



Maths: Teaching and Learning

The following document outlines Aylesford Primary School's approach to teaching maths

Pre-assessments:

- Before a unit of work is started, teachers assess pupils' understanding so that teaching is pitched at the correct level and pupils' learning activity is matched to their needs.
- This may be completed verbally, or written.
- Written pre-assessments are completed on blue paper and stuck in at the start of the unit.
- Where understanding is below that of the majority of the class, pre-teaching is done to 'fill the gaps'.

Mental/Oral starters:

- Each lesson begins with a mental/oral starter to increase fluency.
- The following activities are used:
 - Counting Stick
 - Beat the Teacher
 - Thinking of a Number
 - Function Machine
 - Gattegno Chart
- The level of challenge is matched to the year group expectations.

Input:

- Lessons include "steps to success"



Differentiation:

- All pupils work on the same Learning Objective (L.O) each lesson.
- Challenge is provided through depth of learning and understanding.
- Pupils move through different levels of understanding as follows:
 - “Do it”
 - Pupils answer ‘standard’ questions, similar to that modelled by the teacher.
 - For example: $5 + 2 = \underline{\quad}$
 - “Twist it”
 - Focuses on reasoning and addressing misconceptions.
 - For example: Robyn says $5 + 2 = 3$. Why is Robyn wrong?
 - “Bop it”
 - Pupils problem solve and apply their learning
 - For example: Robyn has 10p. A shop sells rubbers for 3p, paper for 4p and rulers for 5p. What could Robyn buy?
- Pre-assessments, teacher questioning and pupils’ understanding during previous lessons and inputs are used to attain whether a child starts with the “do it”, “twist it”, or “bop it” challenge.

Plenaries:

- Maths lessons are concluded with the following:
 - Reasoning statements
 - Self - / Peer – assessment
 - Kagan structures to consolidate learning
 - New teaching introduced
 - Misconceptions addressed
 - Past exam questions



Marking:

- Marking is in line with the Aylesford Marking Policy.
- On the piece of work, the statements “Do it, Twist it, Bop it” are bullet pointed. The teacher highlights the level of work the pupil was able to achieve independently.
- Additional marking is as follows:
 - Letters to show level of support:
 - I = Independent
 - P = Prompted (*some questions asked*)
 - G = Guided (*some extra teaching required*)
 - S = Supported (*needed adult support to achieved*)

Assessment:

- Year group expectations are stuck at the front of pupils' books.
- Teachers date the expectations when seen in termly assessments and in work.
- Once dated 3 times, the expectation is achieved and highlighted.
- Expectations should **not** be signed off solely from one week of teaching that unit.

Big Maths:

- Pupils have separate 'Big Maths' lessons once every 2 weeks.
- Mathematical concepts from previously taught units are revisited in a problem solving context.
- Pupils are encouraged to draw from lots of different knowledge to solve problems.
- Emphasis is put not on finding the correct answer, but rather the process to getting there.



The first thing I did was

I already knewso

I noticed that

Once I found out.....I could then.....

It didn't work when I.....so I.....

The part I found most difficult was.... because

The part I found easiest was..... because.....

It could be.....because

It couldn't be because