



Houghton Mifflin Harcourt

Computational Fluency

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Developing Computational Fluency

Try these...think about your thinking:

$9 + 7 =$

$15 - 8 =$

$96 + 15 =$

$7 \times 8 =$

$8 \times 19 =$

$22 \times 12 =$

“Teaching both skill and understanding is critical...they are learned together, not separate.”

Computational fluency involves...

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Priorities *(as seen in Singapore Mathematics):*

1)

2)

3)

Examples:



Be Systematic:

Grade	Standard	Required Fluency
Kindergarten	K.OA.5	Add within 5
		Subtract within 5
First Grade	1.OA.6	Add within 10
		Subtract within 10
Second Grade	2.OA.2	Add within 20
		Subtract within 20
	2.NBT.5	Add within 100
		Subtract within 100
Third Grade	3.OA.7	Multiply within 100
	3.NBT.2	Divide within 100
		Add within 1,000
Fourth Grade	4.NBT.4	Subtract within 1,000
		Add within 1,000,000
Fifth Grade	5.NBT.5	Subtract within 1,000,000
		Multi-digit multiplication



Know what they Know:



Invest in Thinking: