

Daily Routines to Jump-Start Math Class, Middle School

THE BOOK AT-A-GLANCE

A quick-reference table provides you with a brief description of each task, along with the corresponding task purpose.

JUMP-START ROUTINES AT-A-GLANCE

	ROUTINE	DESCRIPTION	PURPOSE
ENTRY-LEVEL ROUTINES			
1	Picture It	Students estimate quantities in pictures.	Develop understanding of magnitude of numbers by reasoning about them in context.
2	Where's the Point?	Students determine possible values for unknown locations on empty number lines.	Develop understanding of number relationships with number lines.
3	Is This the End?	Students determine endpoints for a number line when the value of a certain location is known.	Develop understanding of number relationships with number lines.
4	That's a Fact	Students reason about numbers in context.	Develop understanding of magnitude of numbers by reasoning about them in context.
5	Math Yapper	Students provide clues for partners to guess mystery numbers, concepts, or vocabulary.	Develop understanding of concepts and vocabulary to communicate more clearly.
6	Broken Numbers	Students decompose numbers into two component numbers.	Develop flexible thinking about number decomposition.
MID-LEVEL ROUTINES			
7	It's About	Students estimate fractional parts of irregular figures.	Develop fraction sense and estimation with fractions.
8	The Best Tool	Students determine whether it is most efficient to evaluate an expression mentally, with a calculator, or with paper and pencil.	Determine whether tools or mental calculations are more efficient.
9	Relating Three	Students find unknown numbers by considering the relationships within and among different number lines.	Develop understanding of number relationships and powers of ten.
10	Two Columns	Students compare expressions by reasoning and estimating.	Use estimates to compare values and determine reasonableness of solutions.
11	Numbered Star	Students manipulate numbers and operations to find a specific solution.	Develop flexible thinking and computational fluency.

Entry-level routines are listed and can be used with all students—no special prior knowledge required.

Mid-level routines section put students' reasoning skills and mental mathematics to the test.

Advanced-level routines extend reasoning to slightly more complex scenarios.

	ROUTINE	DESCRIPTION	PURPOSE
12	Switcharoo	Students create expressions to satisfy prompts about numbers.	Develop flexible thinking about numbers and computation by creating prompts for specific results.
13	Express It	Students decompose a number in a variety of ways.	Develop flexible thinking about number decomposition.
14	Comparing Without Calculating	Students reason about operations and consider numbers as friendly estimates.	Develop a sense of reasonableness by identifying relationships between numbers and operations.
ADVANCED-LEVEL ROUTINES			
15	More or Less	Students compare expressions to a known value.	Reinforce computational fluency by estimating and determining reasonable answers.
16	Somewhere In Between	Students estimate sums, differences, products, and quotients of decimals and fractions.	Develop reasonableness of calculations with fractions and decimals.
17	Patterns and Generalizations	Students look for patterns within sets of equations.	Develop understanding of relationships by looking for patterns within equations.
18	If I Know This	Students use known conversions to determine unknown conversions.	Develop efficient strategies for fraction, decimal, and percent conversions by using known fraction-decimal conversions.
19	What It Takes to Make	Students use friendly numbers to find possible sums, differences, products, and quotients.	Determine reasonable estimates for computations.
20	Two Truths and a Lie	Students consider the accuracy of different solutions.	Develop reasoning about skills and concepts by considering multiple possibilities.