



# Wyndham Primary Academy

## Maths No Problem!

The textbooks:  
 = Follow a **spiral approach**  
 → Allows those children that do not grasp concepts quickly the chance to do so and rapid graspers the chance for **enrichment**  
 = Have **anchor tasks** that are difficult to leave  
 → Allows **time** for struggling learners  
 → Provides the opportunity for **deepening** for advanced learners

A typical lesson is outlined below.

## Our Master's Classes



**Explain it** – All children are provided opportunities to become a 'Tiny Teacher' within a lesson, explaining their methods to their partner.



**Convince me** – Children must identify their partner's misconceptions and reason why their answer is correct but their partner is not.



**Prove it** – Children are challenged to independently prove that they have reached the correct answer. Eg. Using an alternative method.



**Use it** – Children are challenged to apply their learning, using it within another context.

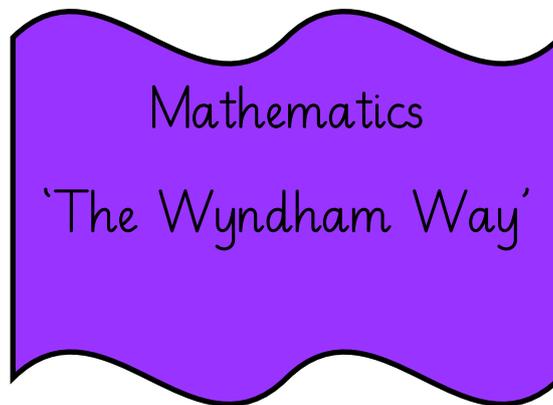
### Part 1: In Focus

Children focus on a single problem but look at it from multiple perspectives.

At this stage children are:

- Presented with a **visual representation** of the problem
- Provided **concrete resources** to help them explore
- Asked to work with their **mixed ability** partner to devise different methods
- Given opportunities to **talk** to negotiate for meaning
- **Questioned** about everything
- Given **time to explore**
- Given **time to process** and gain **confidence**

The teacher rarely explains!



### Part 4: Independent Application

Children apply their learning independently.

At this stage children are:

- Given questions that follow a structured spiral approach
- Given the opportunity to present the final version of their explanation, after exploration and discussion, in their maths journal

### Part 2: Let's Learn

Children explain their solution to the problem.

At this stage children are:

- Asked to **explain** their solution to the class
  - Presented with **alternative methods** from the children in the textbook
- The teacher adds layers to structure children's responses.

### Part 3: Guided Practise

Children practise for consolidation and fluency.

At this stage children are:

- Presented with similar problems that are slightly different each time (**variation** not repetition)
- Given the opportunity to **address and critique different methods** through a mini-plenary

## Catering for all learners

1. We adopt a **concrete - pictorial - abstract approach** (CPA)
2. We **differentiate the environment**

### Struggling learners

- Create a safe environment where children can make mistakes
- Create choice
- Allow processing time

### Advanced learners

- Make the environment less safe through questioning
- Challenge children's thinking
- Acceleration Vs Enrichment

## Assessment

Assessment of **process** not product.

Can children:

- Perform the skill?
- Give you a physical model? Give you a visual model?
- Explain themselves orally? In written form?
- Challenge themselves independently?
- Use it in a familiar situation? In an unfamiliar situation?

