

# Thinking Frames at St. Mary's



# New Curriculum for Wales - 4 Core Purposes

## **Ambitious, capable learners who:**

- set themselves high standards and seek and enjoy challenge;
- are building up a body of knowledge and have the skills to connect and apply that knowledge in different contexts;
- are questioning and enjoy solving problems;
- can communicate effectively in different forms and settings, using both Welsh and English;
- can explain the ideas and concepts they are learning about;
- can use number effectively in different contexts;
- understand how to interpret data and apply mathematical concepts;
- use digital technologies creatively to communicate, find and analyse information;
- undertake research and evaluate critically what they find and are ready to learn throughout their lives.

## **Enterprising, creative contributors who:**

- connect and apply their knowledge and skills to create ideas and products;
- think creatively to reframe and solve problems;
- identify and grasp opportunities;
- take measured risks;
- lead and play different roles in teams effectively and responsibly;
- express ideas and emotions through different media;
- give of their energy and skills so that other people will benefit and are ready to play a full part in life and work.



## **Four Purposes**

## **Healthy, confident individuals who:**

- have secure values and are establishing their spiritual and ethical beliefs;
- are building their mental and emotional well-being by developing confidence, resilience and empathy;
- apply knowledge about the impact of diet and exercise on physical and mental health in their daily lives;
- know how to find the information and support to keep safe and take part in physical activity;
- take measured decisions about lifestyle and manage risk;
- have the confidence to participate in performance;
- form positive relationships based upon trust and mutual respect -face and overcome challenge;
- have the skills and knowledge to manage everyday life as independently as they can;
- and are ready to lead fulfilling lives as valued members of society.

## **Ethical, informed citizens who:**

- find, evaluate and use evidence in forming views;
- engage with contemporary issues based upon their knowledge and values;
- understand and exercise their human and democratic responsibilities and rights;
- understand and consider the impact of their actions when making choices and acting;
- are knowledgeable about their culture, community, society and the world, now and in the past;
- respect the needs and rights of others, as a member of a diverse society;
- show their commitment to the sustainability of the planet and are ready to be citizens of Wales and the world.

# Developing Metacognition

## What is metacognition?

- Thinking about how we learn and think
- Learning skills to be reflective learners
- Supports flexible and adaptable learning
- Research - very high impact on pupil progress



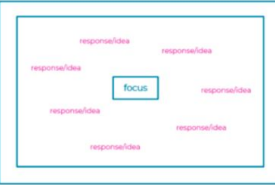
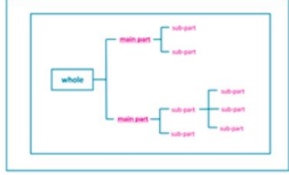
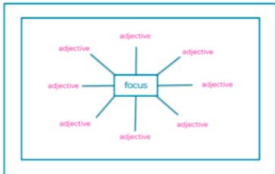
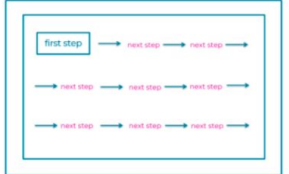
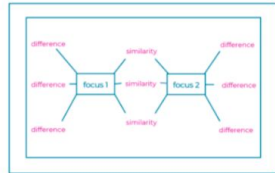
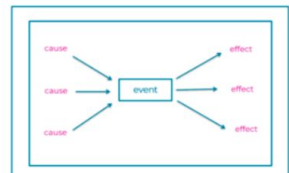
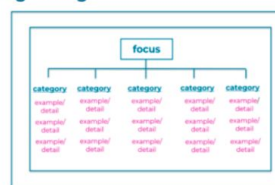
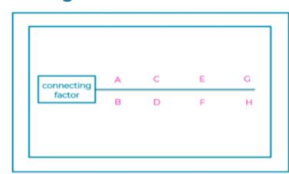
# Thinking Frames

## What are Thinking Frames?

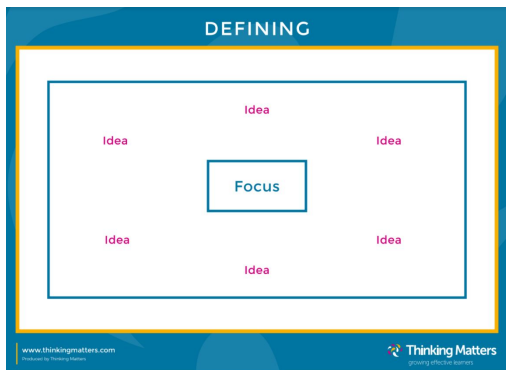
- Visual tools based on distinctive visual patterns which help to organise thinking/ ideas.
- Helps to plan and structure thinking.
- In everyday life we use specific tools for certain jobs:
  - Spade for digging
  - Spoon for eating soup



# Each of the 8 frames are good for specific types of thinking.

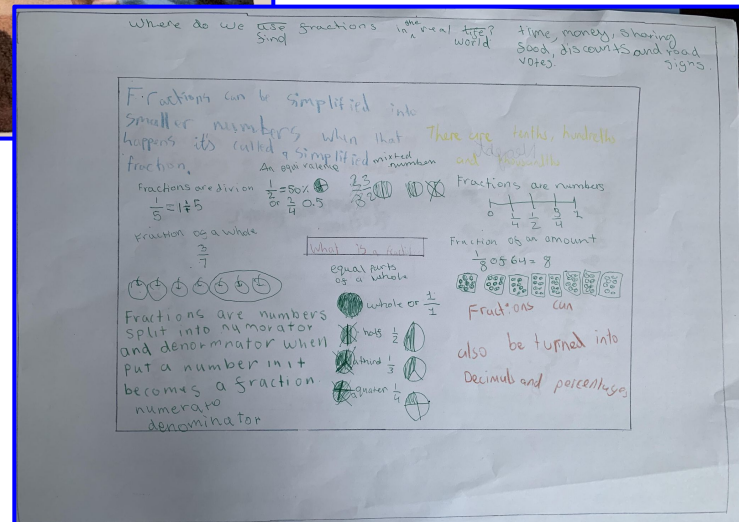
Thinking Process and Frame	Purpose and Key Questions	Thinking Process and Frame	Purpose and Key Questions
<p><b>Defining</b></p> 	<p>The <b>Defining Frame</b> is used for brainstorming or generating lots of ideas and thoughts. It is useful for recording prior knowledge, new knowledge and creative thoughts.</p> <p><i>Tell me everything that you know about this?</i>  <i>How are you defining it?</i>  <i>What is your context?</i>  <i>What is your frame of reference?</i></p>	<p><b>Whole Part</b></p> 	<p>The <b>Whole Part Frame</b> is used for whole part thinking when de-constructing <i>concrete</i> objects. It is used most often in Science, Technology, Maths and Geography but can also be used to show the parts of large generic objects such as a building.</p> <p><i>What are the parts that make up the whole object?</i>  <i>Can the parts be broken down into sub-parts?</i></p>
<p><b>Describing</b></p> 	<p>The <b>Describing Frame</b> is used to describe properties, elements and characteristics. It is a useful tool for enhancing students' descriptive language as it uses only adjectives or adjectival phrases.</p> <p><i>How would you describe this object/idea/person?</i>  <i>Which adjectives would you use?</i></p>	<p><b>Sequencing</b></p> 	<p>The <b>Sequencing Frame</b> is used for any type of sequencing, such as timelines, life cycles, order, plots, story boards, processes and planning. The sequence generally moves in a left to right direction, but, where appropriate, it can be presented in a vertical or circular form, e.g. as for life cycles.</p> <p><i>What is the sequence of events?</i>  <i>What are the sub-stages?</i></p>
<p><b>Compare Contrast</b></p> 	<p>The <b>Compare Contrast Frame</b> is used for comparing and contrasting any two objects, items, concepts or phenomena.</p> <p><i>What are the similarities and differences?</i></p>	<p><b>Cause Effect</b></p> 	<p>The <b>Cause Effect Frame</b> is used for exploring causal relationships, e.g. when asking for reasons why, causes, inputs, or outcomes, impact and implications.</p> <p>This frame can be used for <i>only</i> causes or <i>only</i> effects.</p> <p><i>What are the causes and effects?</i></p>
<p><b>Categorising</b></p> 	<p>The <b>Categorising Frame</b> is used for any type of categorising, classifying or grouping.</p> <p><i>How might you group the main ideas, supporting ideas and details?</i></p>	<p><b>Connecting</b></p> 	<p>The <b>Connecting Frame</b> is used for making connections and analogies or for transferring relationships. It is useful when encouraging creative thinking, linking facts and ideas, seeing relationships and similarities and drawing analogies.</p> <p><i>What is the analogy being used?</i></p>

# Defining Frame

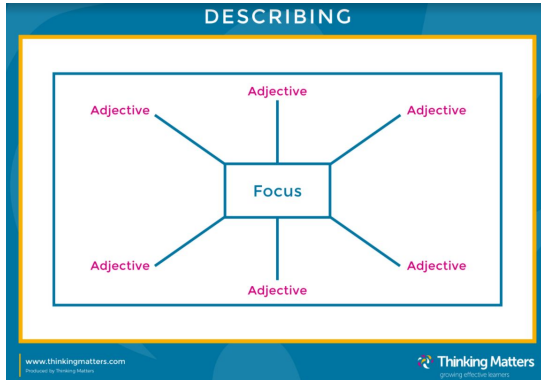


Used for generating lots of ideas

Tell me everything you know about this.



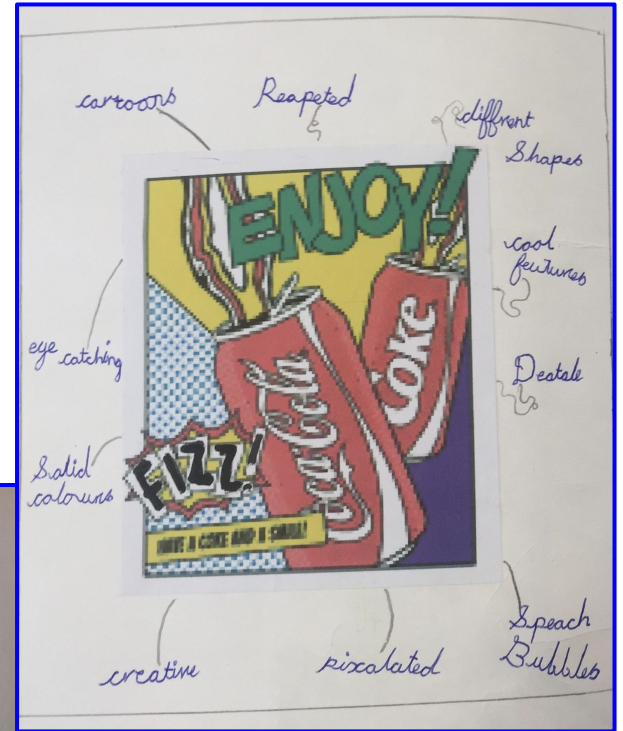
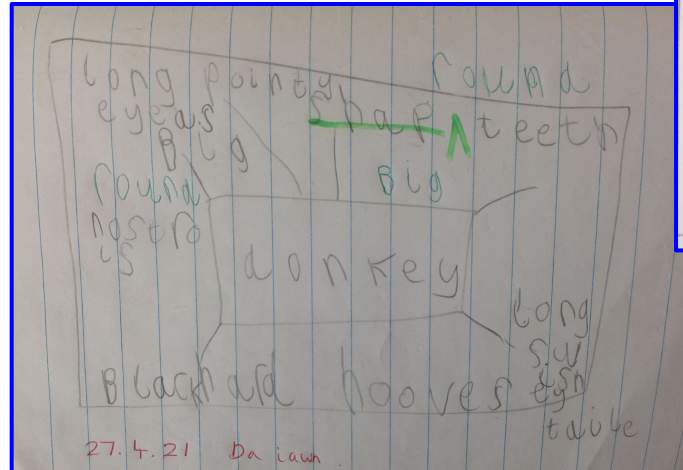
# Describing Frame



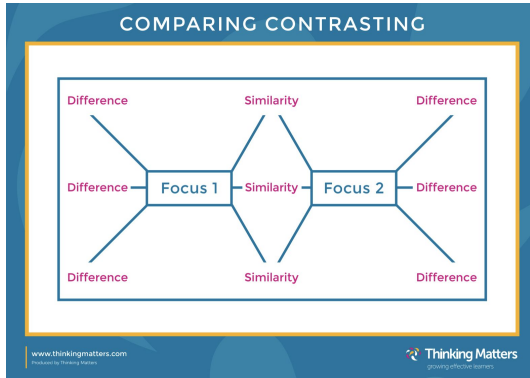
Used for describing

Only uses adjectives  
or adjectival phrases

How would describe  
the person/ object/  
idea?

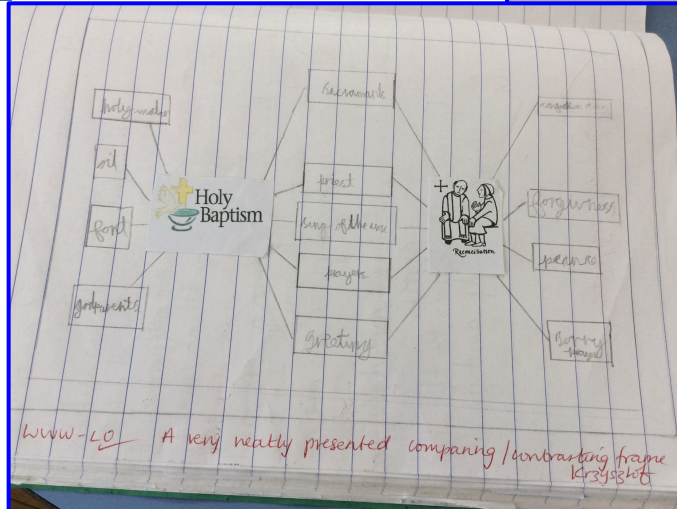
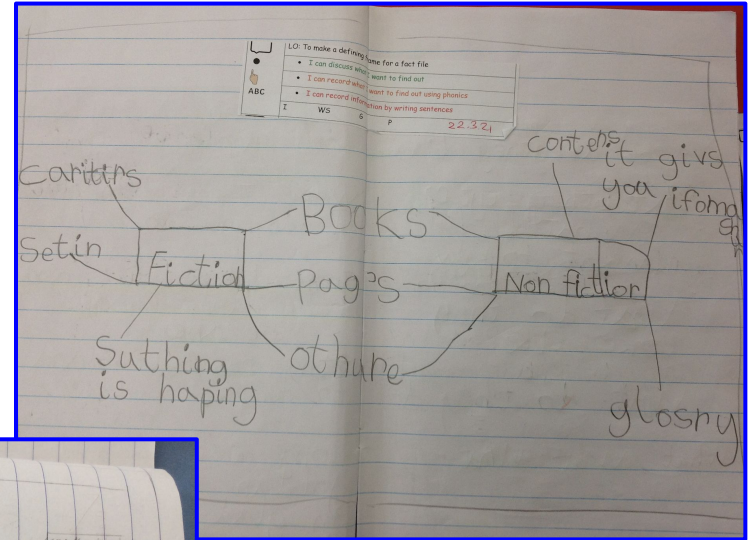


# Compare & Contrast Frame

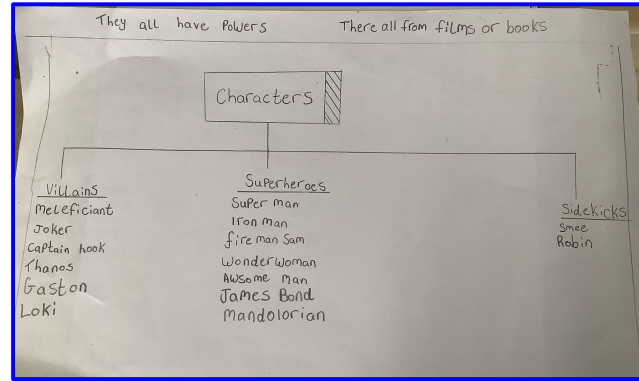
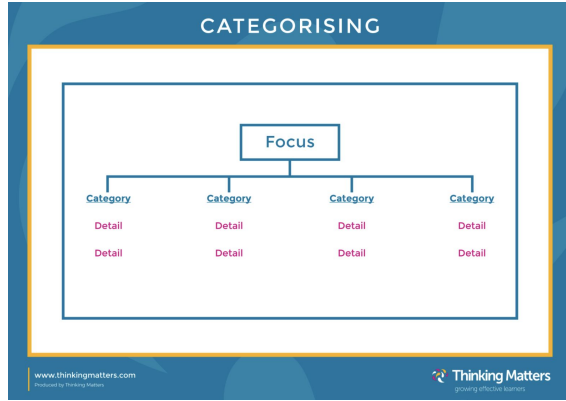


To compare and contrast two things

What are the similarities and differences?

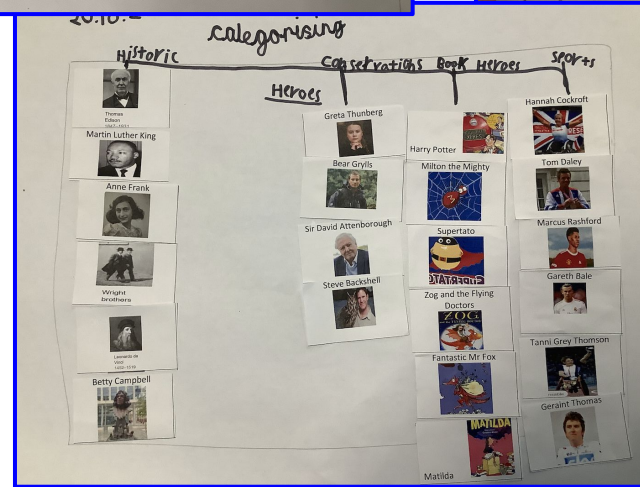


# Categorising Frame

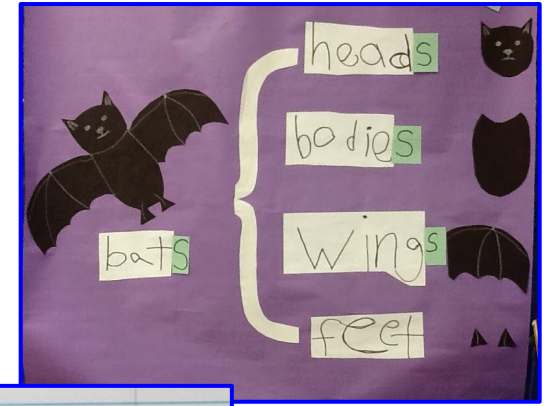
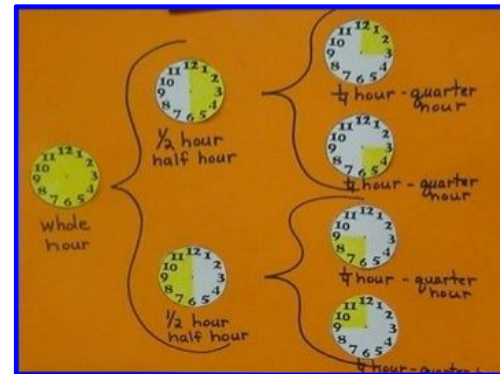
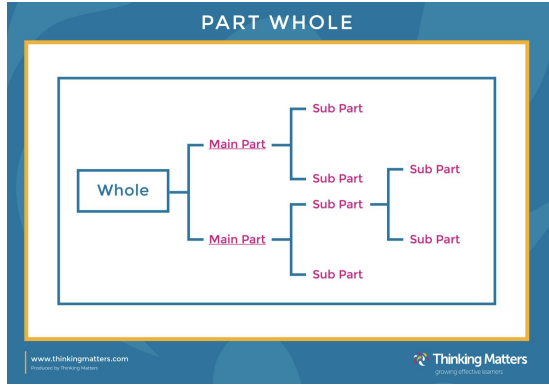


Used for categorising,  
classifying or grouping.

How can you group these?



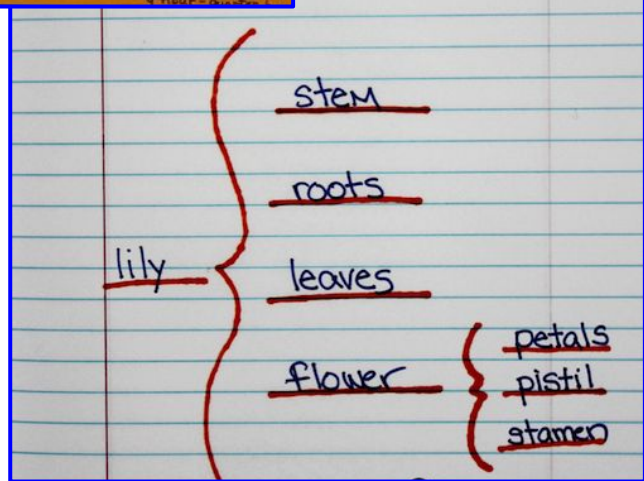
# Whole Part Frame



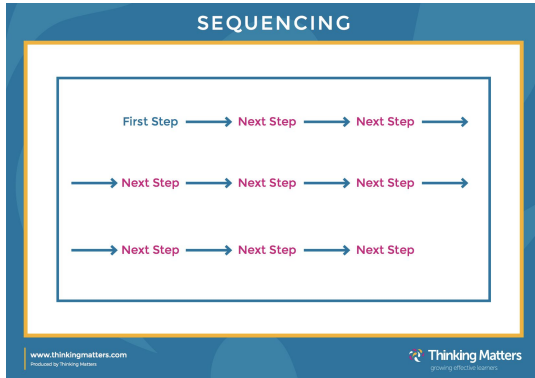
Used when de-constructing real objects.

Used mainly in Science and Technology

What are the parts that make up the whole object?

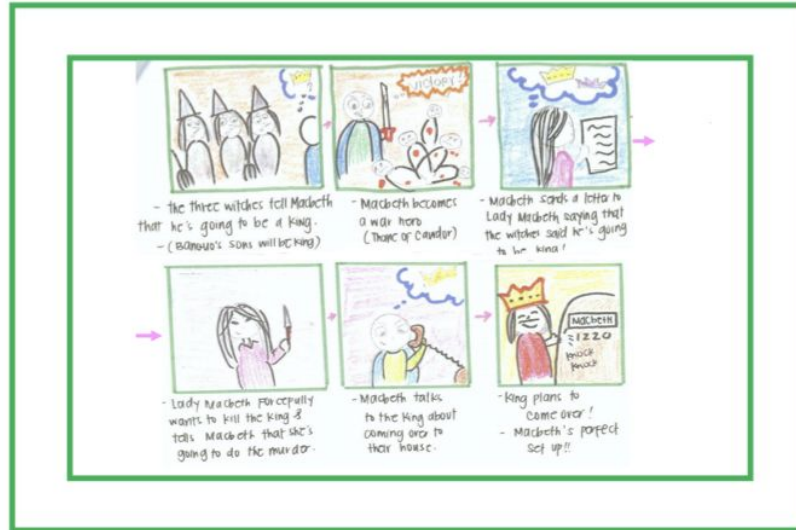
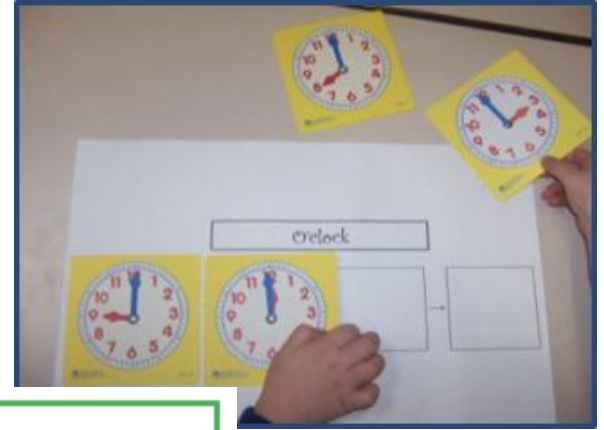


# Sequencing Frame

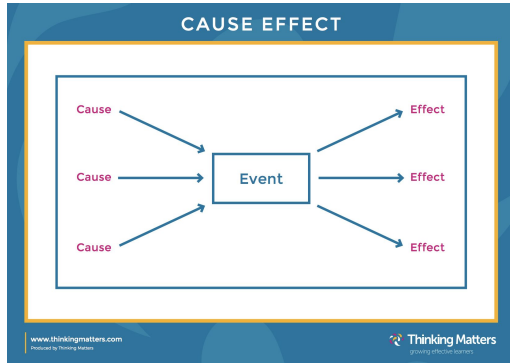


Used for any types of sequencing, e.g. timelines, life cycles, storyboards

What is the sequence of events?

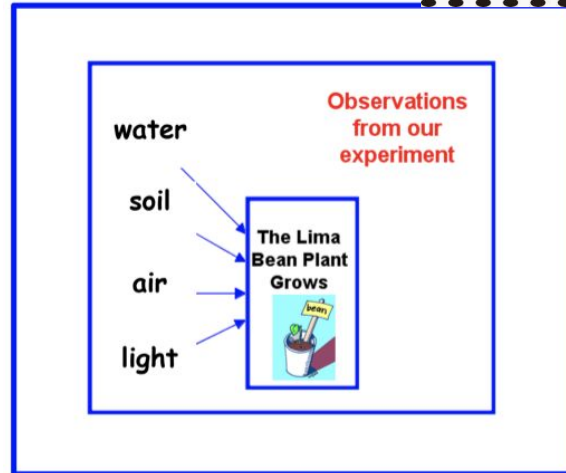
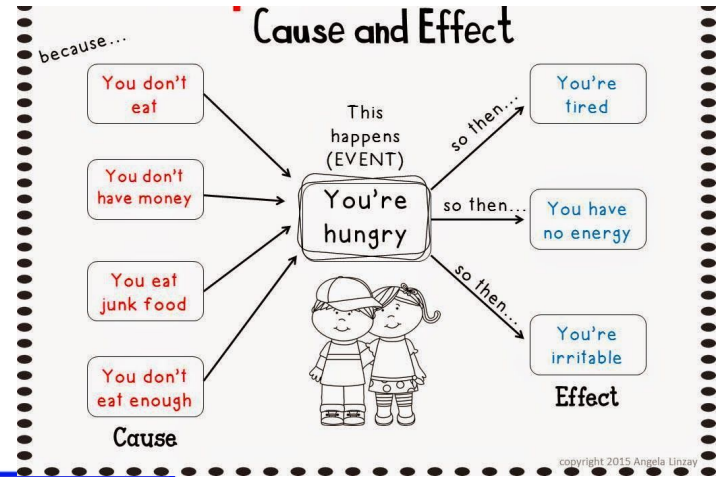


# Cause and Effect Frame



Used for exploring relationships.  
Asking for reasons why, the causes and implications.

What are the causes and effects?



# Connecting Frame

CONNECTING

Connecting factor	A	C	E	G
	B	D	F	H

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Thinking Matters  
growing effective learners

Polar Bear as giraffe as owl

Cub calf Owllet

is a better word	jagged	murky	stride	cackle
	sharp	dark	walk	laugh

Used for making connections/relationships.

Links facts and ideas.

What is the analogy being used?

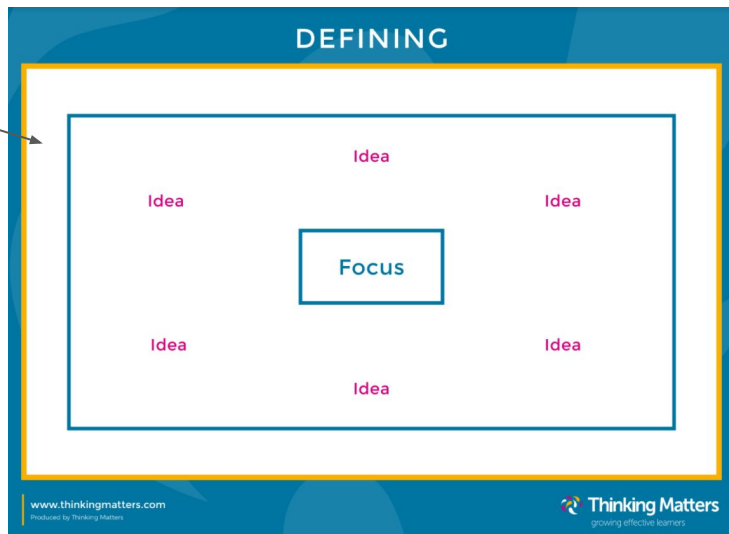
is equivalent to	11.35 pm	4.45 pm	7.10 am	5.25 pm
	23.35	16.45	07.10	17.00

$\frac{1}{2}$  as  $\frac{2}{4}$  as  $\frac{3}{6}$  as  $\frac{4}{8}$

Hoped

# Reflective Lens

- 'Framed' by a double set of lines
- Questioning tool
- Used by teacher or learner
- Provides another opportunity for reflection
- Could be used:
  - Pose a deeper question
  - The sources used
  - Add extra information at a later date

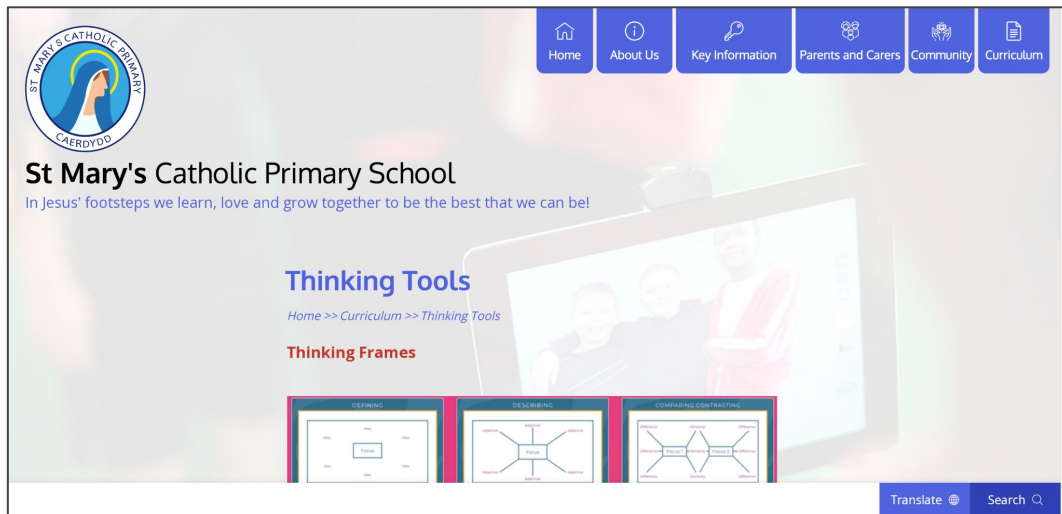


# Thinking Frames at St. Mary's

- Nursery to Year 6
- Teacher models use
- Generate whole class/ group - display, Twitter
- Individual - learners books
- Record in a variety of ways - practically and on paper
- Used to deepen thinking and organise ideas
- Over time - learners choose for frames for themselves



# School Website



The screenshot shows the homepage of St Mary's Catholic Primary School. At the top left is the school's logo, a circular emblem with a blue and white design and the text 'ST MARY'S CATHOLIC PRIMARY CAERDYDD'. To the right is a navigation menu with six blue buttons: 'Home', 'About Us', 'Key Information', 'Parents and Carers', 'Community', and 'Curriculum'. Below the logo, the school's name 'St Mary's Catholic Primary School' is displayed in a large, bold font, followed by the motto 'In Jesus' footsteps we learn, love and grow together to be the best that we can be!'. The main content area features the heading 'Thinking Tools' in blue, with a breadcrumb trail 'Home >> Curriculum >> Thinking Tools' below it. Underneath, 'Thinking Frames' is written in red. Three thinking frame diagrams are shown: 'DEFINING', 'DESCRIBING', and 'COMPARING/CONTRASTING'. Each diagram is a flowchart with a central box and surrounding boxes connected by lines. At the bottom right of the page, there are 'Translate' and 'Search' icons.



## Thinking Frames *A Guide for Parents/Carers*

[www.thinkingmatters.com](http://www.thinkingmatters.com)