

Mathematics Shift 1:

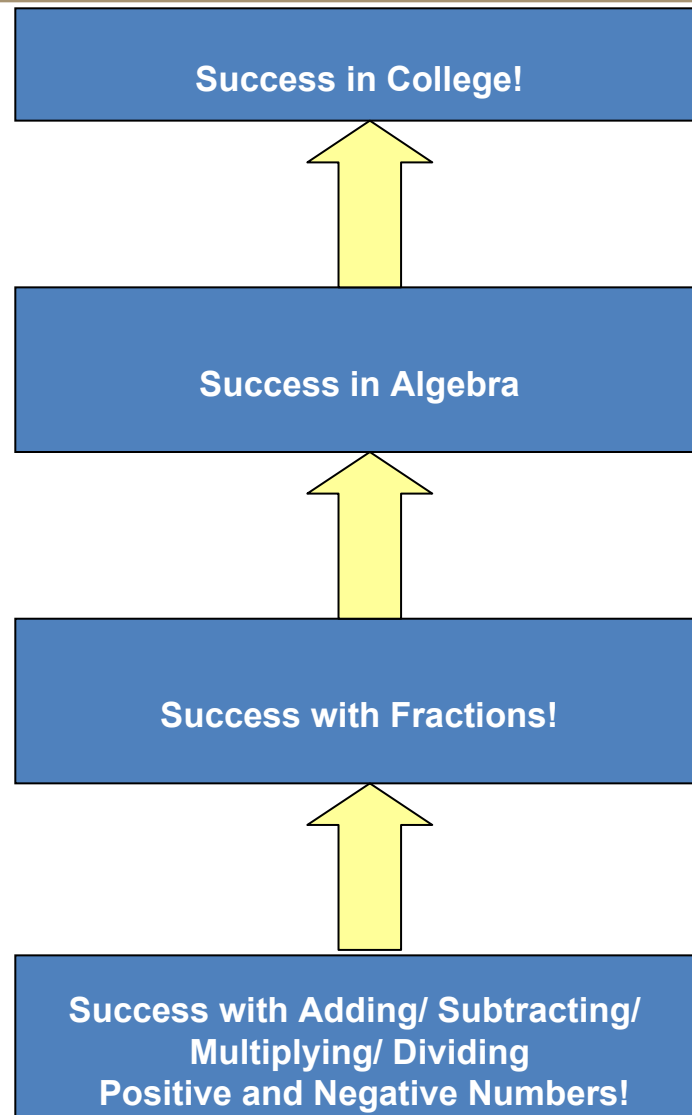
Focus: learn more about less

Students Must...	Parents Can...
<ul style="list-style-type: none">• Spend more time on fewer concepts.	<ul style="list-style-type: none">• Know what the priority work is for your child for their grade level• Spend time with your child on priority work• Ask your child's teacher about their progress on priority work

Mathematics Shift 2: Skills Across Grades

Students Must...	Parents Can...
<ul style="list-style-type: none">• Keep building on learning year after year	<ul style="list-style-type: none">• Be aware of what your child struggled with last year and how that will affect learning this year • Advocate for your child and ensure that support is given for “gap” skills – negative numbers, fractions, etc

The National Mathematics Advisory Panel's Final Report (2008)



Final Report of the National Mathematics Advisory Panel, 2008

Mathematics Shift 3: Speed and Accuracy

Students Must...	Parents Can...
<ul style="list-style-type: none">•Spend time practicing – lots of problems on the same idea	<ul style="list-style-type: none">•Push children to know/ memorize basic math facts•Know all of the fluencies your child should have and prioritize learning of the ones they don't

Key Fluencies

Grade	Required Fluency
K	Add/subtract within 5
1	Add/subtract within 10
2	Add/subtract within 20 Add/subtract within 100 (pencil and paper)
3	Multiply/divide within 100 Add/subtract within 1000
4	Add/subtract within 1,000,000
5	Multi-digit multiplication
6	Multi-digit division Multi-digit decimal operations
7	Solve $px + q = r$, $p(x + q) = r$
8	Solve simple 2×2 systems by inspection

Mathematics Shift 4: Know it/ Do it!

Students Must...	Parents Can...
<ul style="list-style-type: none">• UNDERSTAND why the math works. MAKE the math work.• TALK about why the math works• PROVE that they know why and how the math works	<ul style="list-style-type: none">• Notice whether your child REALLY knows why the answer is what it is• Advocate for the TIME your child needs to learn key math• Provide TIME for your child to work hard with math at home• Get smarter in the math your child needs to know

Mathematics Shift 5: Real World

Students Must...	Parents Can...
<ul style="list-style-type: none">• Apply math in real world situations• Know which math to use for which situation	<ul style="list-style-type: none">• Ask your child to DO the math that comes up in your daily life

Mathematics Shift 6: Think Fast/ Solve Problems

Students Must...	Parents Can...
<ul style="list-style-type: none">• Be able to use core math facts FAST <p>AND</p> <ul style="list-style-type: none">• Be able to apply math in the real world	<ul style="list-style-type: none">• Notice which side of this coin your child is smart at and where he/she needs to get smarter• Make sure your child is PRACTICING the math facts he/she struggles with• Make sure your child is thinking about Math in real life