

Maths LO and process



Process of a maths lesson

Mental Maths starter (10 minutes)

Main lesson process

Connect



Activate



Activity



Demo

MENTAL MATHS

Mental Maths Starter (10 minutes)

Linked to Mental Maths objectives given.

Weekly Year group expectations.

Foundation stage	One objective for the week. All through games, chanting, songs or practical activities
Year 1	One objective for the week. Days 1-4 through games, chanting, songs or practical activities Day 5 Fast Four based on the mental maths objective
Year 2	Days 1-2/3 through games, chanting, songs or practical activities Day 3/4 <i>Mental maths</i> Activity in books based on objective above Day 5 Fast four (based on four operations)
Year 3 and Year 4	1-2 days learning based on one objective through games, chanting, songs etc. Day 3 <i>Mental maths</i> Activity in books based on objective above Day 4 Times tables (test) Day 5 Fast four (based on four operations)
Year 5	Fast Four Daily arithmetic as part of Mental maths including weekly times table test (Practical/ games/ chants etc as needed)
Year 6	Fast Four Daily arithmetic as part of Mental maths including weekly times tables test

CONNECT (previous learning)

Linking learning- short teaching/ activity linked to previous learning that will help them make connections to known concepts. This could be from a previous year group or from a previous lesson. KS1 complete as a class, KS2 pupils complete short task in books.

ACTIVATE (teach)

‘Link your learning’ Link from connect activity move onto activate.

Share L.O. (taken/ adapted from YOAP) Under L.O share and read key mathematical vocabulary needed for the lesson.

Modelling Use **I do, we do, you do** process to teach. Pre-empt and address misconceptions during this time.

Engagement Pupils use manipulatives, WB's fans etc in lesson to engage in learning and for AFL.

Staffing Direct support during lesson to pupils who need it. Including pairing up with a pupil who is secure.

Pupil modelling Let pupils become a teacher and explain and model concepts on the board. (cheacher – child teacher)

ACTIVITY

Tasks Task based directly on taught learning objective. You may have more than one activity – the same concept in different ways, (like varied fluency)

Staffing Staff directed to pupils who have been identified in lesson/ previous lesson to have more support. Use fluid groups to create analysis groups in lessons to work with pupils who need more teaching/ modelling before activity.







Challenges 1-3

- Additional tasks to extend and challenge learning. These will link to L.O and be based on real-life situations, reasoning and problem-solving tasks.
- Challenge 3 will be more open ended for mastery pupils.
- Aim is to have every child complete challenge 1 at least unless they've need additional support in main activity.
- Model how to answer challenge 1 before DEMO in lesson.
- Pupils use ACE for reasoning questions
 - A – answer (I agree or disagree / who is correct)
 - C- calculation (show example of some working out to **prove** right or wrong etc. This could be formal or informal methods known.
 - E- explain how they know and what the calculations show.

DEMO

- Demonstration of their learning (plenary)
- Go over learning from lesson. Ask pupils to explain.
- A task like the main activity task. Pupils can do this on WB's as a class/ paired/ IND or they can have a **DEMO** task printed off to stick in their work.
- At the end of the lesson, get pupils to self-assess using the boxes. Model this on the board.

L.O and Sticking in work

L.O: To recognise the place value of each digit in a four digit number						KS2 pupils write the short date. One digit per square.
Independent	Paired	Group	TA	Teacher		 I don't understand  I need more help  I'm confident  I can teach this!
CONNECTION In which of the number below is the <u>4</u> digit worth 40? 304 430 340						

- Connect activity on SB for KS1
- Short connect activity underneath the L.O for KS2 (for Y2 if and when feels appropriate)
- Give pupils work where they need to use the squares in their book as much as possible.
- High standards of presentation – sheets stuck in in line with L.O (one square from sides)
- Pupils use small tick in purple pen when self-marking work. No bigger than one of the squares.

Use the labels on slides and work as below:

- Connect
- Activate
- Activity
- Challenge (1-3)
- Demo