

Book/Series	Description of Content
Preschool and Younger Kids Math Series	
Green (3Y)	Rote counting 1-5; one-to-one correspondence; same and different; sorting by attributes; small, medium, and large
Yellow (4Y)	Rote counting 1-10; one-to-one correspondence; match amounts with numerals; more/less; recognize and name basic shapes; patterns
Blue	Numeral recognition through 10; simple patterns; sequencing; sorting; demonstrate independence in counting; groups of similar objects
Purple	Beginning number combinations; rod recognition; greater than and less than; ordinal numbers; count backwards from 12; patterns; sorting; sequencing
Beg. Red (PK)	Beginning addition and subtraction; fact families; orally explain concepts of addition and subtraction and related vocabulary (add, plus, minus, subtract); missing addends; inverse operation as a method of checking; story problems; count to 100; time; money
Red 1 (K)	
Red 2	

Purple Math Series		Peach Math Series - Time; money; measurement	
Younger Kids only work on 1 book at a time Each book reviews previous skills as well as introduces new skills that increase in complexity and difficulty		Completed parallel to Purple Math starting after Potto	
Cape Buffalo	Place Value 1's and 10's; 2-digit addition and subtraction	Peach 1 (1)	Read and show time (o'clock, half past, quarter past, etc.); total value of coin sets; measuring inches and centimeters; scale drawings; make and interpret bar graphs; interpret logic diagrams
Potto*	Pictorial multiplication	Peach 1 +	Inches, feet, and yards; money skills; time skills using "minutes;" recognize and how halves, thirds, and fourths; compare cups, pints, and quarts
Puffins	Addition and subtraction with regrouping; "less than" and "greater than;" fraction concepts	Peach 2	Time; money; measurement; patterns and logic; measuring in ounces, gallons, liters
Capybara	Pictorial division	Peach 3	Pounds and kilograms; selecting correct standard measurement unit
Chameleon (2)	Multiplication facts through 9's; word problems with addition, subtraction, and multiplication; "hidden rod" problems using logic	Peach 4	Thermometers and temperatures
Angelfish	Division with 1-digit quotients; multiplication to check division; place value; rounding and estimation; graphs and tables; monetary change; word problems with division	Key Math – Fractions and Decimals Completed parallel to Purple Math starting at Angelfish (alternate Fractions and Decimal books) Fractions Books 1 - 4; Decimals Books 1 – 4; Algebra Books 1 through 10 Decimals 1/Fractions 2 is Decimals 3/Fractions 3 is 5th grade benchmark	

Armadillo (3)	Place value to 100,000; 3-digit addition and subtraction; use < and > to compare 3-digit numbers; round to nearest 10 and 100; column addition of 2-digit numbers, word problems and operations
Cassowary	2-digit multiplication; lattice method; standard and metric measurement; St. Andrew's Cross;" multiplication proofing; long division with 1- and 2-digit quotients; remainders; problem-solve with 3-digit addition and subtraction; organize a multi-step problem; visual imagery problems; introduction to geometry (polygon names, polyhedron names); line graphs
Ibex (4)	Multiply 3 digits by 1 digit; place value with 10 th and 100ths; divide 3 digits by 1 digit; probability; circle and picture graphs, averages; solve word problems pictorially; Fahrenheit
Linsang	4-digit addition and subtraction; perimeter; area; volume; means; double bar graphs; problem-solving using tables, guessing, checking; combinations
Dromedary	Multiply 2 digits by 2 digits with an without lattice method; geometry: congruence, right angles; Grams/kilograms; Celsius; problem-solving using lists, tables, and patterns
Tarsier (5)	Dividing 4 and 5 digits by 1 digits; add fractions with like denominators; round to 10, 100, 1000; range of data; problem-solving with pictures; diagrams and re-stating the problem
Manatee	Multiply 3 and 4 digits by 2 digits; divide 3, 4, 5 digits by 2 digits; prime and composite numbers; find area of circles, parallelograms, triangles; order of operations; solve complex word problems
Okapi	4- and 5-digit multiplication of 100; 3+-digit multiplication
Tapir	Ratio concepts; proportions; percents; fractions to decimals and back to fractions; percents to fractions and back to percents; proportions to percents; operations on intergers; prime factoring; variables, terms, expressions; equations
Tasmanian Devil	Probability; positive/negative intergers; polynomials
Hippo	Critical thinking; writing about math; problem-solving
Key Algebra 1-10	
The Key Algebra Curriculum consists of 10 books through which students progress once 5 th grade benchmarks are complete.	

Rivendell teachers are constantly re-assessing the math progression to ensure it is challenging, and rigorous. We also keep in touch with local middle schools and Rivendell alumni to verify that Rivendell students are prepared for middle school math in Poudre School District.

Iowa Test of Basic Skills (Math)

In accordance with the *Curriculum and Evaluation Standards for School Mathematics* of the National Council of Teachers of Mathematics (NCTM), the Math tests at all levels do much more than assess skill in solving numerical problems. The tests emphasize the ability to do quantitative reasoning and to think mathematically in a wide variety of contexts.

At Levels 7 through 14, there are three separate tests. The first is called Math Concepts at Levels 7 and 8 and Math Concepts and Estimation at Levels 9 through 14. This test requires students to demonstrate their understanding of fundamental ideas in the areas of number properties and operations, geometry, measurement, algebra, probability and statistics, and estimation. At Levels 9 through 14, the separately timed Estimation section tests mental arithmetic, number sense, and various estimation skills such as rounding.

The second test, called Math Problems at Levels 7 and 8 and Problem Solving and Data Interpretation at Levels 9 through 14, includes word problems that require one or more steps to solve. In many cases, students select an appropriate method or approach, rather than compute an answer. At Levels 9 through 14, several real-world "stories" form the basis for sets of three to four problems, each requiring somewhat different skills to solve. Levels 7 through 14 also include data displays such as tables and graphs. Students use them to obtain information, compare quantities, and determine trends or relationships.

Each problem in the third test, Math Computation, requires one arithmetic operation — addition, subtraction, multiplication, or division. The problems require operations with whole numbers, fractions, decimals, and various combinations of these, depending on the test level. Students must work a problem and compare their answer with the choices given. The last answer option is "N," meaning the correct answer is "Not given."