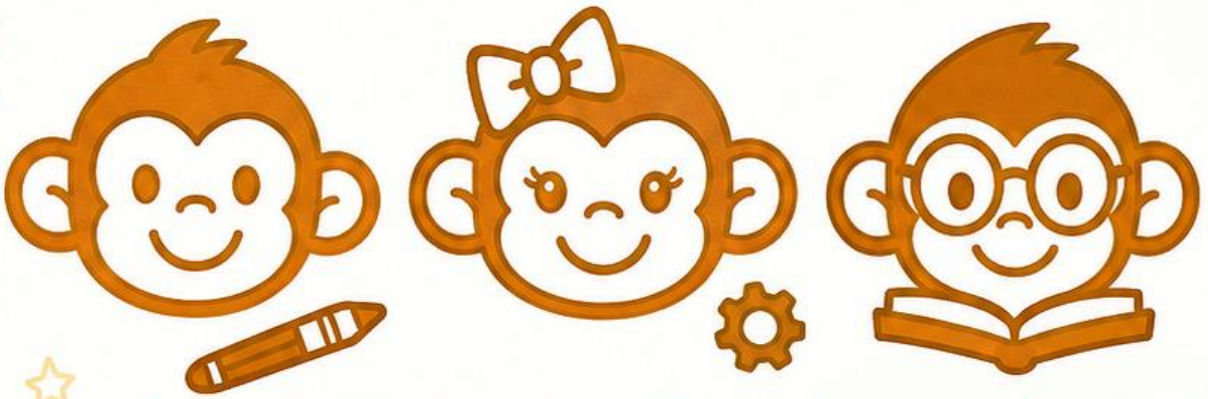
Monkey Buddies Activities



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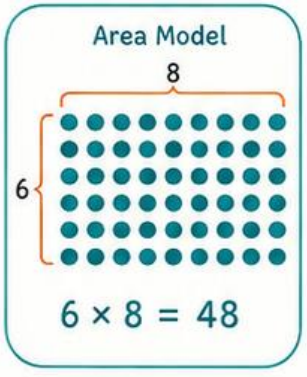
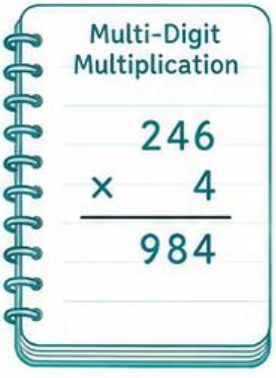
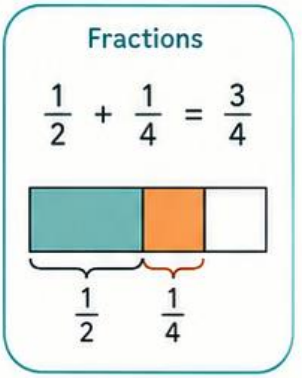
Brain Maker Summer Math Transition Guide

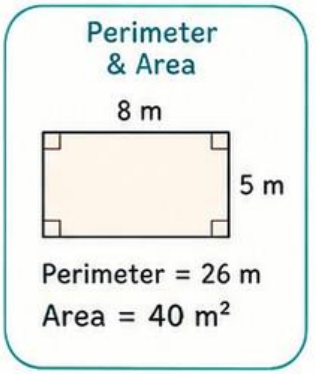
Fourth to Fifth Grade

A parent-friendly readiness guide built around generalized grade-level math skills









Monkey Buddies Learning Lab + Brain Maker Connection + Christina Dennis, M.Ed.

Brain Maker

Fourth-to-Fifth Grade Transition Math Plan

A generalized summer readiness map for building stronger fifth-grade math foundations

Program Purpose

This transition plan is designed for students who move from fourth grade into fifth grade. The goal is not to rush ahead into a full fifth-grade curriculum. The goal is to strengthen the fourth-grade skills that fifth-grade math depends on while gently previewing the language, models, and problem-solving habits students will meet next.

Core Summer Priorities

- Strengthen multiplication fact fluency and connect multiplication to division.
- Review place value consistently through whole numbers, money, decimals, rounding, and estimation.
- Build flexible strategies for multi-digit multiplication, division, and multi-step word problems.
- Develop stronger fraction and decimal understanding before relying on procedures.
- Use math language, models, drawings, and real-world applications to explain thinking.
- Preview fifth-grade ideas such as expressions, decimal operations, fraction operations, volume, and coordinate grids without creating mastery pressure.

How This Plan Works

Each pairing includes a Skill Builder page and a Use It / Hands-On Reinforcement page. Both are teaching pages. The second part makes the math concrete, flexible, and usable through tools, games, models, measuring, money, clocks, task cards, and applied problem-solving.

Skill Builder	Use It / Hands-On Reinforcement
Introduces or strengthens the skill with modeling, vocabulary, guided examples, written practice, and short checks for understanding.	Teaches the same skill through manipulatives, visuals, games, task cards, models, real-world contexts, and explain-your-thinking routines.

Generalized Grade-Level Expectations

This guide uses fourth-grade skills as the review foundation and fifth-grade skills as the readiness preview. Grade-level expectations vary by state and curriculum, so this document uses parent-friendly readiness language instead of state-specific standards codes.

The overall progression matches the common elementary-to-fifth-grade bridge: whole-number operations, place value, fractions, decimals, measurement, area/perimeter, volume, coordinate grids, and mathematical reasoning.

Fourth-to-Fifth Grade Readiness Map

Use this as a flexible 15-pair map. Each pair can be one week, part of a week, or spread across multiple weeks depending on the student. Skills should spiral back often, especially facts, place value, math language, money, time, and word problems.

Pair 1: Baseline, Multiplication Facts, and Place Value

Skill Builder	Use It / Hands-On Reinforcement
Multiplication fact baseline through 12; division fact connection; place value check with whole numbers; compare, order, and round numbers; introduce explain-your-thinking sentence frames.	Fact games; place-value build-it mats; expanded form cards; number talks; quick “explain the digit” routines; confidence check without pressure.

Grade-Level Readiness Skills

Fourth-grade review: factor pairs, multiples, whole-number place value, rounding, comparing, and multi-digit operation readiness.

Fifth-grade preview: larger place-value patterns, decimal place value, and fluency expectations.

Brain Maker Focus

Find the gaps before filling the notebook. Watch for confidence, language, and number sense - not just correct answers.

Notes / Observations

Pair 2: Money, Decimals, and Making Change

Skill Builder	Use It / Hands-On Reinforcement
Count mixed coins and bills; add and subtract money amounts; make change; connect dollars/cents to decimal notation; estimate totals.	Store math; menu math; receipt totals; “pay and make change” cards; compare prices; budget a small shopping list.

Grade-Level Readiness Skills

Fourth-grade review: solve real-world money problems using the four operations and measurement language.

Fifth-grade preview: decimal operations and financial contexts with estimation and reasonableness checks.

Brain Maker Focus

Money makes decimals visible. It also shows whether place value and subtraction are truly usable.

Notes / Observations

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Pair 3: Analog Time and Elapsed Time

Skill Builder	Use It / Hands-On Reinforcement
Read analog and digital time; tell time to the nearest minute; use start and end times; solve elapsed-time problems with number lines.	Clock cards; draw-the-hands pages; schedule math; elapsed-time number lines; “how long until?” and “what time will it be?” problems.

Grade-Level Readiness Skills

Fourth-grade review: time as measurement and multi-step word problems.

Fifth-grade readiness: persistence with multi-step contexts and precision with units.

Brain Maker Focus

Time is not the main fifth-grade skill, but it reveals skip-counting, sequencing, and problem-solving stamina.

Notes / Observations

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Pair 4: Multi-Digit Multiplication by One Digit

Skill Builder	Use It / Hands-On Reinforcement
Multiply 2-, 3-, and 4-digit numbers by 1-digit numbers using place value, partial products, area models, and estimation.	Arrays; base-ten blocks; area-model mats; partial-product matching; estimate-then-solve cards; explain-which-strategy tasks.

Grade-Level Readiness Skills

Fourth-grade review: multiply multi-digit whole numbers by one digit using place value strategies.

Fifth-grade preview: fluency with larger whole-number multiplication.

Brain Maker Focus

Students need to understand why multiplication works, not just stack numbers and hope.

Notes / Observations

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Pair 5: Two-Digit by Two-Digit Multiplication

Skill Builder	Use It / Hands-On Reinforcement
Multiply two 2-digit numbers using area models, partial products, place value, and distributive thinking. Connect written methods to models.	Build-the-box multiplication; area model puzzles; product matching; “find the missing partial product” cards; real-world rectangle problems.

Grade-Level Readiness Skills

Fourth-grade review: multiply two 2-digit numbers with models and equations.

Fifth-grade preview: fluent multi-digit multiplication and expression writing.

Brain Maker Focus

This connects multiplication, place value, area, and early algebraic thinking.

Notes / Observations

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Pair 6: Division and Fact Families

Skill Builder	Use It / Hands-On Reinforcement
Division as equal groups and sharing; relationship to multiplication; quotients, remainders, and partial quotient thinking; use facts to divide.	Equal-group builds; array division; remainder reasoning; fact-family cards; “what multiplication fact helps?” prompts.

Grade-Level Readiness Skills

Fourth-grade review: divide using place value, properties, and the relationship between multiplication and division.

Fifth-grade preview: division with larger numbers and 2-digit divisors.

Brain Maker Focus

Division should feel connected to multiplication, not like a separate mystery procedure.

Notes / Observations

Pair 7: Expressions, Equations, and Multi-Step Word Problems

Skill Builder	Use It / Hands-On Reinforcement
Read word problems carefully; identify knowns and unknowns; write equations or expressions; use parentheses when helpful; estimate and check.	Draw-it/model-it mats; operation sorting; equation matching; “what is the question asking?” cards; reasonableness checks.

Grade-Level Readiness Skills

Fourth-grade review: multi-step problems with whole numbers and measurement contexts.

Fifth-grade preview: writing and interpreting numerical expressions and solving more complex real-world problems.

Brain Maker Focus

This is the bridge from answer-getting to mathematical thinking.

Notes / Observations

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Pair 8: Area, Perimeter, and Irregular Shapes

Skill Builder	Use It / Hands-On Reinforcement
Area as inside space; perimeter as distance around; rectangle formulas; decompose rectilinear shapes; find missing side lengths; count only outside edges for perimeter.	Tile rectangles; grid-paper shapes; split-the-shape challenges; perimeter paths; design-a-room or design-a-garden task.

Grade-Level Readiness Skills

Fourth-grade review: area/perimeter, measurement word problems, and decomposition of shapes.

Fifth-grade preview: volume and deeper measurement reasoning.

Brain Maker Focus

Area and perimeter must stay separate: area is inside; perimeter is around.

Notes / Observations

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Pair 9: Fraction Meaning and Fraction Models

Skill Builder	Use It / Hands-On Reinforcement
Fractions as numbers; numerator, denominator, unit fractions, equal parts, same whole, and fractions on a number line.	Fraction strips; build-a-whole; number-line hops; fraction circles; equal/not equal parts sort; same-whole discussion cards.

Grade-Level Readiness Skills

Fourth-grade review: fraction equivalence, ordering, comparing, and fraction notation.

Fifth-grade preview: fraction operations and visual models.

Brain Maker Focus

Before procedures, students need to know what a fraction actually represents.

Notes / Observations

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Pair 10: Equivalent and Comparing Fractions

Skill Builder	Use It / Hands-On Reinforcement
Generate equivalent fractions; compare fractions using same numerator, same denominator, benchmarks, number lines, and common denominators.	Fraction war; benchmark sorting; model matching; compare-on-a-number-line cards; “is this reasonable?” fraction checks.

Grade-Level Readiness Skills

Fourth-grade review: equivalent fractions and comparing fractions with models and reasoning.

Fifth-grade preview: using equivalence to add and subtract unlike denominators.

Brain Maker Focus

Benchmark thinking helps students catch unreasonable fraction answers.

Notes / Observations

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Pair 11: Fraction Operations and Mixed Numbers

Skill Builder	Use It / Hands-On Reinforcement
Add and subtract fractions with like denominators; work with mixed numbers; preview unlike denominators; introduce fraction multiplication as repeated groups or scaling.	Recipe math; fraction tile equations; build-the-sum models; mixed-number picture cards; simple “groups of fractions” models.

Grade-Level Readiness Skills

Fourth-grade review: add/subtract fractions and mixed numbers with like denominators; multiply fractions by whole numbers.

Fifth-grade preview: unlike-denominator operations and fraction multiplication/division concepts.

Brain Maker Focus

The denominator names the size of the pieces. The numerator tells how many pieces.

Notes / Observations

Pair 12: Decimal Place Value

Skill Builder	Use It / Hands-On Reinforcement
Tenths, hundredths, thousandths; decimals as fractions; word form; expanded form; compare and round decimals using place value.	Decimal grids; money-to-decimal cards; place-value mats; compare-and-order decimals; round-on-a-number-line tasks.

Grade-Level Readiness Skills

Fourth-grade review: tenths/hundredths and decimal comparison.

Fifth-grade preview: place value to thousandths, rounding decimals, and decimal reasoning.

Brain Maker Focus

Decimals are place value. They should not feel like a brand-new number system.

Notes / Observations

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Pair 13: Decimal Operations and Powers of Ten

Skill Builder	Use It / Hands-On Reinforcement
Add and subtract decimals; estimate decimal sums/differences; line up decimal points; preview multiplying/dividing by powers of 10 using place-value shifts.	Shopping totals; receipt math; decimal card sorts; decimal number-line problems; powers-of-10 place-value slide tasks.

Grade-Level Readiness Skills

Fourth-grade review: decimal comparison and money contexts.

Fifth-grade preview: operations with decimals to hundredths and powers-of-10 reasoning.

Brain Maker Focus

Decimal operations should be connected to place value and money, not memorized as isolated rules.

Notes / Observations

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Pair 14: Volume, Geometry, and Coordinate Grids

Skill Builder	Use It / Hands-On Reinforcement
Volume as cubic units; rectangular prisms; length x width x height; classify shapes; plot points on a first-quadrant coordinate grid.	Cube builds; volume counting; classify-shape sorts; grid maps; ordered-pair games; build-and-label rectangular prisms.

Grade-Level Readiness Skills

Fourth-grade review: lines, angles, shape properties, and measurement.

Fifth-grade preview: volume, coordinate planes, and classifying figures by attributes.

Brain Maker Focus

This is preview work, not mastery pressure. Students should recognize the language and models.

Notes / Observations

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Pair 15: Mixed Fifth-Grade Readiness Review

Skill Builder	Use It / Hands-On Reinforcement
Cumulative review: facts, place value, multiplication, division, fractions, decimals, money, time, area/perimeter, volume preview, and word problems.	Applied problem-solving stations; task cards; build-and-explain challenges; final readiness check; parent/tutor summary notes.

Grade-Level Readiness Skills

Fourth-grade review across major skill areas with fifth-grade readiness preview in operations, fractions, decimals, measurement, geometry, and problem solving.

Brain Maker Focus

Can the student choose a strategy, explain the thinking, use correct math language, and check for reasonableness?

Notes / Observations

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Activity Page and Hands-On Menu

These page and activity types fit the fourth-to-fifth transition plan. They can be repeated with new numbers, new contexts, and new vocabulary across several weeks.

Skill Area	Activity Page Ideas
Fact Fluency	Multiplication grids, fact-family triangles, division match cards, skip-count paths, missing-factor puzzles.
Place Value	Build-it/write-it/say-it mats, expanded form match, rounding number lines, compare-and-order cards.
Money and Decimals	Receipt totals, menu math, make-change cards, decimal place-value mats, money-to-decimal match.
Time	Analog/digital match, draw-the-hands clocks, elapsed-time number lines, schedule problems.
Multiplication and Division	Area models, partial-product mats, division grouping mats, remainder reasoning cards, estimate-then-solve.
Fractions	Fraction strips, number-line fractions, equivalent fraction match, benchmark fraction sort, recipe fraction tasks.
Area, Perimeter, and Volume	Tile rectangles, perimeter path tracing, split-shape area, missing-side challenges, cube-volume builds.
Coordinate Grids and Geometry	Grid maps, ordered-pair cards, classify-shape sorts, angle/line vocabulary cards.
Word Problems	Draw-the-story mats, operation sort, equation match, reasonableness check, explain-your-thinking prompts.

Math Language Cheat Sheet

Use this as a quick-reference language page for tutoring, parent conversation, and student explanations. The goal is repeated, natural use of the words while solving problems.

Operation Words

Word	Kid-Friendly Meaning
addend	a number being added
sum	the answer to addition
difference	the answer to subtraction
factor	a number being multiplied
product	the answer to multiplication
dividend	the number being divided
divisor	the number doing the dividing
quotient	the answer to division
remainder	what is left over after equal groups

Place Value and Decimal Words

Word	Kid-Friendly Meaning
digit	one symbol in a number
place	where a digit is located
value	what the digit is worth
standard form	the usual way to write a number
expanded form	a number broken apart by value
round	find a nearby easier number

estimate	a reasonable close answer
tenth/hundredth/thousandth	decimal places smaller than one whole

Fraction Words

Word	Kid-Friendly Meaning
numerator	top number; how many parts
denominator	bottom number; size/name of the parts
unit fraction	one equal part
equivalent	same value
benchmark	a familiar number used to compare, such as 1/2
same whole	fractions must refer to the same whole to compare
mixed number	a whole number and a fraction together

Measurement and Geometry Words

Word	Kid-Friendly Meaning
area	space inside a flat shape
perimeter	distance around the outside
decompose	break apart into smaller shapes
volume	space inside a 3D shape
cubic unit	unit used to measure volume
coordinate plane	a grid used to locate points

ordered pair	two numbers that tell where a point is

Thinking Words

Word	Kid-Friendly Meaning
equation	a math sentence with an equal sign
expression	numbers and operations without an equal sign
unknown	the missing number
variable	a letter or symbol used for an unknown
strategy	the plan used to solve
model	a drawing, tool, or object that shows the math
reasonable	an answer that makes sense
justify	explain why the answer works

End-of-Summer Readiness Check

Use this as a quick parent/tutor summary. The goal is a working understanding, not perfection in every category.

Skill	What We Want to See	Notes
Multiplication facts	Facts through 12 x 12 are improving and many are automatic.	_____
Division connection	Can use multiplication facts to solve basic division and reason about remainders.	_____
Place value	Can read, write, compare, round, and explain multi-digit whole numbers and decimals.	_____
Money	Can count money, add/subtract money amounts, and make simple change.	_____
Time	Can tell time to the nearest minute and solve simple elapsed-time problems.	_____
Word problems	Can identify what is known, choose an operation or expression, and explain the answer.	_____
Fractions	Can model, compare, generate equivalent fractions, and add/subtract simple fractions.	_____
Decimals	Can read, compare, round, and add/subtract decimals using place value.	_____

Area/perimeter	Can explain the difference and solve rectangle/irregular shape problems.	_____
Volume preview	Can count cubic units and understand volume as space inside a 3D shape.	_____
Math language	Uses core words like factor, product, quotient, numerator, denominator, decimal, area, perimeter, volume, expression, estimate, and reasonable.	_____

Final Note for Families

This plan is designed to help a rising fifth grader strengthen the fourth-grade skills that fifth-grade math depends on while previewing the language and thinking that will appear next. The work is built around generalized grade-level math skills and is taught through direct instruction, models, hands-on activities, math language, and real-world practice.

Brain Maker Connection: When students can explain their thinking, use correct math words, and apply math in real situations, they are not just completing problems. They are building flexible math brains.

Standards Note

This guide is built around generalized grade-level math skills commonly addressed in fourth and fifth grade math standards across states. It is intended as a parent-facing transition guide, not a state-specific standards document.

Reference Area	Use in This Guide	Notes
Generalized grade-level math expectations	Used to organize fourth-grade review and fifth-grade readiness skills.	This is not a state-specific standards document.
Upper elementary number sense and operations	Used to prioritize multiplication, division, place value, decimals, expressions, and multi-step problem solving.	Skills are presented in parent-friendly language.
Fractions, measurement, geometry, and data	Used to include fractions, decimals, area, perimeter, volume, coordinate grids, and applied reasoning.	Activities can overlap across several weeks.