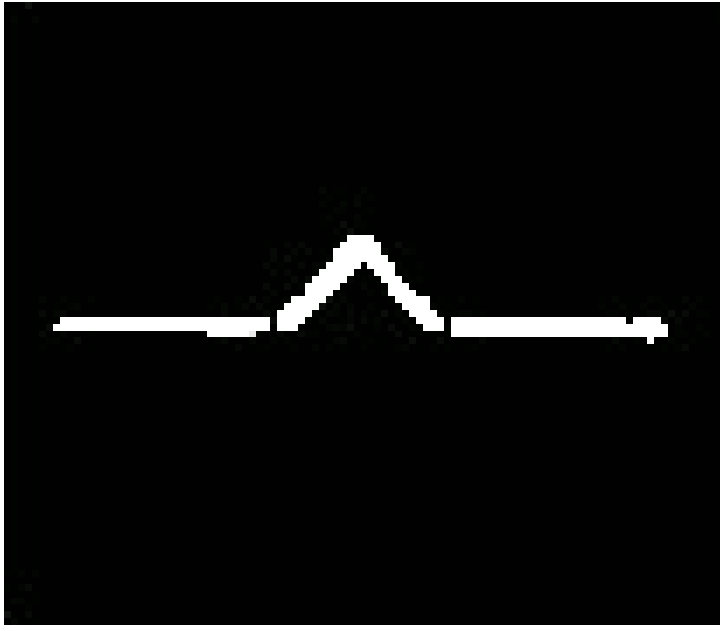
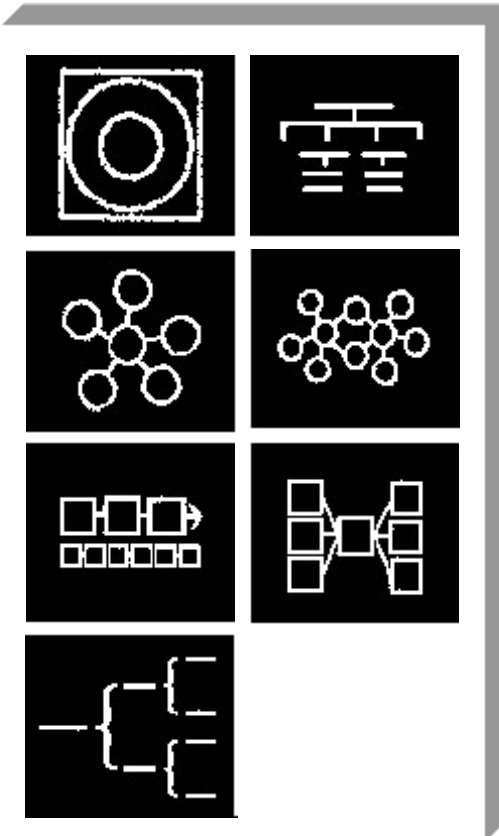
# Multi Flow Map



# Multi-Flow Map







**The Bridge Map**  
for seeing analogies



rain



sun



water



light

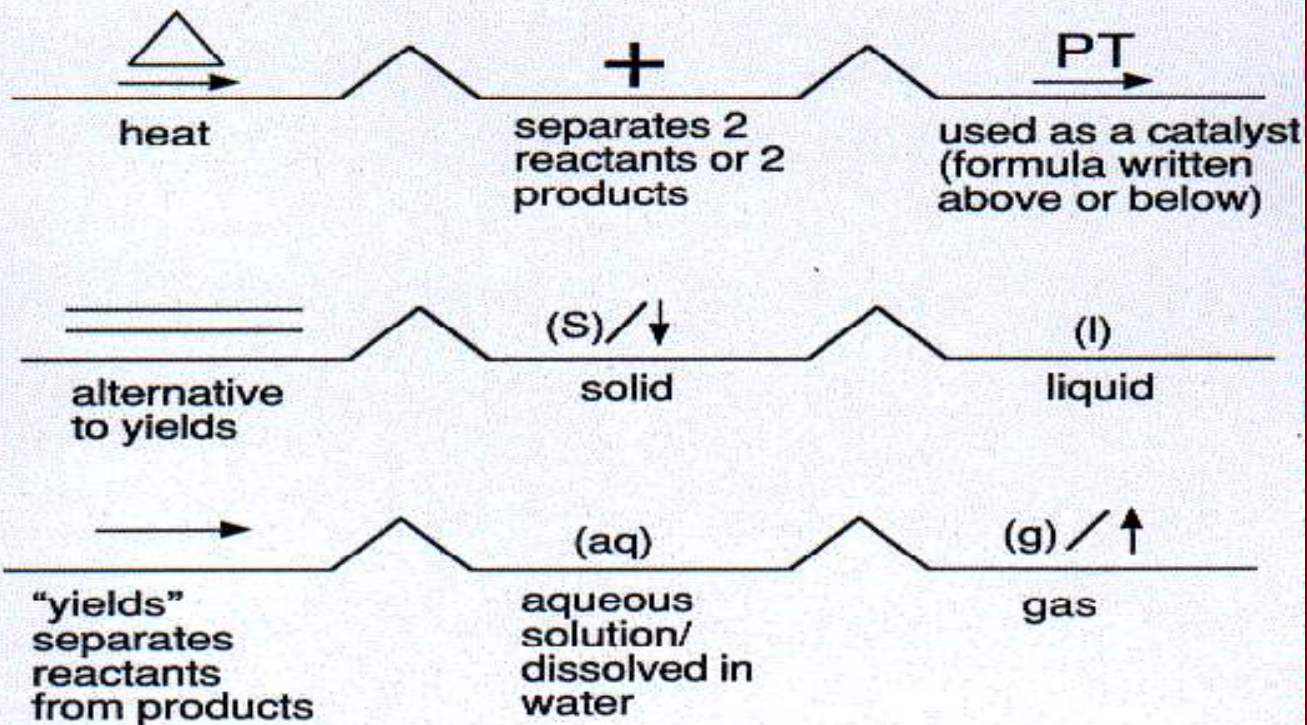
relating factor:

gives

Jesmin

# Chemical Equations

## Chemistry



RF: Symbol for

Represents

Relating Factor

Circle  
Graph

%

as

Line  
Graph

Change  
over time

as

Bar Graph

Comparisons

Friday 30th June

# Bridge Map

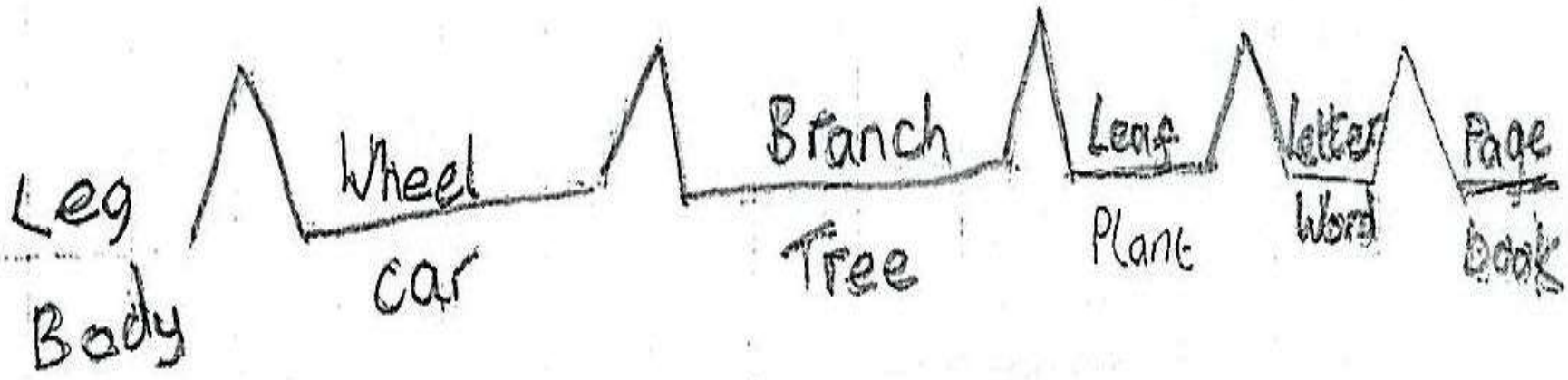
Melissa

Jagged 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

# Bridge Map.



Is  
Part  
of.

is the colour of

Red

as

a strawberry in a  
big strawberry  
patch. Hannah

Gold

as

a catherine  
wheel on  
bonfire night.

James C.

Dark Blue

as

the midnight sky  
before the  
fireworks exploded!  
Amy

Light Blue

as

the sea crashing  
on the rocks.  
Ellie

Black

as

the starry night  
when we are all  
fast asleep.  
Francesca

Green

as

a crocodile in the  
sea snapping his  
jaws.  
Adam

Yellow

as

the shining,  
shimmering sun.  
Juliet

Brown

yummy, yummy  
chocolate.  
Archie

**The use of each Thinking Map reflects a particular question in an enquiry process:**

- Circle Map: *How are you defining this (concept) and in what context?*
- Bubble Map: *What are the attributes?*
- Double-Bubble Map: *How are these alike and different?*
- Tree Map: *How are these grouped together?*
- Brace Map: *What are the parts of a physical, whole object?*
- Flow Map: *What was the sequence of events?*
- Multi-Flow Map: *What were the causes and effects?*
- Bridge Map: *Is there an analogy between these ideas?*