

MATHS · ADULT REFERENCE

Fluency vs Reasoning

Both, not one or the other

Why this debate keeps coming up

What fluency actually means



What reasoning actually means

How to build fluency

Routine	Frequency	What it does
Daily times-tables practice (3-5 mins)	Daily KS1-LKS2	Builds automaticity
Number bond practice (Y1-Y2)	Daily	Foundation for column arithmetic
10 quick questions starter	Daily	Mixed practice of recent and prior content
Digital fluency app or web tool	3x weekly	Engagement-driven fluency practice
Cold calling on facts	Embedded in lessons	Builds confident recall under pressure
Calculation strategy lessons	Weekly	Teaches multiple strategies for the same calculation

How to build reasoning

Routine	Frequency	What it does
Number talks (5-10 mins)	Daily	Children explain how they got their answer
'What's the same, what's different?' starters	Weekly	Compare-and-contrast thinking
Open-ended problems (no single answer)	Weekly	Multiple strategies
Word problem of the day	Daily	Word-problem fluency



Routine	Frequency	What it does
Worked examples + faded scaffolding	Embedded	Cognitive load theory in action
Sentence stems for explaining	Embedded	'My answer is X because...'
Multi-step problem-solving sessions	Weekly	Sustained reasoning practice

The 80/20 truth

How long does fluency take?

What to STOP doing



Whole-school fluency + reasoning audit

- Every classroom has a daily fluency routine (10 mins)
- Times tables practice is happening daily Y2-Y4
- Number talks (or equivalent) happening 3+ times weekly
- Children are explaining their thinking aloud regularly
- Manipulatives available in every classroom
- Every lesson includes some reasoning component
- Digital fluency platform subscribed and accessible
- Word problems integrated, not segregated
- Calculation policy is consistent across the school
- SEND children getting fluency catch-up specifically

