

THE **ThinkTank**

Computation and Number Sense

CORRELATION TO TEKS (TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS)

Grade 4

HEADQUARTERS

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ORIGO[®]
EDUCATION

The Think Tank Grade 4

CORRELATION TO TEKS (TEXAS ESSENTIAL KNOWLEDGE AND SKILLS FOR MATHEMATICS)

		Expectation: The student is expected to...	Pages
Number, Operation, and Quantitative Reasoning	(4.1) The student uses place value to represent whole numbers and decimals.	(A) use place value to read, write, compare, and order whole numbers through the millions place.	Speedy Starters: 1, 4, 10, 12, 15 Brain Builders: 6, 7, 10, 13, 14, 16, 19 Mental Teasers: 1, 2, 3, 7, 8, 12 Mind Benders: 2, 4, 6, 12, 15 Head Sharpeners: 4, 6, 8, 10, 13 Pace Setters: 9, 12, 15 Fast Figurers: 2, 4, 10, 16 Quick Thinkers: 7, 8, 12, 17, 18 Number Jugglers: 2, 10, 13 Wise Workers: 15, 19 Super Solvers: 2, 4, 18, 19 Grand Masters: 10, 14
		(B) use place value to read, write, compare, and order decimals involving tenths and hundredths, including money, using concrete models.	Mental Teasers: 10 Mind Benders: 16, 17 Pace Setters: 8 Super Solvers: 13, 19 Grand Masters: 17
	(4.2) The student describes and compares fractional parts of whole objects or sets of objects.	(A) compare and order fractions using concrete and pictorial models.	Brain Builders: 15 Mind Benders: 7 Head Sharpeners: 3 Quick Thinkers: 6 Number Jugglers: 1
	(4.3) The student recognizes and solves problems in addition and subtraction situations.	(A) use addition and subtraction to solve problems involving whole numbers.	Speedy Starters: 4, 10, 11, 13, 14, 15, 18, 19 Brain Builders: 1, 3, 6, 7, 10, 11, 12, 13, 16, 18 Mental Teasers: 1, 2, 3, 6, 7, 8, 9, 15, 20 Mind Benders: 3, 4, 9, 10, 12, 13, 15, 18, 20 Head Sharpeners: 10, 11, 12, 13, 14, 16, 18, 20 Pace Setters: 3, 9, 10, 11, 14, 15, 17 Fast Figurers: 1, 2, 4, 5, 12, 14, 17, 18 Quick Thinkers: 2, 7, 8, 10, 12, 13, 14 Number Jugglers: 6, 13 Wise Workers: 5, 12, 16, 17, 20 Super Solvers: 1, 4, 11, 14, 16 Grand Masters: 8, 15
		(B) add and subtract decimals to the hundredths place using concrete and pictorial models.	Speedy Starters: 8 Mental Teasers: 14 Pace Setters: 8, 11, 16 Fast Figurers: 15 Quick Thinkers: 15, 20 Number Jugglers: 3, 5, 11, 12, 18 Super Solvers: 8, 13, 16, 20 Grand Masters: 6, 9, 11, 12, 16, 18, 20

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		Expectation: The student is expected to...	Pages
Number, Operation, and Quantitative Reasoning	(4.4) The student multiplies and divides to solve meaningful problems involving whole numbers.	(A) model factors and products using arrays and area models.	Speedy Starters: 20 Wise Workers: 1
		(B) represent multiplication and division situations in picture, word, and number form	Speedy Starters: 9, 20 Brain Builders: 20 Mental Teasers: 11, 19 Mind Benders: 11 Head Sharpeners: 5, 7 Pace Setters: 1, 6, 20 Fast Figurers: 13, 15, 20 Quick Thinkers: 3, 4, 19 Number Jugglers: 17, 20 Wise Workers: 11, 18 Super Solvers: 10, 12 Grand Masters: 1, 19
		(D) use multiplication to solve problems involving two-digit numbers.	Speedy Starters: 14, 15 Brain Builders: 16 Mental Teasers: 16, 19 Mind Benders: 6, 8, 11, 13, 20 Head Sharpeners: 1, 4, 6, 7, 8 Pace Setters: 1, 4, 5, 14, 17 Fast Figurers: 4, 5, 15, 16 Quick Thinkers: 2, 5, 7, 9, 11, 16, 18, 19 Number Jugglers: 2, 6, 20 Wise Workers: 1, 3, 4, 7, 8, 11, 13, 15, 17 Super Solvers: 3, 5, 7, 11, 12, 18, 19 Grand Masters: 2, 7, 8, 14, 15, 19
		(E) use division to solve problems involving one-digit divisors.	Speedy Starters: 9, 14, 15 Pace Setters: 6 Fast Figurers: 4, 18, 19, 20 Quick Thinkers: 3, 7, 19 Number Jugglers: 7, 10, 16, 19 Wise Workers: 2, 3, 10, 14, 17 Super Solvers: 11, 12, 15 Grand Masters: 8, 15, 20
	(4.5) The student estimates to determine reasonable results.	(B) estimate a product or quotient beyond basic facts.	Super Solvers: 11 Grand Masters: 8

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		Expectation: The student is expected to...	Pages
Patterns, Relationships, and Algebraic Thinking	(4.6) The student uses patterns in multiplication and division.	(A) use patterns to develop strategies to remember basic multiplication facts.	Speedy Starters: 20 Brain Builders: 20 Mental Teasers: 5, 11 Head Sharpeners: 5, 15 Pace Setters: 19, 20 Fast Figurers: 11, 13 Quick Thinkers: 4, 11 Number Jugglers: 17 Wise Workers: 18 Super Solvers: 10 Grand Masters: 1, 5
		(B) solve division problems related to multiplication facts (fact families) such as $9 \times 9 = 81$ and $81 \div 9 = 9$.	Fast Figurers: 19
		(C) use patterns to multiply by 10 and 100.	Fast Figurers: 16 Quick Thinkers: 5, 18 Number Jugglers: 7 Wise Workers: 13, 15 Super Solvers: 7, 18, 19 Grand Masters: 14
	(4.7) The student uses organizational structures to analyze and describe patterns and relationships.	The student is expected to describe the relationship between two sets of related data such as ordered pairs in a table.	Speedy Starters: 19 Mental Teasers: 16 Mind Benders: 18 Head Sharpeners: 1 Pace Setters: 5 Wise Workers: 16 Grand Masters: 7
Geometry and spatial reasoning	(4.10) The student recognizes the connection between numbers and points on a number line.	The student is expected to locate and name points on a number line using whole numbers, fractions such as halves and fourths, and decimals such as tenths.	Speedy Starters: 1 Brain Builders: 4, 12, 19 Mental Teasers: 9 Mind Benders: 2, 9 Head Sharpeners: 18 Pace Setters: 12 Fast Figurers: 10 Quick Thinkers: 17 Number Jugglers: 5 Wise Workers: 19 Super Solvers: 2, 14 Grand Masters: 16, 17, 18

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		Expectation: The student is expected to...	Pages
Measurement	(4.11) The student selects and uses appropriate units and procedures to measure weight and capacity.	(A) estimate and measure weight using standard units including ounces, pounds, grams, and kilograms	Speedy Starters: 7
	(4.12) The student applies measurement concepts.	The student is expected to measure to solve problems involving length, including perimeter, time, temperature, and area.	Fast Figurers: 7 Number Jugglers: 9, 15 Wise Workers: 9 Super Solvers: 7 Grand Masters: 3
Probability and Statistics	(4.13) The student solves problems by collecting, organizing, displaying, and interpreting sets of data.	(A) interpret bar graphs.	Fast Figurers: 9 Number Jugglers: 8 Super Solvers: 6

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		Expectation: The student is expected to...	Pages
Underlying Processes and Mathematical Tools	(4.14) The student applies Grade 4 mathematics to solve problems connected to everyday experiences and activities in and outside of school.	(A) identify the mathematics in everyday situations.	Speedy Starters: 2, 6, 8, 16 Brain Builders: 2 Mental Teasers: 17, 18 Mind Benders: 5, 13, 19 Head Sharpeners: 19 Pace Setters: 16, 17, 18 Fast Figurers: 5, 8, 9 Quick Thinkers: 1, 2, 15 Number Jugglers: 3, 4, 8, 12 Wise Workers: 3, 6 Super Solvers: 6, 9 Grand Masters: 4, 12, 13
		(B) use a problem-solving model that incorporates understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.	Speedy Starters: 17 Mind Benders: 3, 13, 20 Head Sharpeners: 9 Pace Setters: 7, 14, 17 Fast Figurers: 5, 6 Quick Thinkers: 2 Number Jugglers: 12, 14 Wise Workers: 3 Grand Masters: 10
		(C) select or develop an appropriate problem-solving strategy, including drawing a picture, looking for a pattern, systematic guessing and checking, acting it out, making a table, working a simpler problem, or working backwards to solve a problem.	Speedy Starters: 3, 8, 9, 17, 18 Brain Builders: 3, 5, 18 Mental Teasers: 4, 15, 19 Mind Benders: 3, 13 Head Sharpeners: 2, 7, 9, 11, 12, 20 Pace Setters: 1, 2, 7, 11, 14, 16, 17 Fast Figurers: 1, 3, 5, 6, 14, 15, 17 Quick Thinkers: 2, 10, 15, 19, 20 Number Jugglers: 3, 6, 12, 14, 20 Wise Workers: 3, 5, 11 Super Solvers: 1, 11, 12, 16, 17 Grand Masters: 8, 9, 10, 12, 19
		(D) use tools such as real objects, manipulatives, and technology to solve problems.	Brain Builders: 18 Fast Figurers: 14 Super Solvers: 1

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		Expectation: The student is expected to...	Pages
Underlying Processes and Mathematical Tools	(4.15) The student communicates about Grade 4 mathematics using informal language.	(A) explain and record observations using objects, words, pictures, numbers, and technology.	Speedy Starters: 17 Brain Builders: 9, 18 Mental Teasers: 13, 14 Mind Benders: 1, 3, 13, 20 Head Sharpeners: 11, 17 Pace Setters: 16, 17 Fast Figurers: 5, 6, 14 Quick Thinkers: 2, 15 Number Jugglers: 3, 6, 14 Wise Workers: 3, 14 Super Solvers: 1, 15 Grand Masters: 6, 12
		(B) relate informal language to mathematical language and symbols.	Speedy Starters: 2, 3, 4, 6, 9, 14, 16, 17 Brain Builders: 2, 13, 17 Mental Teasers: 4, 10, 14, 17 Mind Benders: 3, 5, 12, 13, 16, 19, 20 Head Sharpeners: 9, 13, 19 Pace Setters: 2, 7, 13, 14, 16, 17, 18 Fast Figurers: 3, 5, 6, 11 Quick Thinkers: 2, 8, 15 Number Jugglers: 3, 4, 6, 14 Wise Workers: 3, 6, 15, 17, 20 Super Solvers: 8, 9, 15 Grand Masters: 6, 10, 12, 13, 14, 15, 20

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		Expectation: The student is expected to...	Pages
Underlying Processes and Mathematical Tools	(4.16) The student uses logical reasoning to make sense of his or her world.	(A) make generalizations from patterns or sets of examples and nonexamples.	Speedy Starters: 3, 4, 5, 10, 12, 19 Brain Builders: 7, 8, 9, 10, 13, 14, 20 Mental Teasers: 1, 3, 4, 5, 8, 11, 12, 13 Mind Benders: 1, 4, 12, 14, 15, 17, 18 Head Sharpeners: 5, 6, 9, 10, 13, 15, 17, 20 Pace Setters: 2, 6, 7, 9, 10, 19 Fast Figurers: 2, 3, 11, 13, 16, 20 Quick Thinkers: 3, 4, 5, 8, 11, 12, 14, 18 Number Jugglers: 6, 7, 13, 16, 17 Wise Workers: 4, 8, 10, 14, 15, 16, 18 Super Solvers: 3, 4, 10, 11, 17, 18, 19 Grand Masters: 1, 2, 5, 8, 10, 14
		(B) justify why an answer is reasonable and explain the solution process.	Speedy Starters: 2, 3, 8, 14, 17 Brain Builders: 6, 9, 17, 18 Mental Teasers: 4, 7, 13, 14, 17, 19 Mind Benders: 1, 3, 11 Head Sharpeners: 7, 8, 11, 16, 17 Pace Setters: 1, 2, 16 Fast Figurers: 3, 6, 12, 14, 15 Quick Thinkers: 13, 15, 19 Number Jugglers: 3, 4, 6, 10, 12, 14, 16, 18, 20 Wise Workers: 4, 10, 11, 12, 13, 14, 17, 20 Super Solvers: 1, 3, 5, 8, 11, 12, 15 Grand Masters: 2, 4, 6, 8, 10, 12, 15, 19, 20