

Thinking

Schools:

Habits of Mind

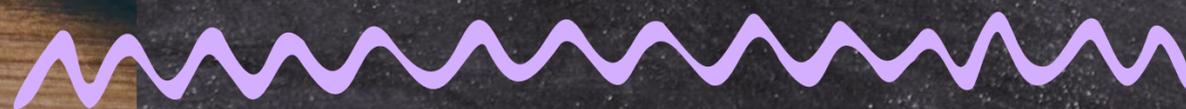
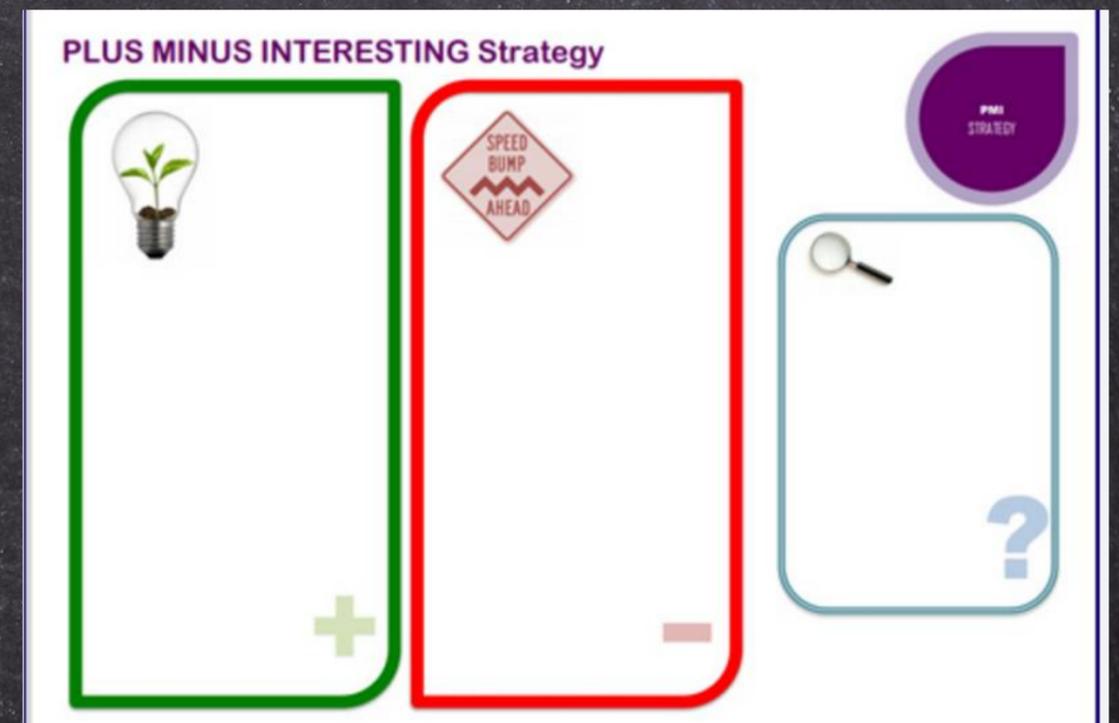
SEAVIEW PRIMARY SCHOOL



# Where to start?



- Drive Team formation.
- Habits of Mind discussions.
- Survey of need by Early Years Team.
- Action Plan.



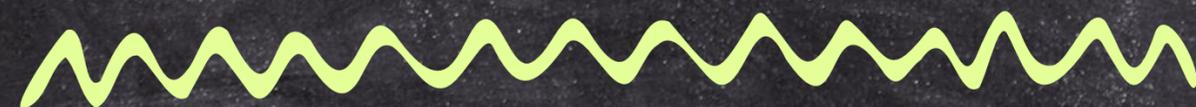
# Identify Your Starting Point

Following training with Lorna to develop our shared understanding of each habit, our Early Years Staff survey identified our greatest areas of need:

Term 1: Persisting

Term 2: Managing Impulsivity

Term 3: Listening with Understanding and Empathy



# First Steps...

- Drive Team Action Planning.
- Feedback from; Early Years Team, pupils and parents / guardians to assist us in creating a baseline linked to our habits of focus.
- Staff meeting to share information on joining Thinking Schools and Habits of Mind, with a particular focus on Persistence.
- Habit more specifically developed through Nursery - Year 2 but all pupils in the school were included.

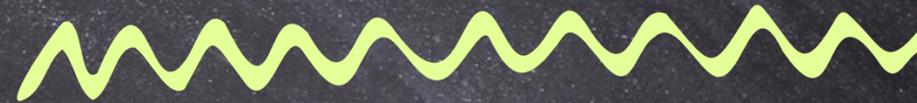
# Worth

## Remembering

- Each habit ends with -ing, to help us think of them as skills which are ongoing. We can always improve upon how we perform them.
- In school, the focus on development of these skills is between Nursery and Year 2 because this is an intense period of accelerated brain growth.
- Between the ages of 3 and 5, children are particularly engaged by sensory and motor experiences.
- Neural networks that direct executive functions develop and start maturing around age 5.



# How to Teach a Habit



## FOCUS

Learners should be familiar with the importance of focus in terms of achieving targets and understand that using techniques can assist them.

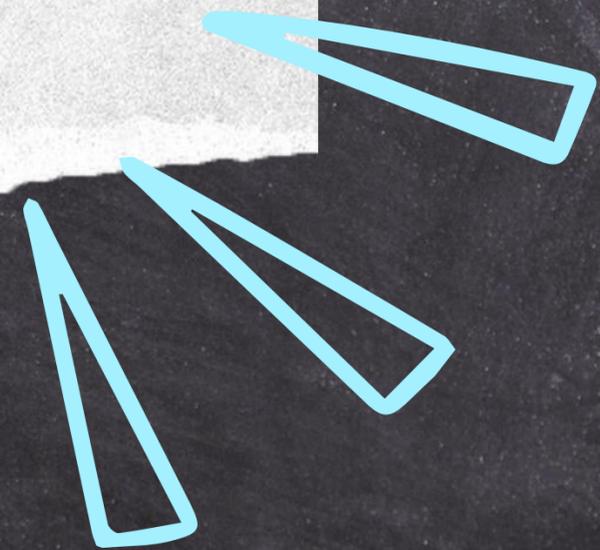
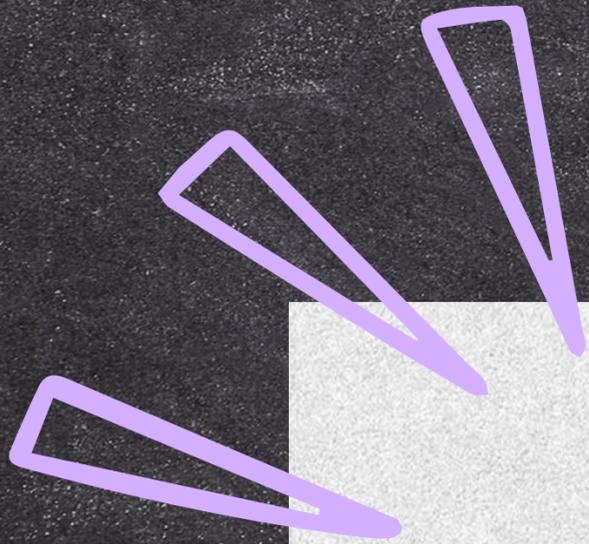
## Frame

Thinking frames and routines are examples of strategies to help.

## Feedback

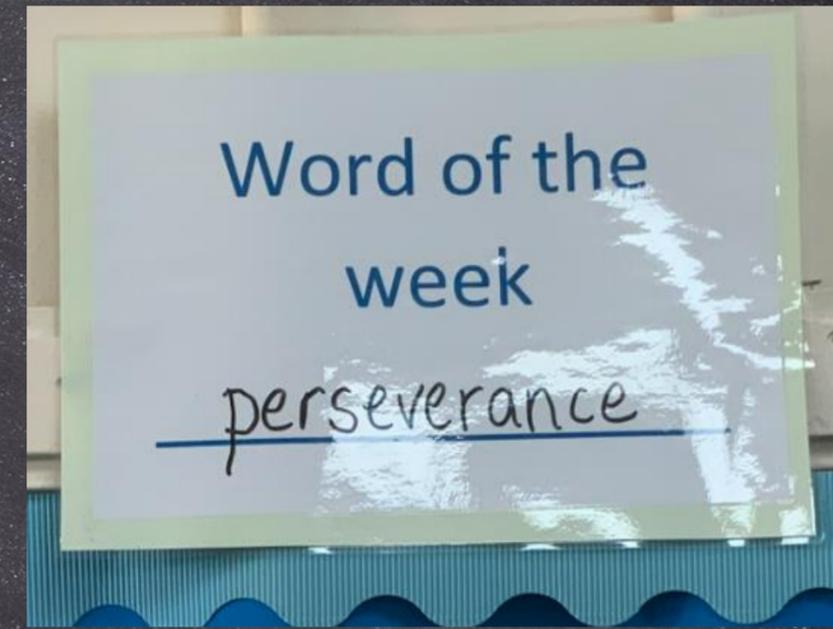
Feedback should be deliberate practice in making and breaking habits.  
Setting achievable goals as stepping stones towards a bigger aim.

**FOCUS**



# OUR FOCUS

- Teach the skills and habits explicitly.
- Use related vocabulary regularly.
- Noticeboard visible and referred to.
- Model the skills using the characters, puppets, stories etc.
- Opportunities for sharing in assembly.
- Share to Seesaw to develop awareness for parents / guardians.
- Needs evidenced in planners.



**Habits of Mind : Persisting**

**Story to support Persisting**

- Mr Wolf's Pancakes 
- Giraffes can't dance 
- How to catch a Star 
- Stuck 
- Mr Wolf and the enormous turnip 

**Video clips to support Persisting**

- Sesame Street : David Beckham: Persistent  
<https://www.youtube.com/watch?v=Vq4wrPL1o4s>
- Sesame Street : Bruno Mars Don't Give Up  
<https://www.youtube.com/watch?v=pWp6kz-pnQ>
- Perseverance – Finding Nemo  
<https://www.youtube.com/watch?v=W6Q4oowiMpU>
- Dog with a stick  
<https://www.youtube.com/watch?v=RPpmd9uRgJw>
- Chicken the tiny dwarf hamster builds a plan to reach her treats.  
[https://www.youtube.com/watch?v=hx4cvP\\_Xlo4](https://www.youtube.com/watch?v=hx4cvP_Xlo4)
- For older children : Castaway scene  
<https://www.youtube.com/watch?v=Nmzh188mZqw>

Bluey cartoon Persisting  
<https://www.youtube.com/watch?v=XpNH2Mdkpok&t=8s>

# Support for Staff



## Metacognition – Thinking about Thinking

What is it? – Thinking about your own thinking. Knowing what you know and what you don't know. Self-eval

**Sounds like** – “Right now I’m wondering...”. “My strategy is...”, “I know this, but I don’t know this”. “Because know this...I’m going to try this...”

**Looks like** – Attending. Staying on focus. Asking questions. Analyzing. Reflecting. Trying new ways.

**Feels like** – “Ah-ha!” “I know that”. “I don’t know that.” “I know, I’ll try this.”

Occurring in the neocortex, metacognition, or thinking about thinking, is our ability to plan a strategy for pro what information is needed, to be conscience of our own steps and strategies during the act of problem solvin major components of metacognition are developing a plan of action, maintaining that plan in mind over a per time and then reflection on and evaluating the plan upon its completion. Intelligent people plan for, reflect on evaluate the quality of their own thinking skills and strategies. We want students to perform well on complex cognitive tasks. We want students to connect their learning to what they know and what they do not know. T inner awareness and the strategy of, thinking about your thinking, helps students solve complex tasks.

“When the mind is thinking it is talking to itself.” Plato

Information on Habits of Mind are taken from the book Habits of Mind by Costa and Kallick.

## How can I teach metacognitive skills and strategies?

There is secure evidence to show that teaching metacognitive strategies can have a significant impact on pupil progress. The Education Endowment Foundation (EEF) calculates this impact to be an average of 7 months’ additional progress.

How should teachers teach metacognitive strategies

This is the seven-step model for explicitly teaching metacognitive strategies as recommended by the EEF report

1. Activating prior knowledge.
2. Explicit strategy instruction.
3. Modelling of learned strategy.
4. Memorisation of strategy.
5. Guided practice.
6. Independent practice.
7. Structured reflection.

But how can metacognitive strategies be taught?

This [Metacognition Teacher Toolkit](#) brings together a range of resources that can be used by teachers to integrate metacognition into day-to-day teaching. The resources are more efficiently grouped under the headings **Plan, Monitor and Evaluate**, the three main strands of metacognition.

Twinkl toolkit: <https://content.twinkl.co.uk/resource/55/44/t-slt-1626815443-metacognition-teacher-toolkit-ver-2.pdf?token=exp=1745583226~acl=%2Fresource%2F55%2F44%2Ft-slt-1626815443-metacognition-teacher-toolkit-ver-2.pdf%2A~hmac=379b47c1e6fc6b51f75cfbf90eb454f9b8406c40781b4756257d9dd37f94e270>

## Metacognition Toolkit

This toolkit brings together a range of resources that can be used by teachers to integrate metacognition into day-to-day teaching. The resources are grouped under the headings Plan, Monitor and Evaluate - the three main strands of metacognition.

### Plan

**Setting goals**  
This resource, consisting of three worksheets, leads pupils through the process of setting their own learning goal, planning how they will achieve it and evaluating how well they did. Perfect for teaching goal-setting strategies.



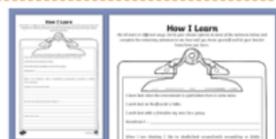
**Awareness of own strengths and challenges**  
This resource uses a simple table to encourage self-reflection.



This questionnaire can help pupils discover how best they learn.



**Self-regulation**  
This worksheet encourages learners to think about the conditions in which they work best and how they can self-regulate.



**Self-questioning**  
These questions are designed for adults to ask pupils during their learning. They could be used initially in this way and for the responsibility to be gradually handed over to pupils as they become more adept. They can ask these questions of themselves and perhaps either answer them to a friend or in their books or learning journals.



### Evaluate

**All evaluation skills**  
These reflective question cards cover self-assessment, making connections and journaling strategies. There are ten different cards, each with three questions.



**Accurate self-assessment**  
Simple, colourful labels for 'two stars and a wish' self-assessments at the end of a lesson.

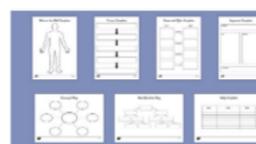


**Activating prior knowledge**  
Use one of these KWL resources to prompt learners to use their prior learning to help them with a new topic or task.



### Monitor

**Note-making and using graphic organisers**  
A pack of graphic organiser templates for use in different circumstances. Teach pupils how to use all of them and subsequently have them on display, so that pupils can choose the best organiser for other tasks that they come across.



**Checking**  
Ideal for KS1, these traffic light fans can be used part-way through a lesson, to encourage pupils to do a quick self-assessment against the learning intention or success criteria.



Use these editable grids with your own success criteria. Stop halfway through the activity so that pupils can self-assess against the criteria and know how they can improve in the second half of the lesson.



The Connect- Extend – Challenge visible thinking routine might also be useful.

## Connect - Extend - Challenge

**CONNECT** How are the ideas and information presented **connected** to what you already knew?

**EXTEND** What new ideas did you get that **extended** or broadened your thinking in new directions?

**CHALLENGE** What **challenges** or puzzles have come up in your mind from the ideas and information presented?

**Purpose:** This routine helps learners make connections between new ideas and prior knowledge. It also encourages them to take stock of ongoing questions, puzzles and difficulties as they reflect on what they are learning.

The **Connect Extend Challenge** routine helps learners to:

- make connections between new ideas and prior knowledge
- recognise ongoing questions, puzzles and difficulties
- reflect on learning

These documents are already downloaded for you and saved in the Metacognition folder inside Thinking Skills in Central.

## Documenting Thinking

In this routine, students are generally sharing their thinking at each step along the way before moving on to the next one. This allows the class to build on the group’s thinking and often results in richer discussions.

It can be very useful to document the thinking at each stage. If you are wanting to document thinking as your students engage with the routine **Connect Extend Challenge** then this template may be useful.

## Connect - Extend - Challenge

CONNECT	EXTEND	CHALLENGE
How are the ideas and information presented connected to what I already know?	What new ideas did you get that extended or broadened your thinking in new directions?	What challenges or puzzles have come up in your mind from the ideas and information presented?

9 Key Questioning Skills to help:

### 1. Are you sure?

Developing pupils’ [metacognition](#) and critical thinking skills are crucial if we want them to be less reliant on the teacher as the person who ‘knows’.

### 2. How do you know?

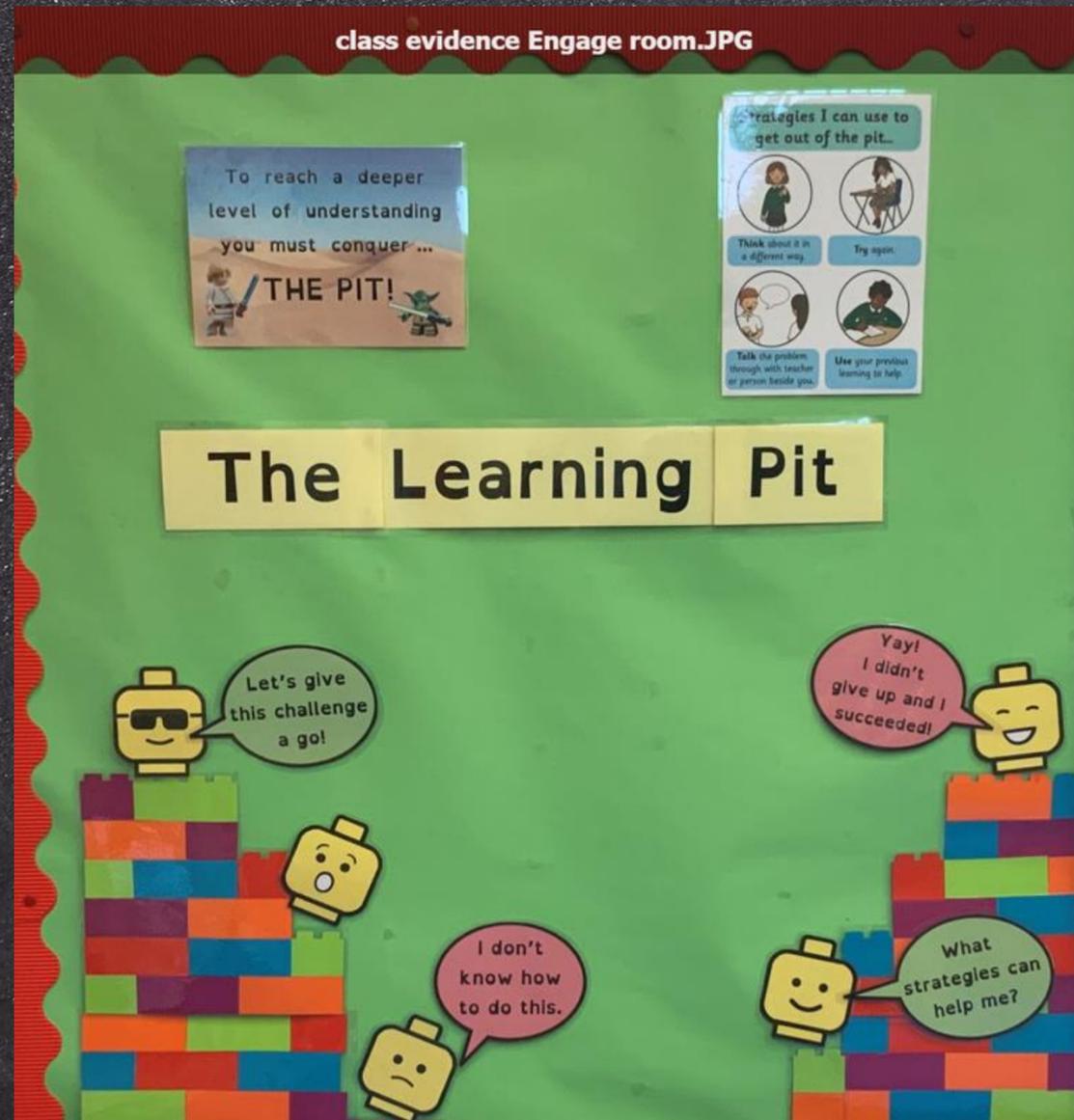
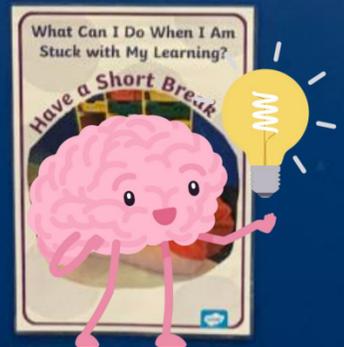
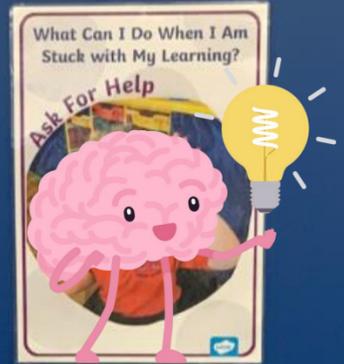
To be able to [answer](#) ‘Are you sure?’ confidently, pupils will have needed to have checked their calculation/explanation themselves, more and more often before they have even given their initial response. Asking ‘**How do you know?**’ ensures this by asking them to share their reasoning with you, a group or the whole class. This question is also a great way to really develop students’ [thinking skills](#); they need to be clear not only that they have the right answer, but that they arrived at it by following the right method. The result of this increased metacognition is children will be more reliant on themselves (and each other) for checking their understanding, method and answer.

### 3. What do you notice?

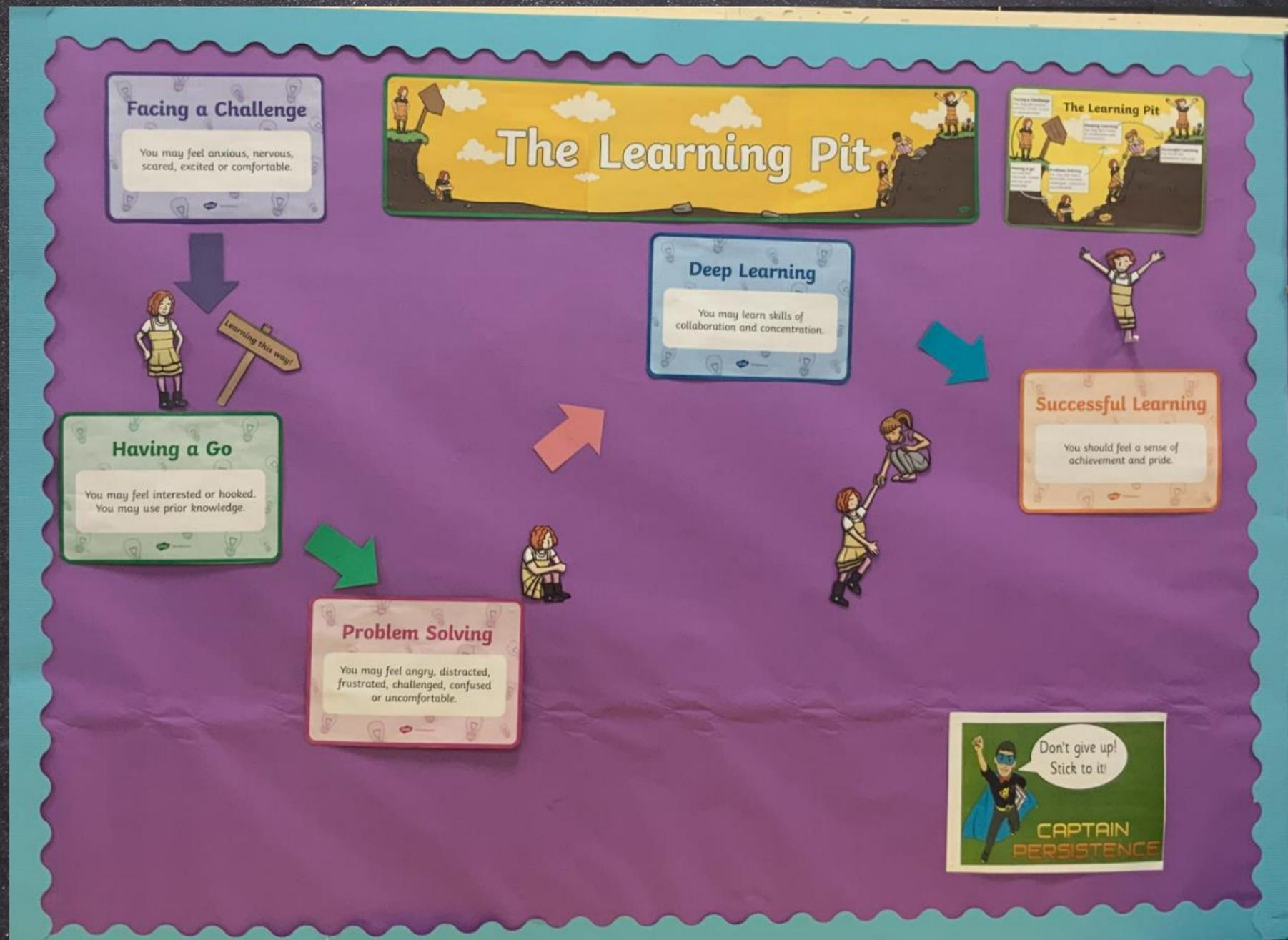
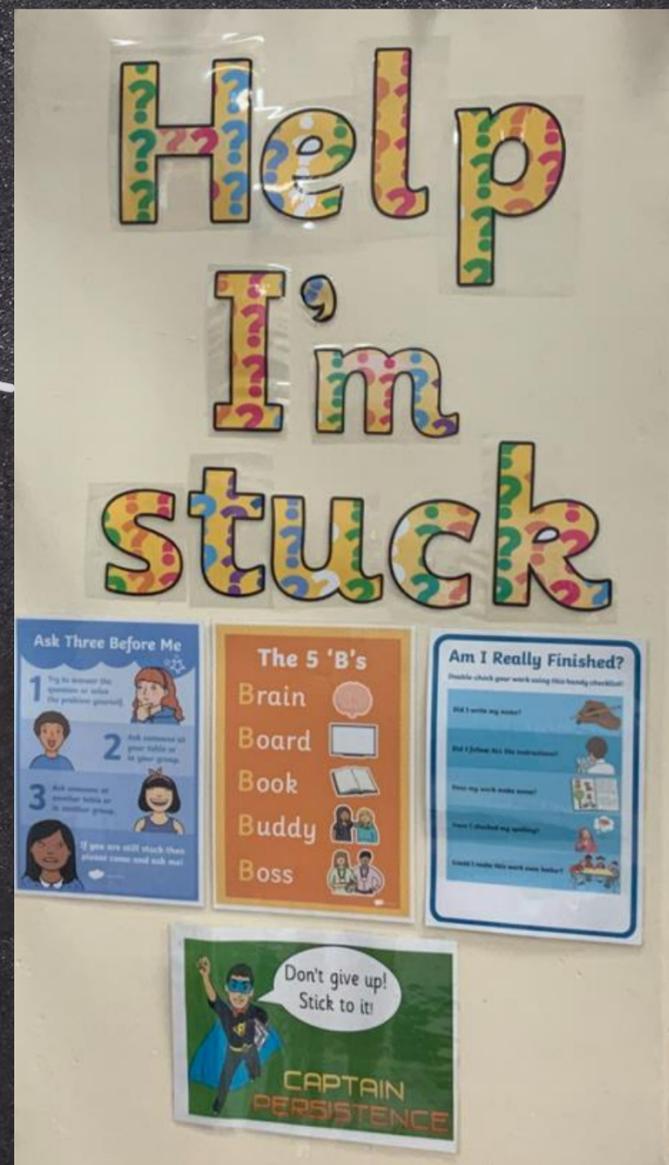
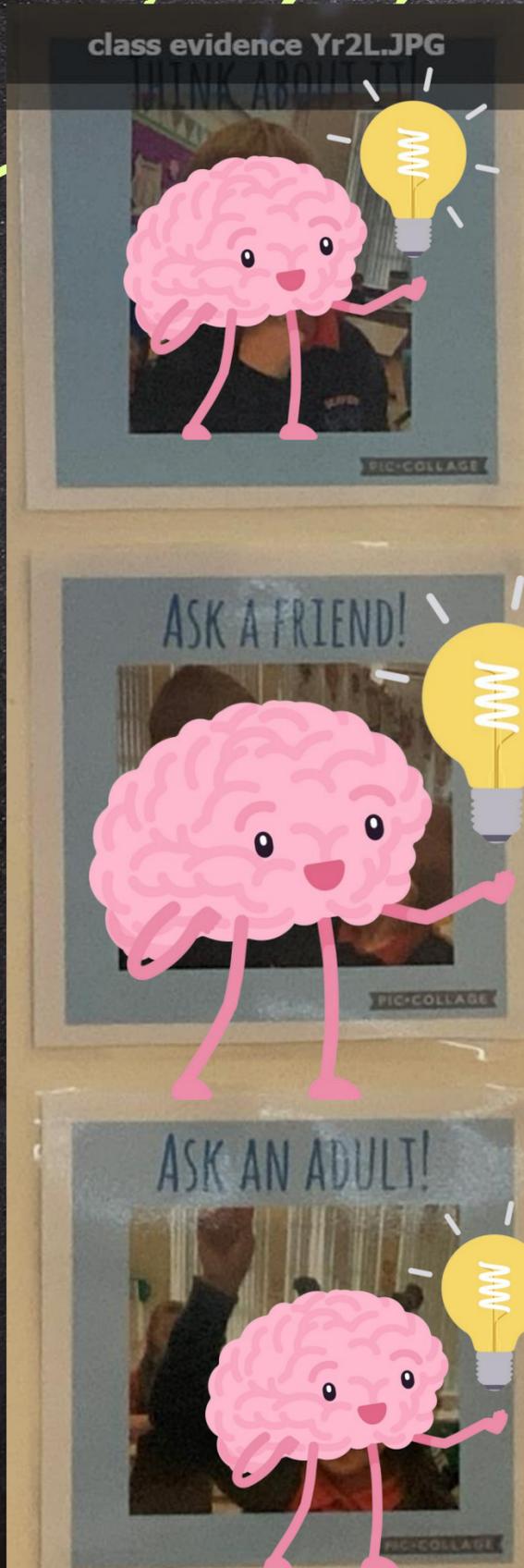
Alongside metacognition, developing pupils’ ability to generalise can reap huge rewards. In other words, encouraging pupils to be mindful and look for patterns within and outside the mathematical area currently being learnt.

It also uncovers where a pupil’s understanding is, showing whether their current line of thinking is relevant to the

# Visibility of Each Focus



# Visibility of Each Focus



# Visibility of Each Focus

## Change Your Mindset

**Facing a Challenge**  
You may feel anxious, nervous, scared, excited or comfortable.

**Having a Go**  
You may feel interested or hooked. You may use prior knowledge.

**Problem Solving**  
You may feel angry, distracted, frustrated, challenged, confused or uncomfortable.

**Deep Learning**  
You may learn skills of collaboration and concentration.

**Successful Learning**  
You should feel a sense of achievement and pride.

**You should be proud of yourself.**

**Growth Mindset Learning Zones**  
A circular diagram with three zones: **Danger Zone** (outermost, red), **Stretch Zone** (middle, yellow), and **Comfort Zone** (innermost, green). Text around the diagram describes the challenges and learning opportunities in each zone.

**The Learning Pit**  
An illustration of a pit with a person climbing out. Labels include: **Facing a Challenge** (at the bottom), **Problem Solving** (on the side), **Deep Learning** (at the top), and **Successful Learning** (at the very top).

class evidence Yr7B.JPG

## I'm stuck!

## What I do?

## can

**Don't give up! Stick to it!**  
CAPTAIN PERSISTENCE

Ask myself: what do I already know that could help me?  
Try another question and come back to the bit you are stuck on later.  
Ask the teacher or another adult for help.  
Use the learning skills to help for vocabulary or ideas.

**Ask Three Before Me**  
1 Try to answer the question or solve the problem yourself.  
2 Ask someone in your class or in your group.  
3 Ask someone in another class or in another group.  
If you are still stuck then please come and ask me!

**Facing a Challenge**  
You may feel anxious, nervous, scared, excited or comfortable.

**Having a Go**  
You may feel interested or hooked. You may use prior knowledge.

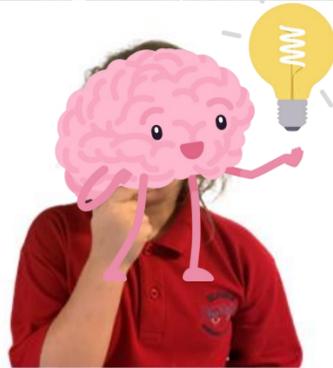
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# Visibility of Each Focus



Whole School

Noticeboard

## Thinking Matters: Habits of Mind

What are they?

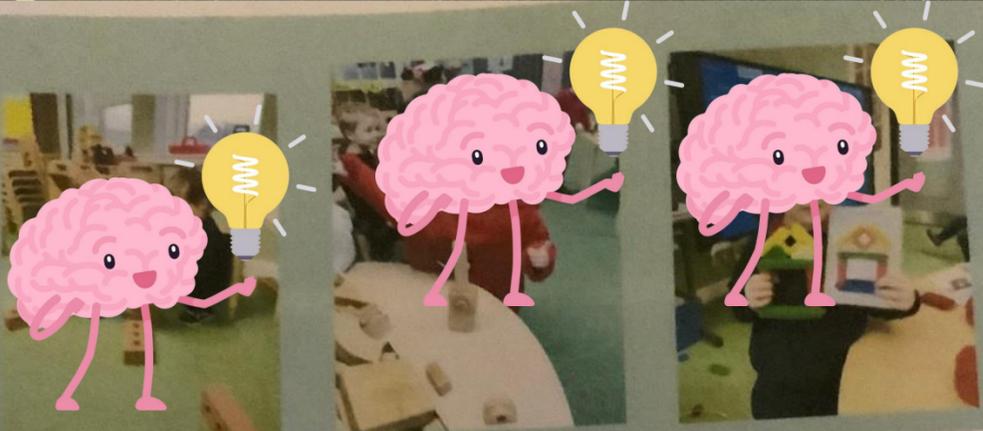
“Habits of Mind are dispositions people use when faced with problems and situations where the answers are not immediately clear. When we use these habits of mind effectively, the results that are produced are more powerful, of higher quality and of greater significance.”

They help us to **think about our thinking!**

Our current school focus:

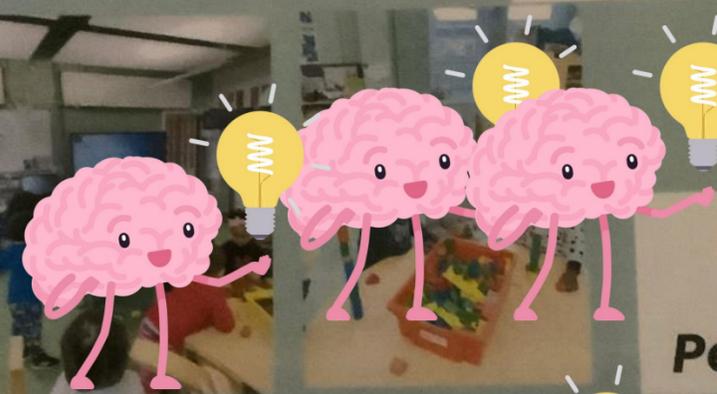


# In Classrooms Each Day...

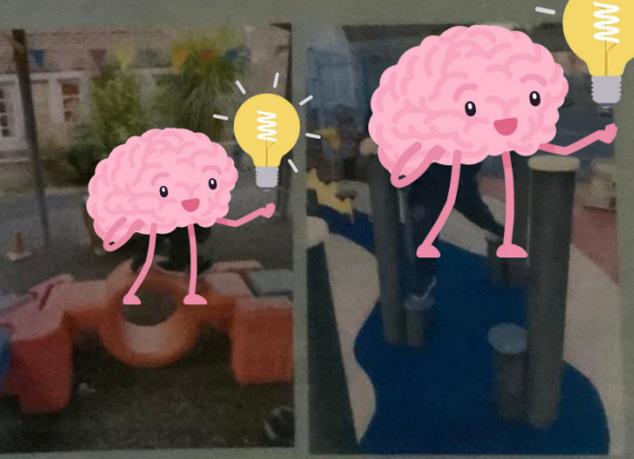


Using perseverance to build towers with bricks.

It took time and perseverance but she managed to copy the pattern and make the house.



**Habits of Mind-Perseverance**

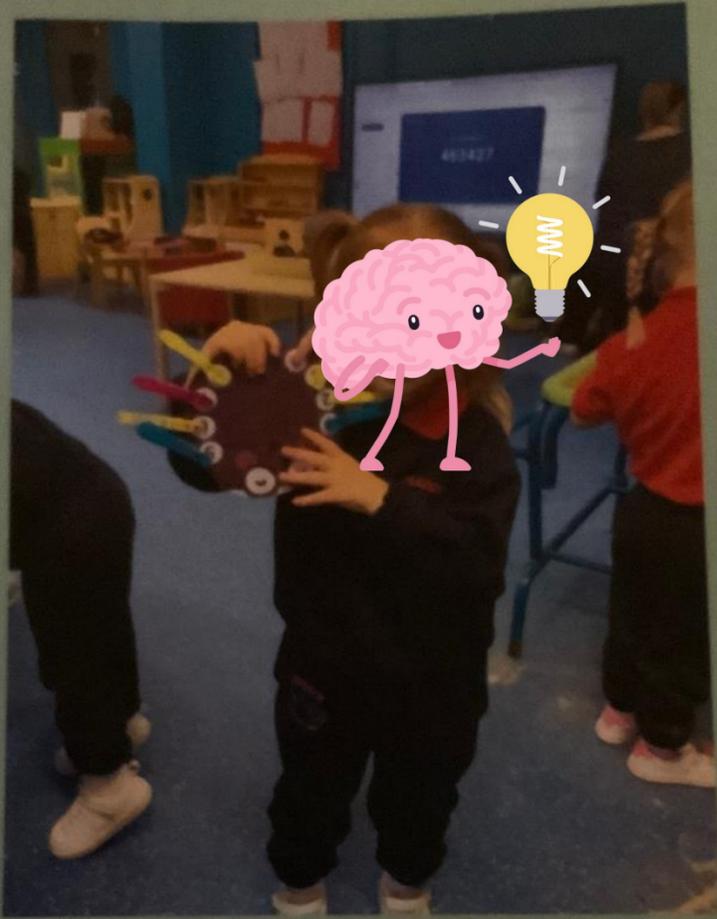


**Nursery 2**

Using our gross motor skills to climb across balance equipment.



PIC-COLLAGE



**GREAT PERSISTENCE ,  
SIENNA GOT ALL THE PEGS  
ON THE SPIDER, SHE NEVER  
GAVE UP!**



**I CAN DO IT**

**GREAT PERSISTENCE**

# In Classrooms Each Day...



JANELLE KEPT TRYING OVER AND OVER AGAIN UNTIL SHE COMPLETED THE PUZZLE

**GREAT PERSISTENCE**



Digging to free our baby dinosaurs!

We used warm water to help melt the ice!

PIC-COLLAGE

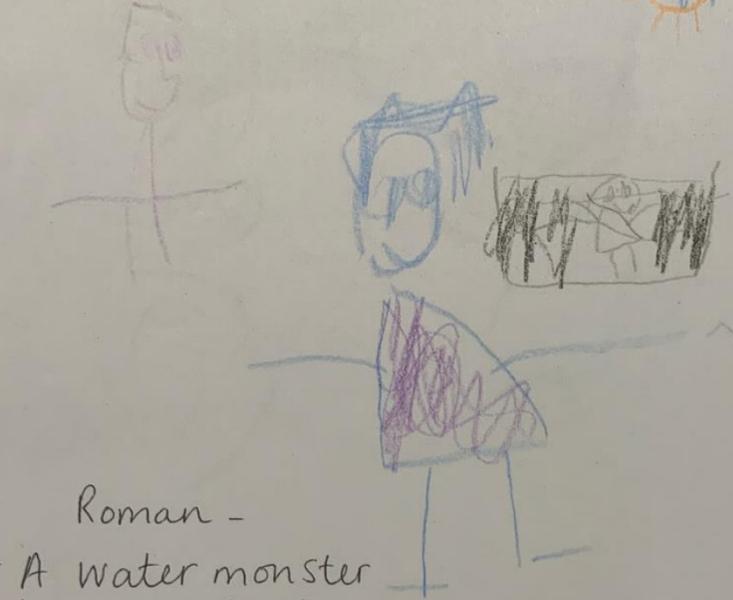
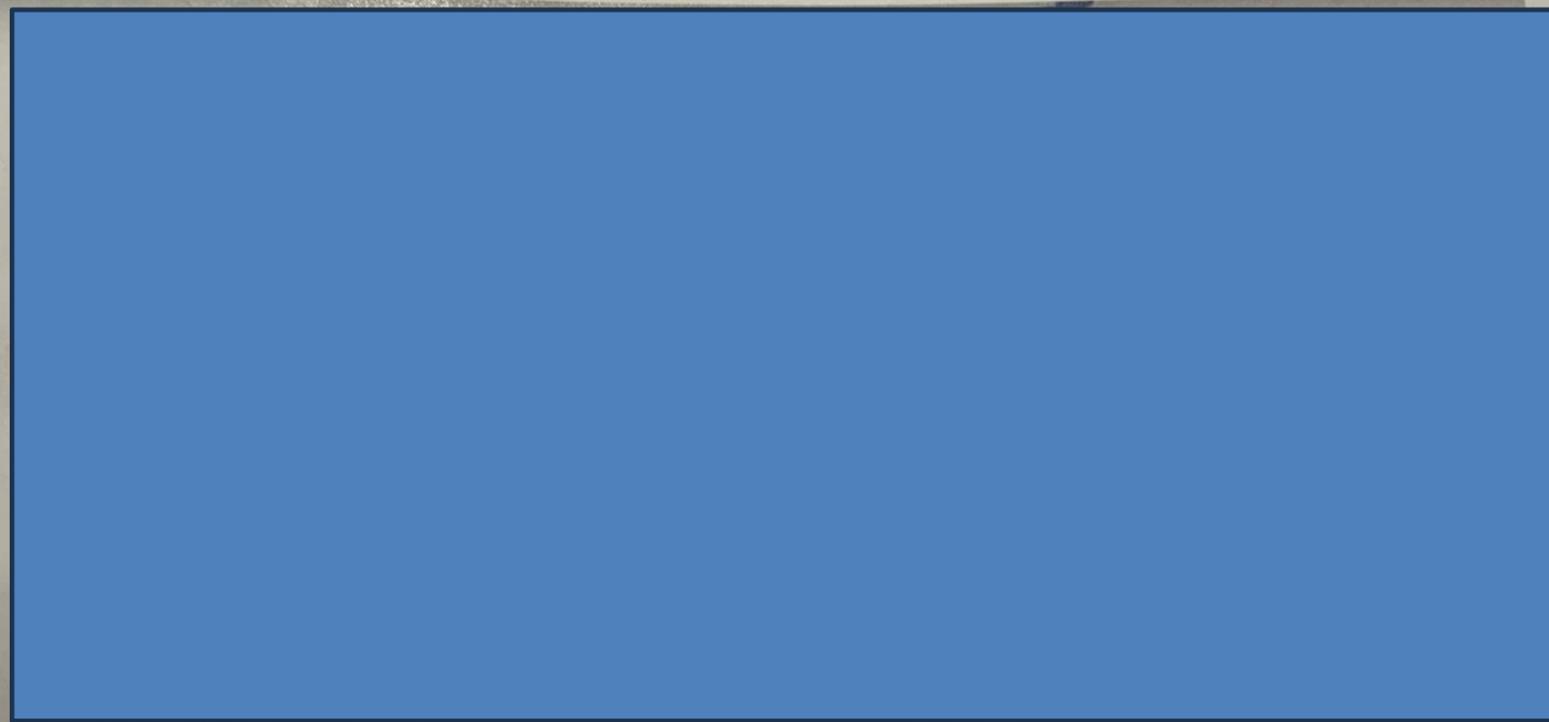
# In Classrooms Each Day...



PIW Responding with Awe and Wonderment

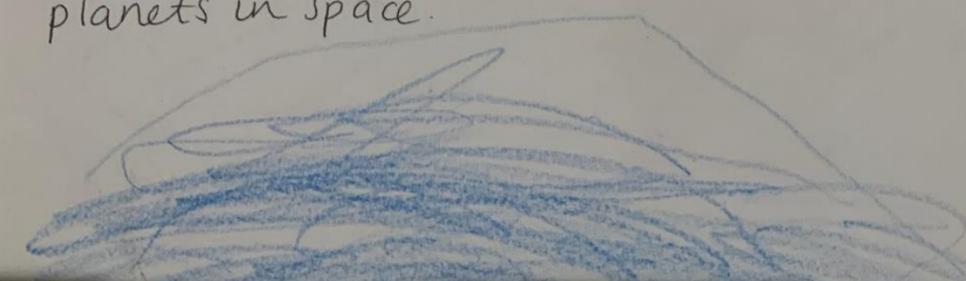
# In Classrooms Each Day...

We listened to 'I See a Song' by Eric Carle.  
In P1W we drew what we heard...



Roman -

"A water monster  
coming out of the  
water. They are the  
planets in space."



# Sharing Each Focus



## Habits of Mind



### Persistence

What does it mean?

Persistence is when you keep trying, even when you find something difficult. You look for ways to reach your goals and persevere.

When should you use it?

You should use it whenever you face a hurdle that you cannot get over on your first attempt, when you need to keep trying at something to reach the end goal or when a task is difficult and takes time and energy.

Strategies to help

- Break down your end goal into smaller steps. Reward yourself each time you achieve a small step towards your final goal.
- You don't have to do it alone. Look for help and support and get other people to encourage you. You can always encourage yourself; "Come on, you can do it!"
- Sometimes, if you find a task difficult, you need to walk away and take a deep breath before you return to it. When you come back to the task later with a fresh mind, you may find it easier to solve.
- Try solving the problem with a different approach or keep the parts that are working and change the parts that aren't.

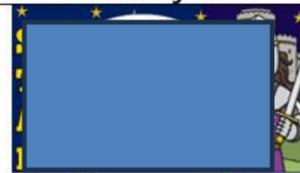
Questions to consider

1. Why do I want to stop now? What is the barrier I am facing and how do I get past it?
2. Is my plan of attack working? If yes, how can I be sure? If no, what needs to change?
3. What have I not understood about the challenges?
4. Am I on track?
5. Why is the goal important? Take time at the hard points to remind yourself of why the goal is worth achieving.

Information from <https://www.habitsofmindinstitute.org/what-are-habits-of-mind/>



## Habits of Mind



### Managing Impulsivity

What does it mean?

Managing impulsivity means thinking before acting. Remaining calm, thoughtful and deliberate.

When should you use it?

You should use it to assist you in taking your time when you approach a challenge / problem or give a response.

Strategies to help

- Practice waiting (counting to ten) before sharing your thoughts. The goal is not to interrupt the other person's thinking.
- Wait / thinking time sets the stage to encourage thought and reflection before responding. Sometimes a family member can come up with an idea, strategy, or solution to their own problem when given an opportunity to think aloud.
- Look at routines with your family members during the day to see where focusing on managing impulsivity may help to relieve the stress. For example, your morning routine may be frustrating for both you and your family members. Consider, for example, asking your family to share ideas about how to make the routine run more smoothly so that you are not making snap judgments or saying something out of anger.
- Remember that you are all working on this together. We are all plagued by the need for instant gratification. Talk about how you managed your impulsivity in a situation. Perhaps you opened the door to the oven too soon and your cake collapsed. It would be a good time to reflect and think about what you might have done instead.
- Use the language of managing impulsivity. For example, saying something like, "Just wait and make sure you read the instructions first. Manage your impulsivity!"

Questions to consider

- Consider the situation you are in. How does it make you feel? How might you manage those feelings so that you can take appropriate action?
- What is it about this situation that is producing these feelings? What are my options for dealing with this situation and what are the advantages and disadvantages of each of those options? Which of these possible solutions is the best?
- Do I need to rush in? I should take my time to stop, think, act and then reflect.

Information from <https://www.habitsofmindinstitute.org/what-are-habits-of-mind/>



## Habits of Mind



### Listening with Understanding and Empathy

What does it mean?

Devoting mental energy to another person's thoughts and ideas. Making an effort to perceive another's point of view and emotions.

When should you use it?

This Habit should be used every time it is important that you understand what is being communicated to you. Beyond the obvious, listening with understanding can extend to all forms of communication where you need to be 'hearing' a person's full message.

Strategies to help

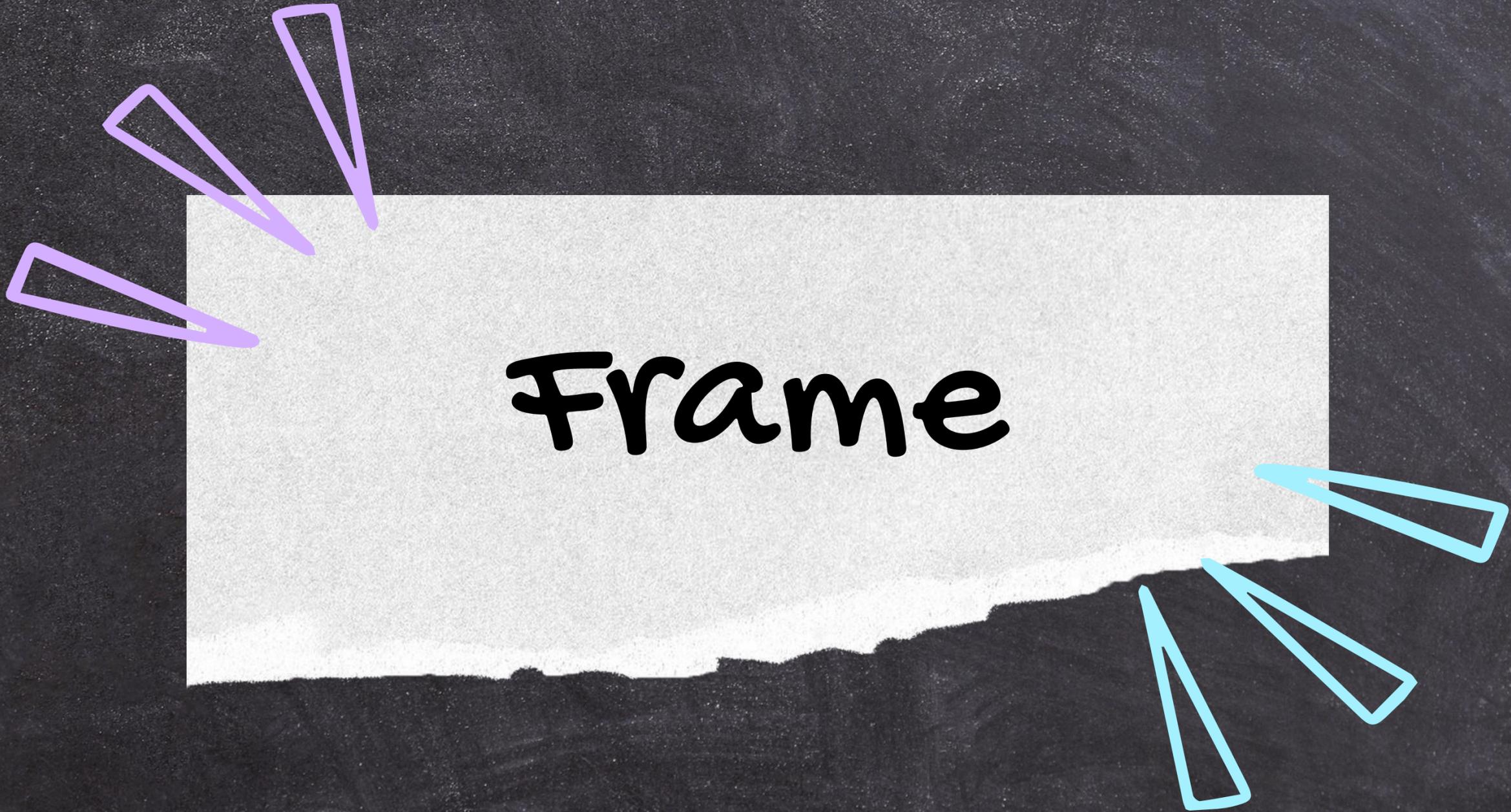
- Use the three Ps; Pause, Paraphrase and Probe.  
**Pause:** Using thinking time before responding to or asking a question allows time for more complex thinking, enhances dialogue and improves decision-making.  
**Paraphrase** – Paraphrasing often leads to greater clarity, both for the person who is speaking and for the person with whom they are interacting. When you repeat something that you heard in your own words, you are checking for understanding and can assure others that you are listening. You show that you understand or are trying to understand them.  
**Probe** – Probing involves questions that seek to both inquire and clarify. They increase the clarity and precision of thinking by refining understanding, terminology and interpretations.

Questions to consider

- What does Listening with Understanding and Empathy look like? You should be facing the person you are speaking to. (If speaking to a child, go down to their level.) Make good eye contact. Think about posture and body language, e.g. nod to let the person know you are listening and understanding.
- What does Listening with Understanding and Empathy sound like? You could use terms of encouragement like; "Good listening..." "I love the way you played with Jamie when he said he was feeling sad..." "So you're suggesting..." "Your idea is..." "You're upset because..." "You're excited about..." etc.
- What does Listening with Understanding and Empathy feel like? This person cares enough to really listen to me. During the process I feel comforted, trusting and possibly vulnerable. Ultimately, I feel reassured and supported. This person understands me.

Information from <https://www.habitsofmindinstitute.org/what-are-habits-of-mind/>

**Frame**

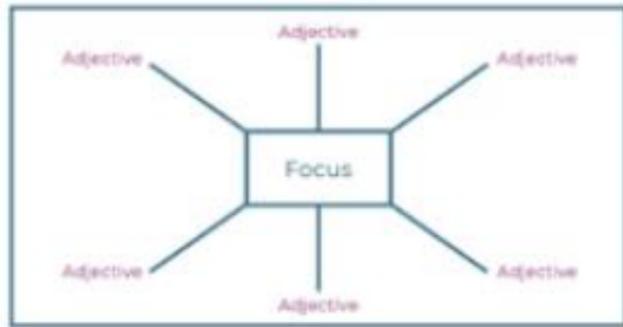


### DEFINING



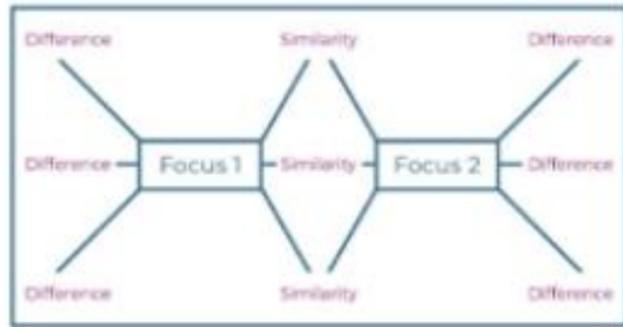
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### DESCRIBING



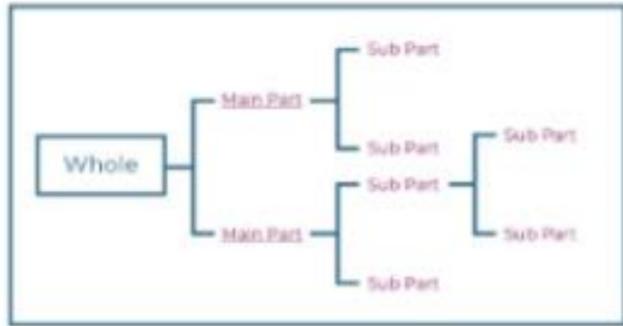
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### COMPARING CONTRASTING



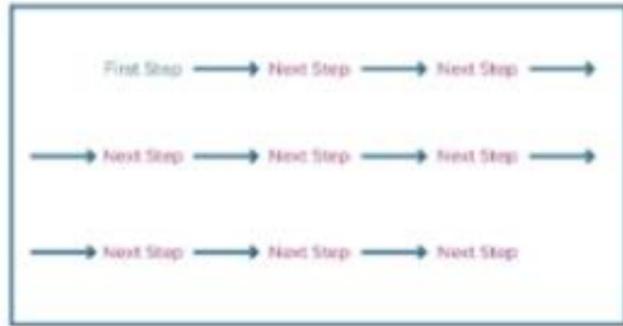
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### PART WHOLE



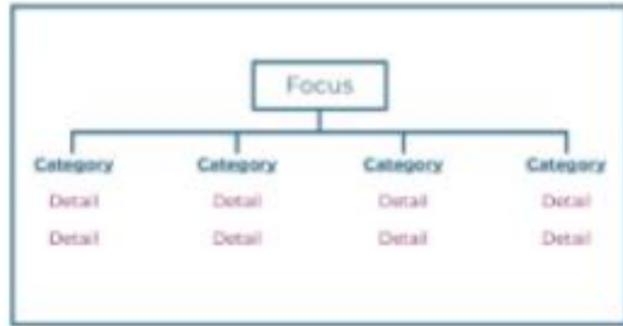
Thinking Matters

### SEQUENCING



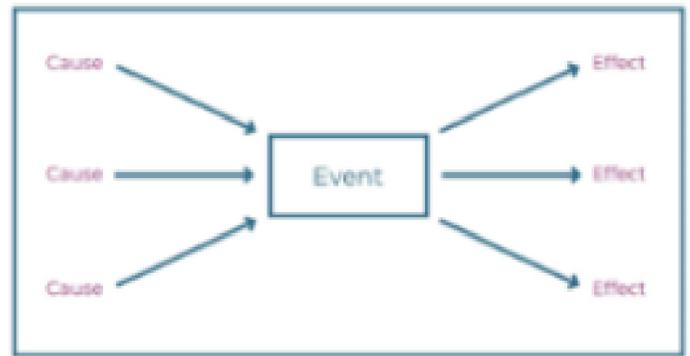
Thinking Matters

### CATEGORISING



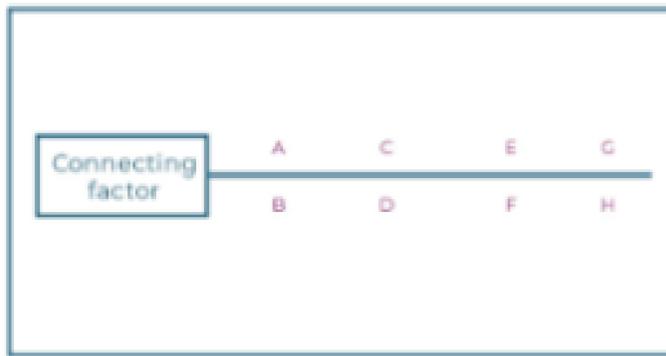
Thinking Matters

### CAUSE EFFECT



Thinking Matters

### CONNECTING



Thinking Matters

Already embedded in Numeracy...

# Thinking Frames



# Thinking Frames

Introducing  
and exploring

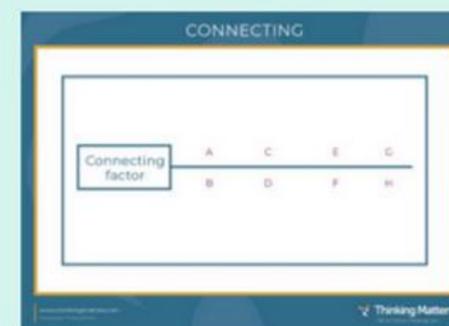
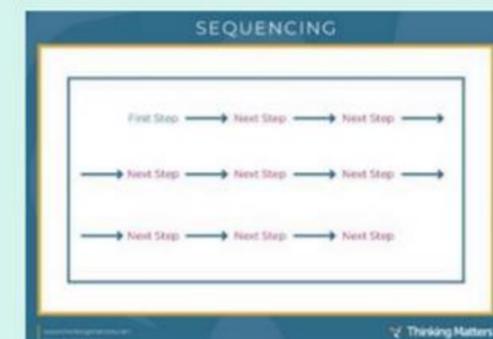
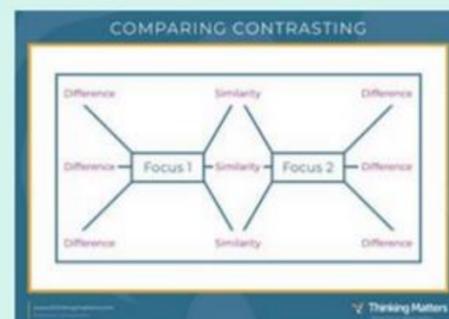
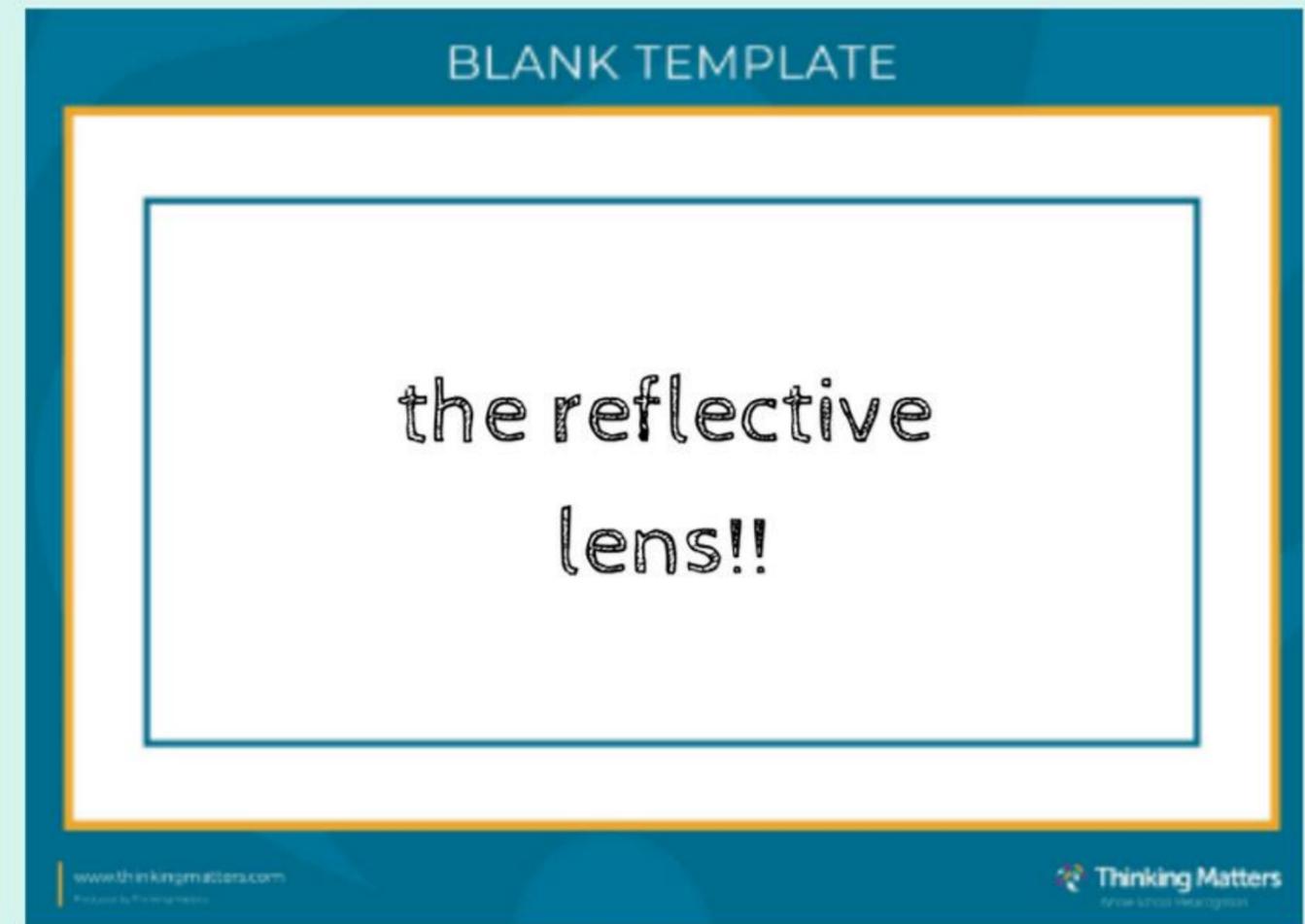
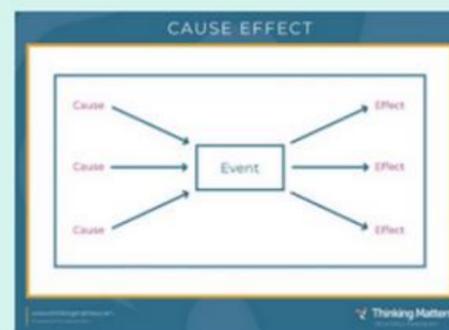
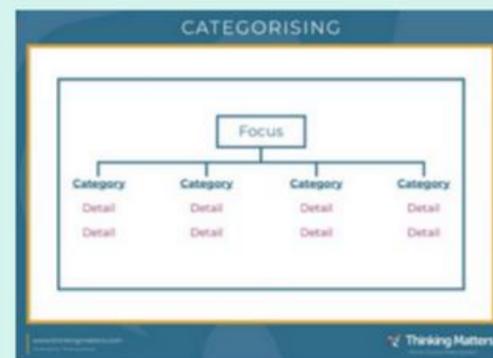
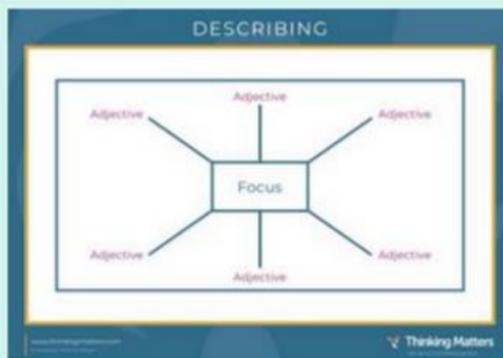
Synthesising &  
Organising

Digging  
deeper

Giving  
Feedback

Self-  
reflection

Engaging with  
others



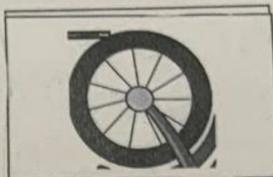
Credit due to:

LI: Use a "parts and whole" thinking frame to record the main parts of a bicycle.



bicycle ✓

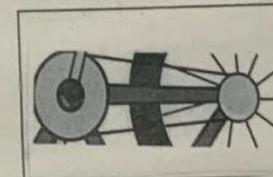
Wheels ✓



pedals ✓



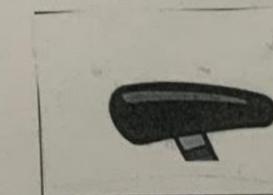
chain ✓



handle bars ✓



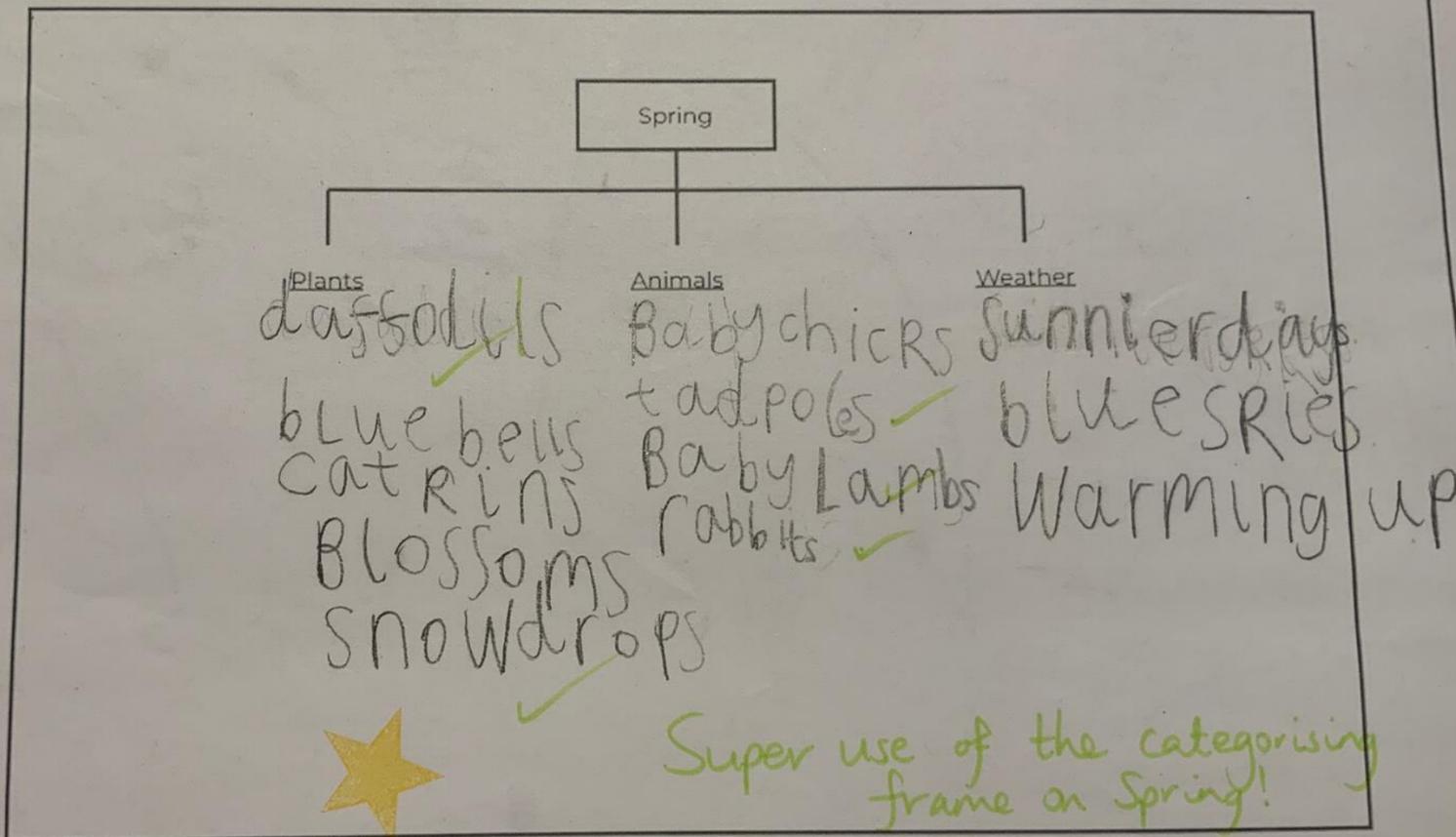
Seat ✓



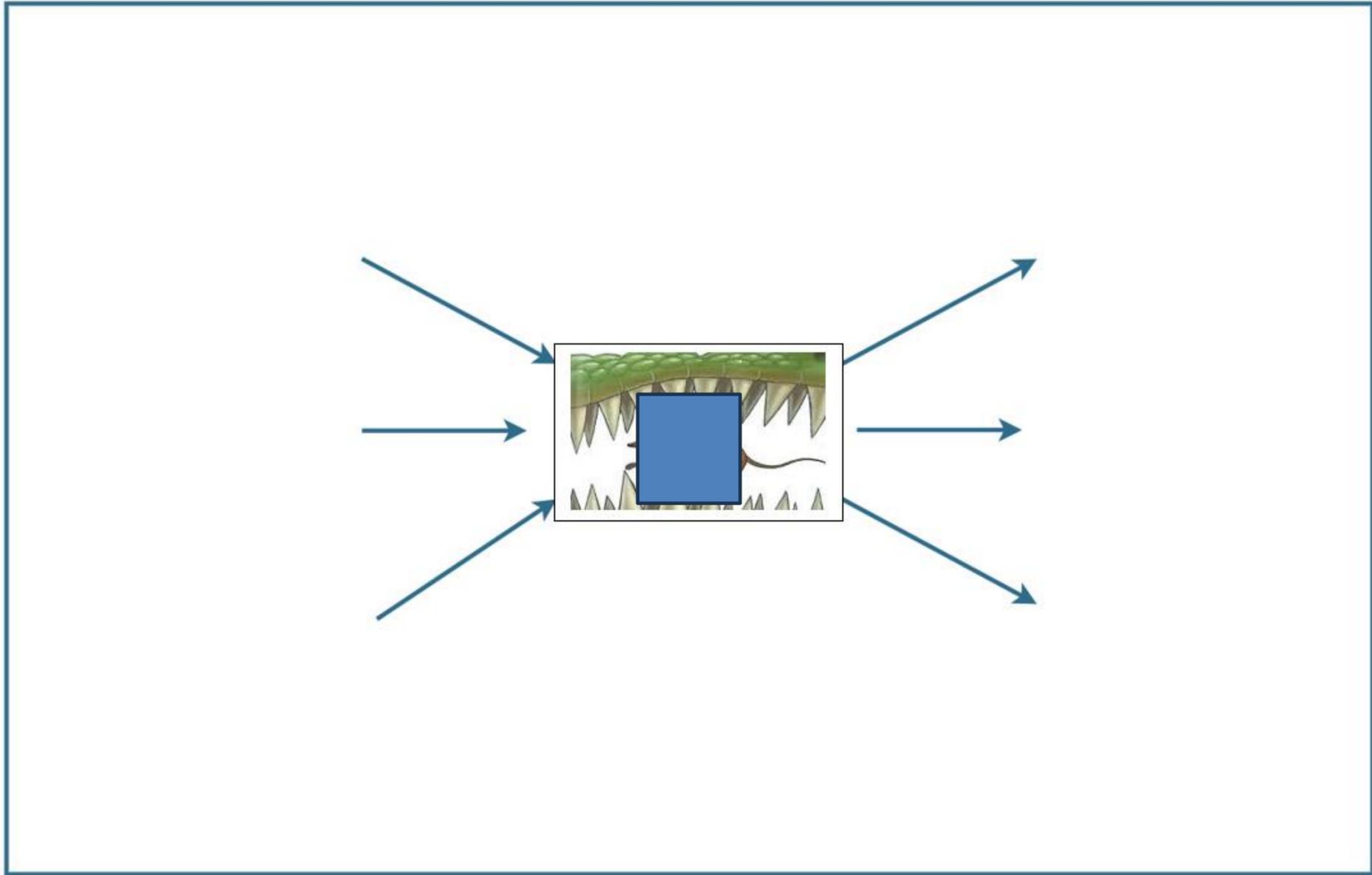
★ Super use of the parts and whole frame on bicycles

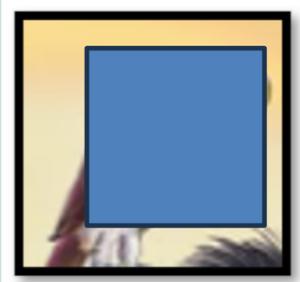
Thinking Frames fit naturally into lots of areas.

EASY to differentiate.



The mouse.





# Vulture

have

- 
- 
- 
- 

eat

- 
- 
- 
- 

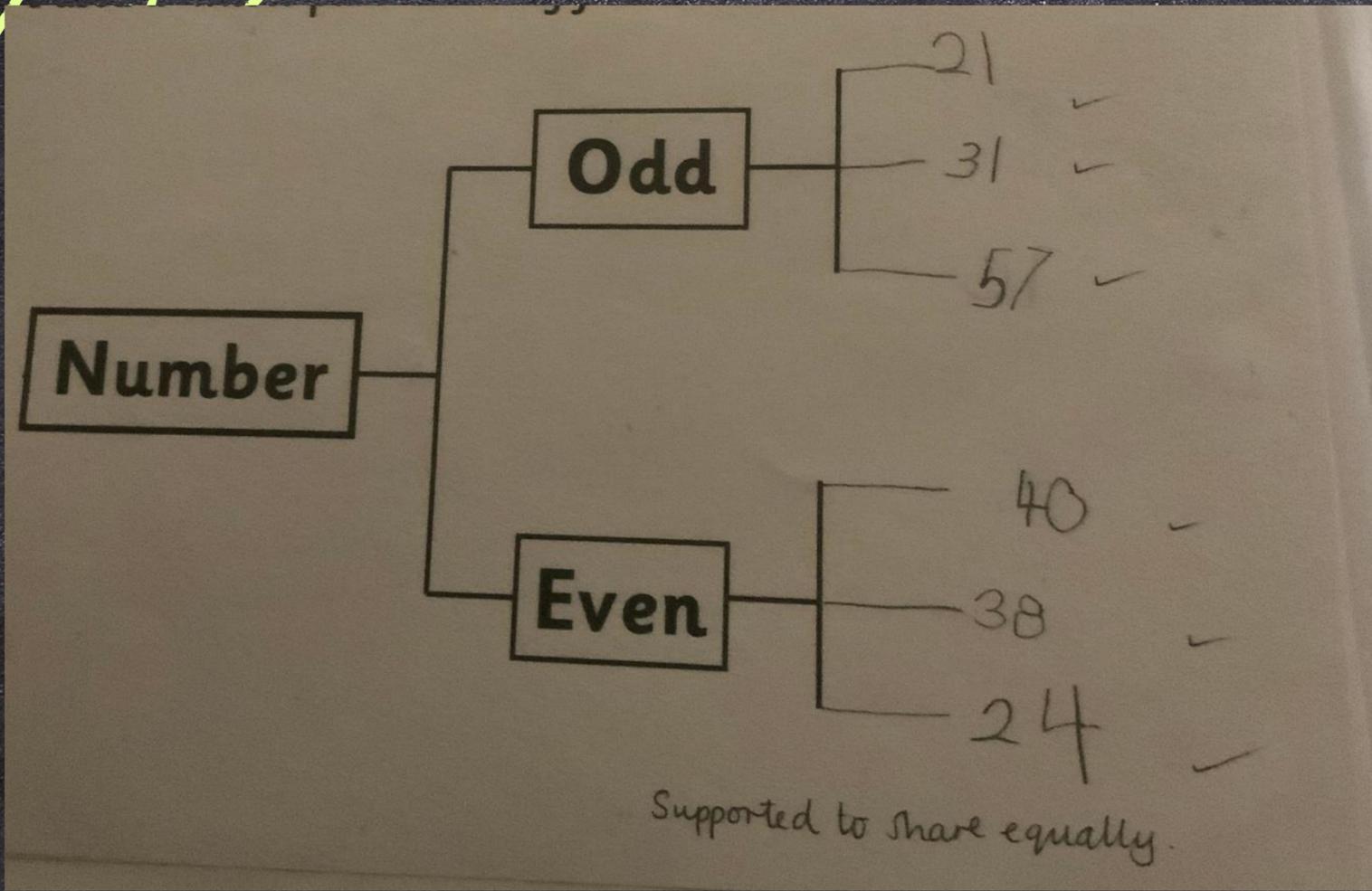
can

- 
- 
- 
- 

LI, To use a categorising frame to write facts about a vulture.



“Thinking frames  
provide a common visual  
language for all students and  
teachers and in all subject  
areas.” Thinking Matters



Defining frame Ziva Good effort with spellings  
Ziva ✓

sight

bright

tight

igh

thigh knight

sign

night

# Numeracy

13 9 6 12  
15 5-15 7 11  
10 5 9 14 8  
4 20 11: recognise and sort numbers

13  
15  
17  
18  
19  
3  
1

13  
15  
17  
18  
19  
20  
1

# Phonics

Categorising Frame

Phoebe sorted by herself.  
A little support to spell  
br, gr,  
qu

Two letters, one sound

```
graph TD
    Root[Two letters, one sound] --> AI(ai)
    Root --> EE(ee)
    AI --> Brain[brain]
    AI --> Tall[tall]
    AI --> Grain[grain]
    EE --> Teeth[teeth]
    EE --> Queen[Queen]
    EE --> Sheep[sheep]
```

- **90% of information is visual:** The brain receives about 90% of its information through sight.
- **Visuals are processed faster:** The brain processes visual information up to 60,000 times faster than text.
- **Brain power:** Around 50% or more of the brain's cortex is dedicated to visual processing.
- **Connection to the retina:** A large percentage of nerve fibers to the brain are connected to the retina, making sight a powerful sensory input.

running    squats    push-ups  
lifting things    football    dancing  
doing steps    **Ways we can  
be active.**    basketball  
star jumps    races eg. skipping    gym  
                  jumping    hopping



Linked to Wellbeing  
and Physical Activity

creatures under the sea.

Jellyfish are slimy

Sharks have sharp teeth.

Octopus can squirt black ink.

A puffer fish is spikey.

Sharks can smell blood.

Sharks can kill you.

A crab can pinch people.

Jelly fish can sting you.

**Creatures under the sea.**

Dolphins can be kind. They don't hurt people.

You can cut a jellyfish in half and make 2 new creatures.

Octopus have 10 legs.

We found out an octopus has 8 legs

A string ray has a triangular tail.

T.W.A.U.



Defining Thinking Frame

W

\* Who came up with Hieroglyphics?

\* Was there social hierarchy?

\* Did there ever be rebellions?

\* Was there a government?

\* The ancient Egyptian's religion is known as Ketism

\* When a pharaoh is about to die, he orders his slaves to be killed

\* When Cleopatra was Queen, the pyramids were already 250 years old

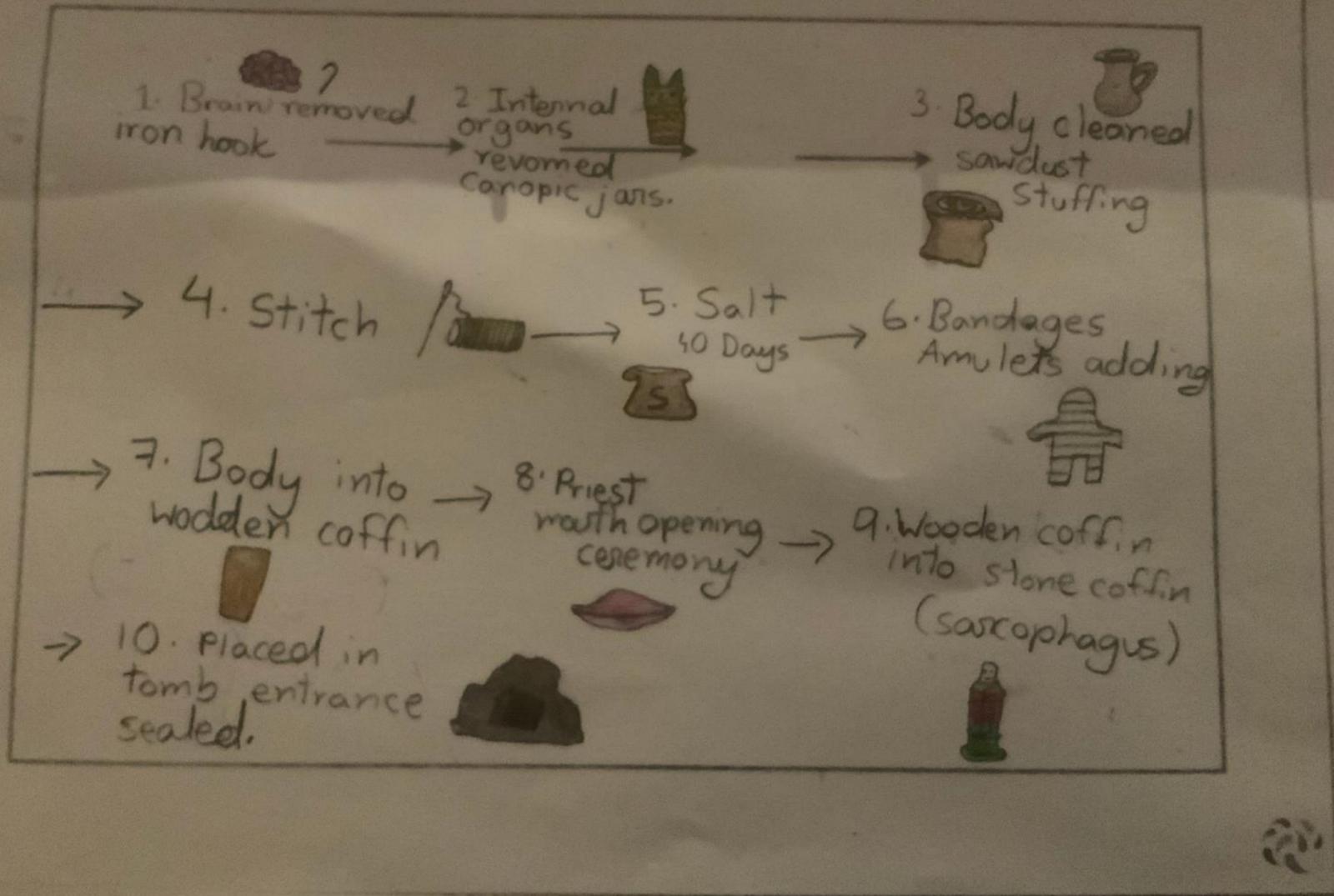
\* Hieroglyphics can be read in any direction

\* The builders of the pyramids were paid in onions and garlic

egyptian civ 7/5/24 \*

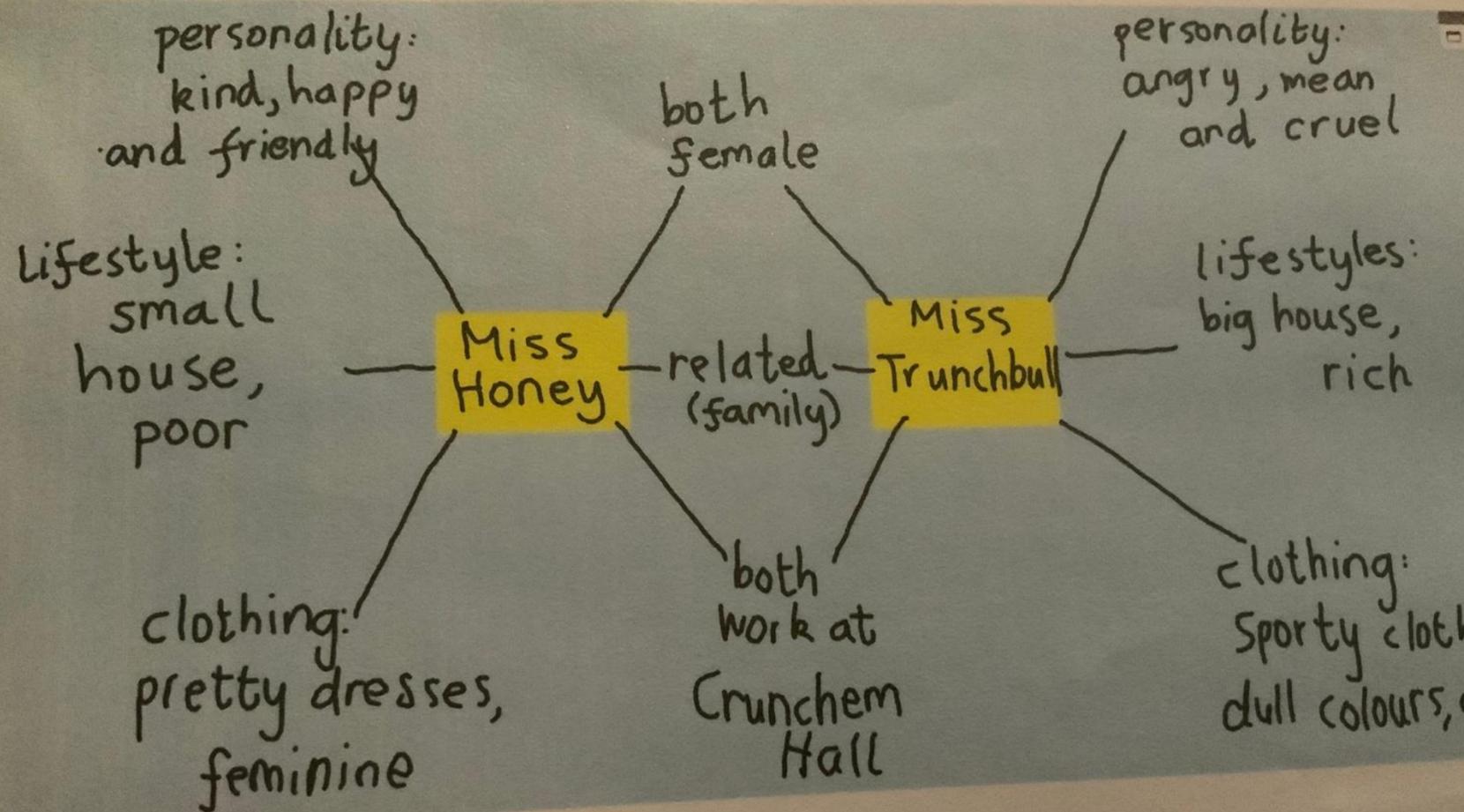
Y5W  
Thinking Frames.

# Sequencing frame. Mummification process

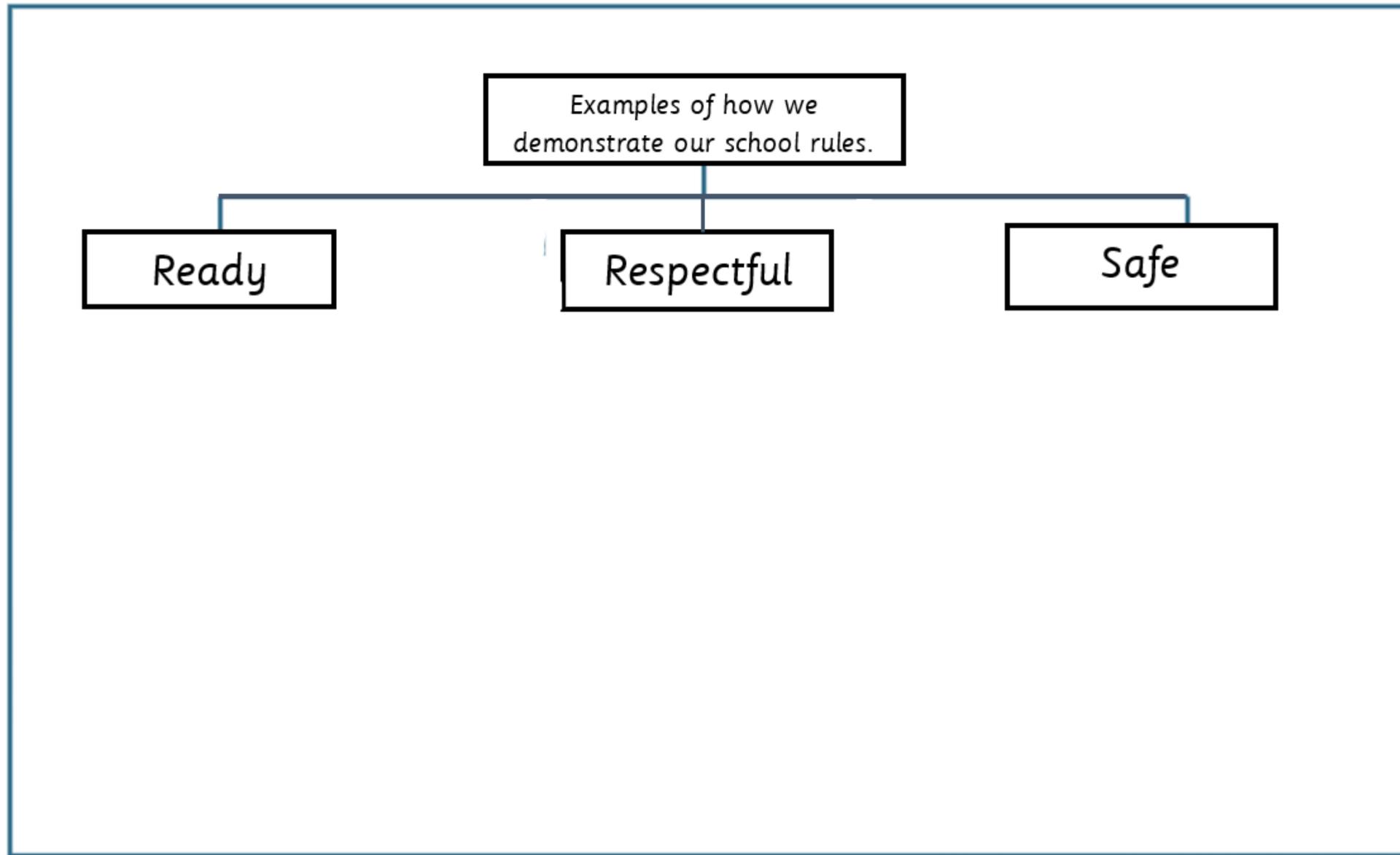


Linked to discussions  
on a recent school  
play...

YEAR 5 - DISCUSSING SCHOOL PLAY - SIMILARITIES AND DIFFERENCES BETWEEN CHARACTERS



L1: Use a categorising frame to record pupils' examples of how we demonstrate our school rules.



Record of pupil voice

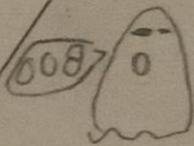
Hannah  
14.3.24

# Castles

Smells like  
yummy food 

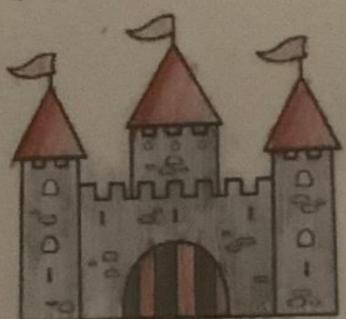
ronth  
dusrusn  
Shnry

gardobe ✓



hontd

udle  
grst  
old



wad  
doole ✓

green moss



★  
Excellent  
use of your  
senses to  
describe a  
castle!

Looks Like

Medival  
music

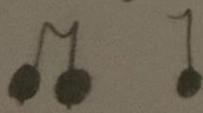


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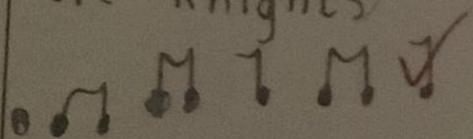
wind vdn andcosn

Rnights screaming

pesnr bud



die Rnights



Sounds Like

# Castles

14.3.24

smelly dungeons

Smells like

bread cooking

horses  
maying

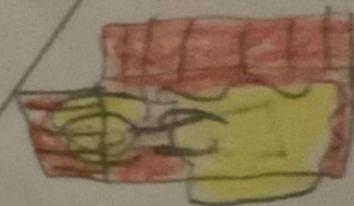
horses poop



royale  
kids  
sleeping

humans poop

the meat



horsie

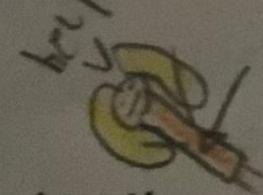
arrows shooting



chickens  
clucking  
cluck!

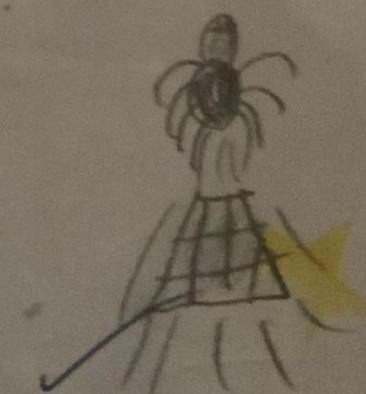


People screaming  
getting hit  
arrows



Sounds Like

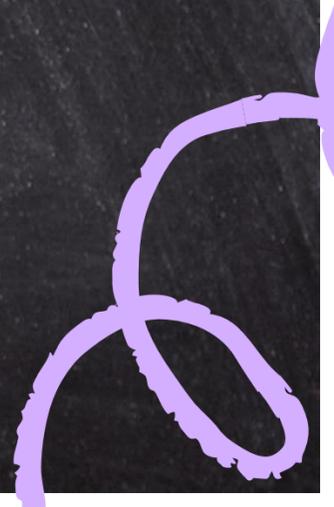
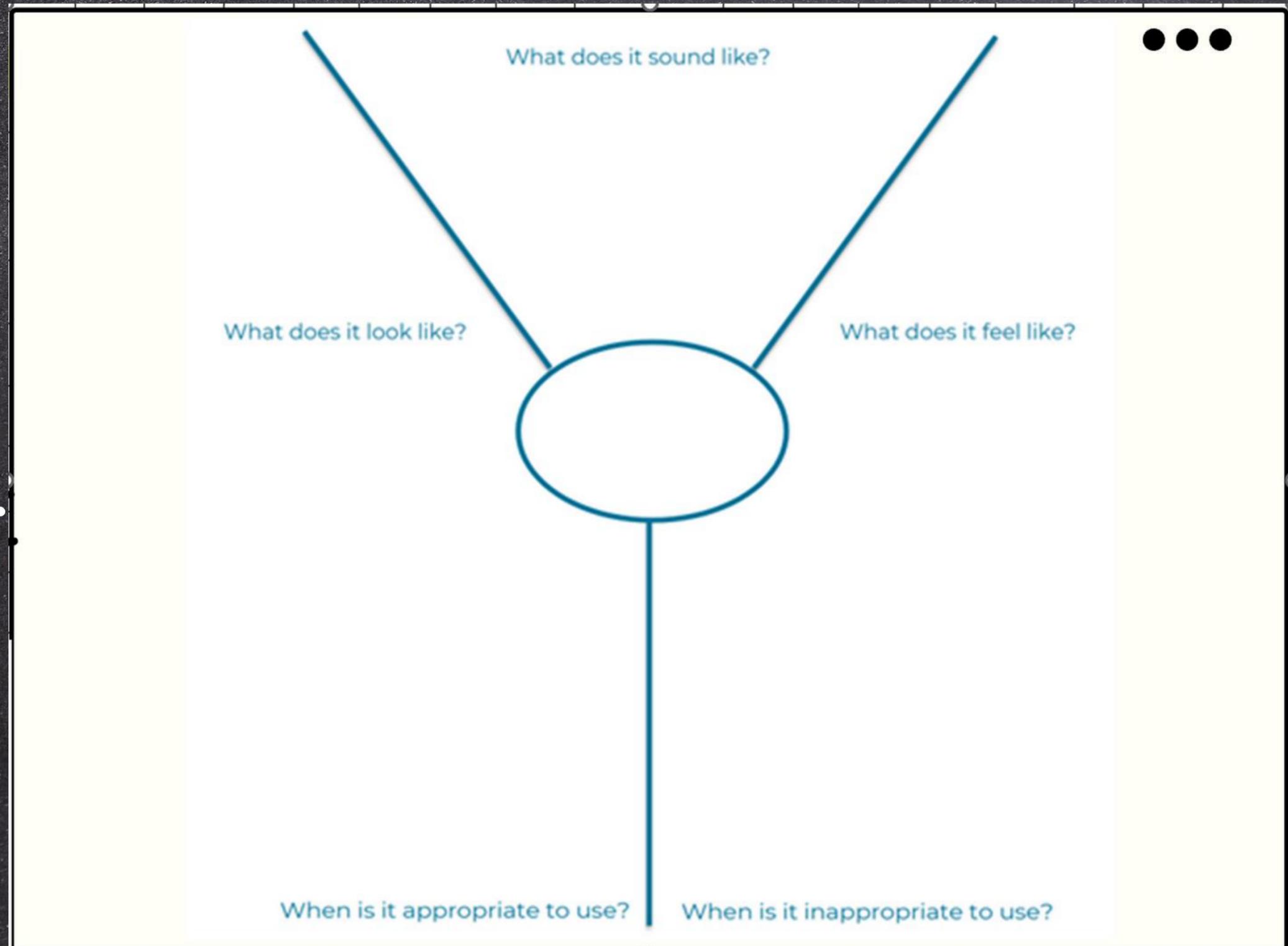
spiders  
crawling  
on the rusty  
wall.



Looks Like

# Not Just for Pupils...

Y Chart  
to get  
staff  
thinking...



# Not Just for Pupils...



## PLUS MINUS INTERESTING Strategy



Staff using language more.  
Targets helped us focus.  
Drive team assisted with motivation.  
Great displays around the school on various habits.



Further development of related reading materials to link in with habits being covered.  
Perhaps specific, physical books for each habit (3) for each year group.



The science behind the habits is really interesting.  
Hearing what the pupils had to say.  
Could we change the K from KWL to a splash words frame?  
Could we use Y frames for our teacher evaluations?  
Consider specific use of thinking frames moving forward. Check in with Numeracy co-ordinator etc.



# Visible Thinking Routines



See-Think-Wonder

Sentence-Phrase-Word

Connect-Extend-Challenge

Zoom in

I used to think... Now I think

Claim-Support-Question

The Explanation Game

Compass Points



# CURIOUS COLIN

RESPONDING WITH  
WONDERMENT AND AWE



Become  
intrigued!



## SEE

*What is it that I see?*



## THINK

*What does it make me think about?*



## WONDER

*What do I wonder?*



## Responding with Wonderment and Awe

*Become intrigued!*

Finding the world awesome, mysterious and being intrigued with phenomena and beauty.

# See Think Wonder



**SEE**

What do you see?



**THINK**

What do you think is going on?



**WONDER**

What does it make you wonder?



What do you see?



What do you think is going on?



What does it make you wonder?

## Responding with Wonderment and Awe

Ask big questions and inspire fresh thinking

See - Only observations from the image.

Think - Statements based on the evidence.

Wonder - Asking questions, wondering about mysteries and implications.

# See Think Wonder



**SEE**

What do you see?



**THINK**

What do you think is going on?



**WONDER**

What does it make you wonder?

## PURPOSE

*What kind of thinking does this routine encourage?*

This routine emphasises the importance of observation as the basis for thinking and interpretation that follows the close looking of an image, object, video, excerpt of text, painting, photo etc. The stimulus should be evocative and engaging.

## APPLICATION

*When and where can it be used?*

Use this routine:

- ❑ When you want students to think carefully about why something looks the way it does or is the way it is.
- ❑ Use at the beginning of a new unit to motivate student interest.
- ❑ Consider using with an interesting object near the end of a unit to encourage students to further apply their new knowledge and ideas

## ASSESSMENT

*How can I use this routine as an assessment?*

- ❑ **See responses** → look for improvement in ability to notice details that take them deeper in the image/ object rather than getting stuck on immediate surface features.
- ❑ **Think responses** → pay attention to the kind of supports students are able to provide for their interpretations in response to the *What makes you say that?* prompt. Are they drawing on evidence to create coherent links?
- ❑ **Wonder responses** → look for questions that are more adventurous and broad rather than limited to those requiring specific factual responses.

Adapted by Alice Vigors 2017

## LAUNCH

*What are the steps needed for starting and using this routine?*

1. **Set up** → Present the chosen image in a way that allows students to see as much detail as possible. Allow sufficient silent time for close observation, 2 or 3 minutes, before any talk or discussion.
2. **See** → Ask learners to state what they noticed. Emphasise we are not looking for interpretations at this stage, only what they observe. Useful prompt: *an observation is something you could actually put your fingers on within the image/object.*
3. **Think** → Ask learners what they think is going on in the image/ object. This general, interpretive question may be modified to suit what is being viewed. The goal here is to build up layers of tentative interpretation rather than merely naming the subject matter. Push for alternatives and additions → *What else is going on here? What do you see that makes you say that?* This encourages learners to provide supporting evidence.
4. **Wonder** → Ask learners what they are now wondering about based on what they have seen and have been thinking. Initially students may find it hard to separate "thinking" from "wondering". Using 'I wonder...' can be useful to begin.
5. **Share the thinking** → Students generally share their thinking at each step along the way before moving on. This allows the class to build on the group's thinking at the previous stage and often results in richer discussions. It can be useful to document the thinking at each stage as it happens, although this is not always necessary.

Linked to events



**See**      **Think**      **Wonder**

**What can you see?**

- ghost
- dog
- trees with no leaves
- pumpkins
- moon
- black bats
- witch
- fairy
- cat
- a man with a hat
- witch
- castle

**What do you think is going on?**

- I think it's Halloween - Sadie
- I think it's very scary - David
- I think the trees are dead - Rudi
- I think they're knocking on people's doors - Noah
- I think they're going to a haunted house - Zak
- I think it's dark - Alex
- I think they're on safari - Ziva
- I think they're going to visit the castle - Roman
- I think they're trick or treating - Oakley
- I wonder if they're going on like a hunt - Noah
- I wonder if it's trick or treat time - Roman
- I wonder if the castle is haunted - Muad
- I wonder if there is anyone in the castle - Billy
- I wonder what season of the year it is - Mrs Wilson
- I wonder why the moon looks so big - Mrs Wilson

**What does it make you wonder?**

- I wonder if the fairy is going trick or treating or somewhere else - Sophia
- I wonder if there's spiders in the trees - Noah
- I wonder if they'll shout trick or treat - Aiva
- I wonder if it's Halloween - Ziva
- I wonder if they are going to the castle - Aiva
- I wonder if there's a Vampire - Phoebe
- I wonder if it's nighttime - Phoebe
- I wonder if there are pumpkins outside the castle - Betty

Thinking Frames for Topic: Introduction to Superheroes!

**See/Think**

- Spiderman can shoot webs. LH
- Batman and Superman can fly. MC AC
- Ironman can fire lasers. CK
- Hulk and Hulk Girl smash things. They are strong. LP ZO
- Black Panther and Wolverine have sharp claws. AG DK
- Captain America fights with a sword and shield. HH
- Some superheroes can jump high. AA
- Thor can lift a very heavy hammer and control thunder. HA
- Most superheroes wear a mask / disguise. XC
- Flash can run very fast and he can run on top of water. FM

**Wonder**

- How can Spiderman hear so well? EB
- What different ways can we use our bodies to help other people? SA
- How can some superheroes climb so well? HA
- Why can some superheroes fly? MC
- How do Spiderman's webs work? AB AJP
- How come Hulk is so strong? ZO
- How does a healthy diet help you to be strong? XC
- Do all superheroes need special tools to help with their skills? HA
- What is the same and what is different about some superheroes and their bodies / skills? AG
- Why are some people faster or stronger than others? MA

Instead of a KWL



# CAT SCHOOL

LI, To Participate in a widening range of talking and listening activities and describe or explain their ideas in partner work or group discussions

## See

- Cats in seats.
- Noticeboard at the back.
- The blue cat is asleep.
- The white cat has his paw up.
- We can see six cats.
- We can see shelves with boxes at the back.
- We can see bright light through the windows.
- We see work on the noticeboard.
- We can see windows on both sides.



## Wonder

- Why is the brown cat staring at the white cat?
- Does the white cat need help from his teacher?
- We wonder what type of toys they have.
- We wonder if it is Spring or Summer because of the shadows on the floor.
- We wonder if they do the same work as us.
- We wonder if they can also see houses from their windows like we can.

## Think

- We think the brown cat looks worried.
- We think there are toys in the boxes at the back.
- It is day time because of the light.
- We think they are doing good work as it's on the noticeboard.
- We think there is a playground outside.

Once Upon A  
Picture

# MORNING SURPRISE



Imagine that you have just walked into your kitchen to find this. Choose:

- Role play the conversation you might have with the octopus.
- Role play the telephone call you might have with a friend or family member to tell them what you have found.
- You can only ask 3 questions to the octopus. What would you ask and why?
- You decide to let the octopus stay here, but the next morning you come into your kitchen to find it joined by another creature.

What might it be?

- The telephone rings. It is the RSCPA and they are concerned: they have had reports from a neighbour that you are keeping sea life in your kitchen sink. What do you say?
- Try to persuade the octopus to leave. Then try to persuade it to stay. Which was easiest? Why?
- Write the story of how the octopus came to be here, and what happens next.
- Write a limerick about this picture.

Questions:

- How did the octopus get here?
- Why is it wearing a hat?
- Is it speaking your language? Do you understand what it's saying?
- Where did the plants come from?

Once Upon A  
Picture

# Think Thursday

Once Upon a Picture: The Imaginator

10.10.25

LI: talking about experiences, pictures and stories.



**The Imaginator**  
Use these words to talk about your ideas.

I think...  
I wonder...  
I agree...  
because

**What is your imagination?**  
In my imagination, I can do whatever I want. I can buy a mansion and a lamborghini. SK  
I can have an imaginary friend who I can play with at home. NB  
I think I would buy things for my mum in my imagination. KM  
I think my imagination is in my head. CC  
I agree my imagination is in my head, it's inside my brain MD  
In my imagination, I would be Spiderman because I can protect my mum. BD

**Is everything that you imagine real?**  
I think what I imagine isn't real because it's just inside my head. ES  
I think some things are real but other parts are not. ES

**I think if I turn the wheel, The Imaginator will start to work. JI  
I think the machine makes a "shhhhh" noise when it works. EA  
I think there are batteries inside. JK DV**

- How does The Imaginator work? What goes in and what comes out? What's creating the sparks? Does it need electricity to function? Write an explanation of how it works.
- Who made The Imaginator?
- Who does this one belong to? Why is it here?
- Are there any others? Where are they sold?
- Create an advert for The Imaginator. Who is the target market? Why would they need one? What are its best features?
- Why is imagination important? What can we do to keep the imagination active?
- Which of these quotes about imagination do you like best? Why?
  - "Something you can imagine is real." - Pablo Picasso
  - "Logic will get you from A to Z. Imagination will get you everywhere." - Albert Einstein
  - "Stories of imagination tend to upset those without one." - Terry Pratchett
  - "Imagination is like a muscle. The more you use it, the bigger it gets." - Philip José Farmer
  - "Imagination is the only weapon in the war against reality." - Lewis Carroll, Alice in Wonderland
  - "When I read a book, I put in all the imagination I can, so that it is almost like writing the book as well as reading it - or rather it's like inventing it. It makes reading so much more exciting and... don't suppose many people try to do it." - Doris Smith, Captain Beawoke

## Think Thursday

LI: talking about experiences, pictures and stories.

### Advantages:

We can eat the chocolate whenever we want. SK  
I think chocolate chairs would help people who don't have anything to eat because it would give them food. KM  
I would chop the chair up and give chocolate to other people. EG  
I think I would share the chocolate with people at home. NB  
I think it's ok to eat the chocolate as long as I brush my teeth to keep them clean. DV  
I think I would bring my chocolate chair outside so it would melt. Then I would put strawberries with it and share with my friends.



### Disadvantages:

I think a chocolate chair would melt in the sun. RM  
Eating the chocolate chair would give you cavities. ES  
You would need a new chair if it melted, so you would have to stand up all the time. JM  
If I ate all of the chocolate and didn't leave any for others, they would be annoyed. BO  
If you eat too much chocolate you would get a sore tummy. AB  
If the chocolate melts, I might get it on my dress and it would need to be cleaned. EA

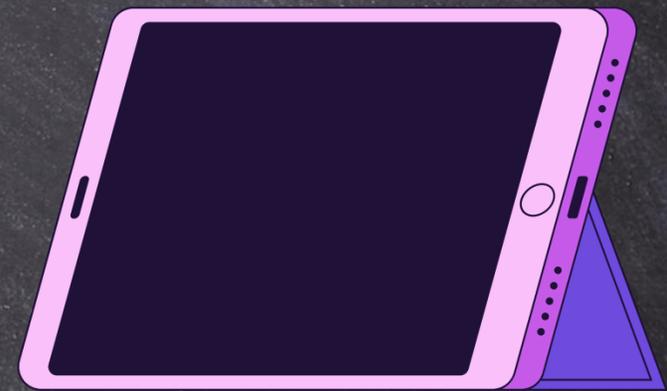
Could also be used when discussing the cover of a new book, a C2K Junior Newsdesk image etc.

# Other ideas...

U.I.C.T.

Pupils upload a picture or photo to Seesaw with an "I see, I think, I wonder" voice-over.

JIT5 within C2K could also be used.



## P.D.M.U. Lessons

See, think, wonder linked to a cartoon based on an emotion.



# Visible Thinking Routines

## Thinking Routines

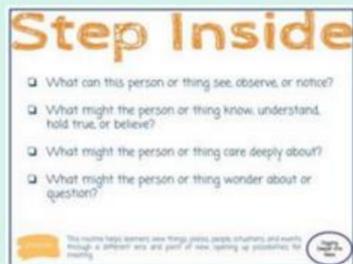
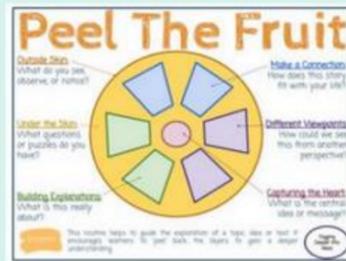
Introducing and exploring ideas



Synthesising & Organising



Digging deeper



Giving Feedback



Self-reflection

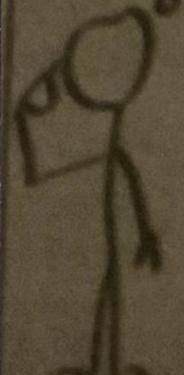


Engaging with others



Credit due to:

I used to think... *veritas*  
 But now I think...



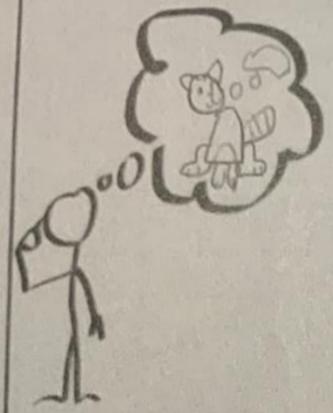
I used to think...  
 DOGS could beat the same  
 as humans

Now I think...  
 DOGS hear better  
 than humans

This routine helps students reflect on their thinking about a topic or issue and explore how and why that thinking has changed. This routine also develops students ability to identify and talk about their thinking itself.

Synthesizing & Organizing Ideas

But now I think...



I used to think...  
~~pets were not smart~~

Now I think...  
~~pets are never intelligent.~~

This routine helps students reflect on their thinking about a topic or issue and explore how and why that thinking has changed. This routine also develops students ability to identify and talk about their thinking itself.

Synthesizing & Organizing Ideas

Astrid ♥ ↗

I used to think...  
 But now I think...



I used to think...  
~~pets did not need looking after~~  
~~they needed care~~

Now I think...  
 they need lots of care

This routine helps students reflect on their thinking about a topic or issue and explore how and why that thinking has changed. This routine also develops students ability to identify and talk about their thinking itself.

Synthesizing & Organizing Ideas

In Soirabz



**Feedback**

Giving feedback to learners constantly happens within deliberate practice:

- Verbal from staff (Recording any applicable pupil comments on displays, on Seesaw or in planner evaluations.)
- Photo evidence on HoM noticeboard, Seesaw, school social media etc.
- Stampers on thinking frames or thinking routines.
- Seaview Star Award for the HoM in focus at the end of each term.

# OUTCOMES FOR LEARNERS

## Wider skills and dispositions/capabilities

### Effective practice

#### Effective practice is demonstrated when:

- children develop self-confidence and self-esteem through participating in and contributing to a range of activities both in and out of school;
- children take personal responsibility for their learning, set goals and know how to achieve them;
- children have a sense of personal and social responsibility and contribute confidently to the life and work of the school and the local community;
- children are confident to plan, review and evaluate, and know how to improve the quality of their own work;
- children are motivated, resilient and positively engaged in their learning;
- staff enable children to develop insights into society and other cultures;
- children work independently and with others, demonstrating and developing skills such as problem solving, decision making, managing information and thinking critically and creatively;
- children develop dispositions to learning appropriate to their stage of development, for example, commitment, determination, openness to new ideas, respect, curiosity, flexibility and integrity;
- children manage their own emotions, personal conduct and interactions with others; and
- children apply their learning and develop team-working and leadership roles in a range of local and global contexts and have an understanding of these roles in future life and employment contexts.

### Self-evaluation questions

- How actively and meaningfully are the children involved in setting their own personal goals? What evidence is there that the children know their own strengths, know what aspects of their work need to be improved and know how to make improvements?
- How do we know that the children are determined to succeed and achieve high standards?
- How do we, as a school community, encourage and acknowledge children's achievements gained both in and out of school?
- Are children supported in a fair and equitable manner by all staff?
- How do we ensure consistency in the opportunities available to all the children?
- Do we know who our children at risk are? Does our self-evaluation process identify a particular group or individuals that may require pastoral or academic support?
- Is our induction process for children and staff effective? How do we know? Have we consulted with those involved?
- How do our working relationships with outside agencies impact on the children's outcomes and well-being?

THANK

YOU

