MATHEMATICS PROGRAMS AND RESOURCES A DESCRIPTION

HOUGHTON MIFFLIN KNOWING MATHEMATICS: www.schooldirect.com 14 weeks of instruction is geared toward small groups of students who are one or more years below grade level. Using proven instructional strategies, mathematical conversations (language of mathematics), and strong visual models gives your struggling students a new way to think about and learn math. Grades: 4-6.

PEARSON AGS GLOBE PACEMAKER BASIC MATHEMATICS:

<u>www.agsglobe.com</u> encourages students to learn at a pace that is right for them by including manageable lesson size, extensive practice and review, and a controlled reading level and vocabulary support. It fosters content understanding, skill development, and retention through review, reinforcement, and applications. It is a full curriculum featuring Student Edition, Student Workbook, Teacher Answer Edition, and a Classroom Resource Binder that includes reproducible practice, assessments, and tools for classroom management.

Grades: 6-12.

SRA-MCGRAW HILL PUBLISHING CORRECTIVE MATHEMATICS SERIES:

www.sraonline.com teaches students the strategies they need for learning facts, working computation problems, and solving story problems. Programs include consistent and carefully sequenced lessons that quickly bring students up to date on core skills, and each skill is taught so students fully understand it and practice it until it is mastered. Program includes addition, subtraction, multiplication, division, fractions, decimals, percents, equations and ratios, (Multiple entry points into each program based on Pre-test of student's skills)

Grades: 6-12.

SRA-MCGRAW HILL PUBLISHING MATH LAB 2C: www.sraonline.com

delivers reinforcement of basic skills, extra practice on more complex topics, and higher-level challenges to ensure mathematics concept mastery. Applying the timetested methods from SRA Reading Labs to math, this program challenges all students regardless of their existing skill levels.

Non-consumable kit includes:

- One copy of every Skill Card (218 different cards)
- Answer Key Cards (one for every Skill Card)
- Activity Cards (65)
- Project Cards (10)
- Mental Power Builders (300)
- Student Record Folders (5)
- Teacher Materials: Answer Book (1), Blackline Masters, Wall Chart

Grade: 6.

AGS PUBLISHING BUILDING BASIC MATH SKILLS WORKTEXT:

<u>www.agsnet.com</u> provides an introduction to basic arithmetic operations through short, two-page lessons. Written specifically for low-level readers, this Worktext can be used alone or alongside other math materials. Covers these math concepts:

- Whole numbers
- Fractions
- Decimals
- Percents
- Geometry and Measurement

Grades: 6-12.

AGS PUBLISHING MATHEMATICS: PATHWAYS: <u>www.agsnet.com</u> presents math skills in a lively format. This text offers highlighted vocabulary words with definitions, step-by-step examples, sidebar features, notes, chapter reviews, and test-taking tips. In addition, the curriculum includes hands-on manipulative activities and exercises letting students construct models that demonstrate selected lesson concepts. Grades: 6-12.

AGS PUBLISHING BASIC MATH SKILLS: <u>www.agsnet.com</u> offers additional instruction on basic mathematical concepts and operations. It provides extensive examples and practice activities-all presented as real-life situations, so students see the relevance of math in their day-to-day lives. Grades: 6-12.

AGS PUBLISHING LIFE SKILLS MATH: <u>www.agsnet.com</u> provides comprehensive instruction that students and adults need for independent living. Grades: 6-12.

AGS PUBLISHING PRE-ALGEBRA: <u>www.agsnet.com</u> makes a smooth transition from basic math to algebra. It is written for the needs of the beginning algebra student. Grades: 6-12.

SOPRIS WEST ALGEBRA 1 RESCUE: www.sopriswest.com has more than 60 objectives (five per chapter) and begins with "concept development," which ensures that students thoroughly understand concepts before moving on to practice and problem solving activities. Pretests allow teachers to match keyed exercises to skill level, and posttests measure students' mastery of each objective. This program not only creates success for students who have struggled in Algebra 1, it provides teachers with a practical means of teaching in a classroom with mixed ability levels. Grades: 9-12.

CARNEGIE LEARNING COGNITIVE TUTOR ALGEBRA I:

<u>www.carnegielearning.com</u> is software based on a cognitive model. Students learn in an environment that's similar to working one-to-one with an instructor. Each student benefits from an individualized course of instruction complete with immediate feedback, prescriptive remediation, and assessment. Grades: 9-12.

MCDOUGAL LITTELL LARSON LEARNING: LARSON'S ALGEBRA 1:

www.larsonlearning.com is a multimedia mathematics program that can be individualized to fit any curriculum and student proficiency level. Its 15 modules cover the entire Algebra 1 curriculum. Every topic has interactive tutorials for skill building and problem solving. These tutorials are designed to engage and motivate students while allowing them to progress at their own pace. Grades: 9-12.

MATH TEACHERS PRESS, INC. MOVING WITH MATH, "SUMS FOR HIGH

SCHOOL": www.movingwithmath.com develops understanding of mathematical concepts through manipulative-based lessons, language development and problem solving. This curriculum provides the tools under prepared students need to build a knowledge bank in Number Sense and Operations; Mathematical Reasoning; Measurement and Geometry; Probability, Statistics, Data Analysis; and Functions and Algebra I. *Moving with Math* uses developmentally appropriated strategies based on research about how students learn. Students move from a concrete stage to a transitional or representational mode involving pictures and then to a greater level of abstraction.

Grades: 9-12.

MATH TEACHERS PRESS, INC. MOVING WITH MATH, MATH BY TOPIC:

<u>www.movingwithmath.com</u> is a complete curriculum to help students build new knowledge upon what they already know. Manipulative activities are in integrated to teach knowledge essential for algebra.

Grades: 6-10.

CARNEGIE LEARNING COGNITIVE TUTOR BRIDGE TO ALGEBRA:

<u>www.carnegielearning.com</u> is a full-year blended curriculum (text and software) based on a cognitive model targeting students who are not ready for Algebra. The course covers all five middle school content strands and emphasizes problem solving and mathematical literacy.

Grades 8-12.

CARNEGIE LEARNING COGNITIVE TUTOR INTEGRATED MATH 1:

www.carnegielearning.com is software based on a cognitive model. Students learn in an environment that's similar to working one-to-one with an instructor. Each student benefits from an individualized course of instruction complete with immediate feedback, prescriptive remediation, and assessment. This course includes the following topics: organizing single variable data, patterns and linear functions, proportional reasoning, modeling situations using multiple representations, linear equations: solving, graphing, intercepts, and slope, area and perimeter, the Pythagorean Theorem, quadratics, statistical analysis, and probability.

Grades: 9-12.

MCDOUGAL LITTELL LARSON LEARNING: LARSON'S PREALGEBRA:

<u>www.larsonlearning.com</u> is a multimedia mathematics program that can be individualized to fit any curriculum and student proficiency level. Its 23 modules cover the entire prealgebra curriculum with middle school math review. Every topic has interactive tutorials for skill building and problem solving. These tutorials are designed to engage and motivate students while allowing them to progress at their own pace. Grades: 6-9.

CONTEMPORARY BOOKS NUMBER POWER SERIES: www.mhcontemporary.com is for those who want to develop and improve their math skills. Every Number Power book targets a particular set of math skills with straightforward explanations, easy-to-follow, step-by-step instruction, real-life examples, and extensive reinforcement exercises. Use these texts across the full scope of the basic math curriculum, from whole numbers to pre-algebra and geometry.

Grades: 6-12.

ETA CUISENAIRE FRACTIONWORKS: www.etacuisenaire.com a complete curriculum for hands-on teaching of fractions, decimals, and percents. A wide variety of manipulative, help students visualize and attach concrete meaning to abstract fractions. Multiple-choice assessment and item analysis tools help the teacher effectively prepare students for higher-level mathematics. Grades: 3-5.

AGS PUBLISHING BUILDING MATH SUCCESS WORKBOOK SERIES:

<u>www.agsnet.com</u> is a resource students can use to practice their math skills. The series targets specific skill areas and includes remediation, on-level practice, and enrichment exercises. It correlates with G•MADE and is designed so students can use the workbooks independently.

Grades: 6-12.

STECK~VAUGHN WORKING WITH NUMBERS REFRESHER: www.steck-vaughn.com ranges from skill building to extra practice to remediation. Topics include whole number computation, fractions, decimals, percents, algebra skills, geometry, measurement, problem solving skills. Grades 5-12.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS THE DECIMAL FACTORY: www.WrightGroup.com reinforces money, estimation, and other crucial decimal lessons. The lessons are covered in a reproducible binder of concrete manipulative activities.

Grades 6-8.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS BUILDING MATH IDEAS:

<u>www.WrightGroup.com</u> helps students to improve performance by understanding math processes using test items as the vehicle. This text helps students increase their mathematical abilities in understanding, reasoning, and problem solving, which become essential to increase performance on standardized tests.

Grades: 6-8.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS BUILDING ROADS TO

REASONING: www.WrightGroup.com increases your students' ability to reason with dynamic problem-solving lessons. While the emphasis is on reasoning and problem solving, the lessons reinforce computational skills in topics appropriate to the grade level.

Grades: 6-8.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS FACTS THAT LAST:

<u>www.WrightGroup.com</u> uses four books (Addition, Subtraction, Multiplication, and Division) as the cornerstones for teaching facts. Each book contains 7-strategies to help your students learn facts, as well as activities, daily warm-ups, and daily practice for each strategy.

Grade: 6.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS GROUNDWORKS,

REASONING WITH NUMBERS: www.WrightGroup.com helps students develop their ability to reason about and with numbers. The goal of the text is to go beyond dealing with the reading and writing of numbers as well as computation and help students develop a better understanding of number concepts and skills. Sets of problems include reasoning problems, ample practice, and teacher guided lessons. The workbook contains reproducible pages.

Grades: 6-7.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS THINKING

MATHEMENTALLY: <u>www.WrightGroup.com</u> provides mental computation strategies that can be applied to operations with whole numbers, decimals, fractions, and percents. It includes blackline masters for overhead transparencies and student practice. Grades: 5-6.

SOPRIS WEST TRANSITIONAL MATHEMATICS: <u>www.sopriswest.com</u> is designed for students who score at or below the 40th percentile on national math tests. Grades 6-8.

- **DEVELOPING NUMBER SENSE, LEVEL ONE** helps students learn to talk about mathematics. They advance from whole number operations to topics that are standard in middle school; work longer, multi-step problems; and learn about measurement, interpreting/graphing data, division, multiplication, and estimating.
- MAKING SENSE OF RATIONAL NUMBERS, LEVEL TWO helps students focus on rational numbers, geometry, and working with data. Students also learn to see and explain ideas behind formulas; work with fractions, decimals, line graphs, and percentages; and understand mean, median, and range.
- UNDERSTANDING ALGEBRAIC EXPRESSIONS, LEVEL THREE focuses on the following topics: negative numbers, exponents, properties, simple algebraic expressions, ratios, proportions, probability, and three-dimensional geometry.

PCI BASIC MATH PRACTICE NUMBER OPERATION: www.pcicatalog.com provides multiple opportunities for practice and application through real-world problem solving. Reproducible binders provide activities appropriate for students from elementary through secondary.

BECON MEASURING UP: is a nine part television series designed to introduce measurement concepts to elementary students and to model appropriate teaching techniques for teachers. It is also on tape and each tape is a 15-minute segment. Students work with an on-screen teacher to learn the customary and metric measurements. The programs are excellent visuals that prepare students for the measurement strand on the FCAT. The tapes can be purchased from BECON. Grades: 3-5.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS GROUNDWORKS, REASONING ABOUT MEASUREMENT: www.WrightGroup.com presents five big ideas of measurement-units, measurement sense, conversions, scale, and formulas-to build the foundation for measurement work. Discussion questions and solutions, along with reproducible student pages of varying difficulty, help teacher tailor instruction to meet individual student needs.

Grades: 6-7.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS CONNECTIONS LINKING MANIPULATIVES TO MATHEMATICS: www.WrightGroup.com ensures that students make vital connections between their experiences with materials, oral and written language, and mathematics. It includes resource books and manipulative kits for teaching key concepts at any grade.

Grades: 6-8.

PCI BASIC MATH PRACTICE MEASUREMENT: <u>www.pcicatalog.com</u> provides multiple opportunities for practice and application through real-world problem solving. Reproducible binders provide activities appropriate for students from elementary through secondary.

BECON PUTTING GEOMETRY ON THE MAP: is a twelve part television series designed to introduce geometric concepts to elementary students. Each of the 15-minute programs must be viewed in chronological order. The programs are excellent visuals that prepare students for the geometry strand on FCAT. The tapes can be purchased from BECON. Grades: 3-5.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS GROUNDWORKS, REASONING WITH GEOMETRY: www.WrightGroup.com provides students with activities that investigate shapes, symmetry, congruence, angles, rotations, reflections, and more. The text provides a teaching problem for each activity set, accompanied by questions and ideas teachers can use to lead a discussion while reviewing each concept. Reproducible student pages of varying difficulty are available.

Grades: 6-7.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS ALGEBRA THINKING: FIRST-EXPERIENCE: www.WrightGroup.com provide manipulative activities with cubes to involve students in logical and algebraic thinking. Lessons build students' informal understanding of algebra and a foundation for formal algebra studies by using simple algebraic notations. Grades: 6-8.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS GROUNDWORKS,

ALGEBRAIC THINKING: <u>www.WrightGroup.com</u> helps students develop their reasoning skills in algebra by providing innovative problems that connect arithmetic with algebra. Concepts of algebra include: representation, proportional reasoning, balance, variable, function, and inductive reasoning. Teacher guided lessons through discussion and reproducible student pages. Grades: 6-7.

ETA CUISENAIRE ALGEBRAWORKS: <u>www.etacuisenaire.com</u> is a new program that offers a hands-on approach to help students visualize abstract concepts and build mathematical fluency by integrating algebraic thinking with basic math topics. Grades: 3-6.

ETA CUISENAIRE HANDS-ON EQUATIONS: www.etacuisenaire.com is an innovative program that offers a simplified, concrete approach to learning about algebraic linear equations. Students use the game pieces to physically build a given algebraic equation, then solves it through manipulation of the pieces.

Grades: 4-9.

BEST QUEST ALGEBRA'SCOOL: www.bestquest.com is a supplemental algebra curriculum which includes: 20 DVDs, an Instructor's Manual, Blackline Masters, and more. It's the only DVD math product that is:

- proven to excite students about math
- standards-based and textbook-aligned
- a combination of auditory, kinesthetic, and visual learning
- perceived as more "entertaining" to students, without sacrificing the quality of education standards in the process

Grades: 9-12.

OPTIONS PUBLISHING FOUNDATIONS IN ALGEBRA:

www.optionspublishing.com supports algebra instruction early and often for students who need more instruction and practice. It integrates mathematical models and teaches students to interpret and analyze mathematical situations and structures. The format is clean and easy to read. A walk-through guides students with reminders and step-by-step solutions. It identifies crucial prerequisite skills required for students to succeed in Algebra. A pretest and posttest (Skill Checks) identify student progress and where they may need additional instruction. Additional practice is provided for each skill in two sections of each book. An easy-to-read Skills Chart records progress and assists teachers with instructional planning.

Grades: 9-12.

SOPRIS WEST YOU CAN BE ALGEBRA READY: www.sopriswest.com is a supplemental program that provides the direct instruction and essential math knowledge students need to successfully complete their algebra course. A seven-step process in each of the 36 lessons offers teachers a highly sequential and focused strategy that meets the NCTM Standards 2000, and a delivery method that promotes student confidence and success.

Grades: 9-12.

THE WRIGHT GROUP/CREATIVE PUBLICATIONS GROUNDWORKS, REASONING WITH DATA AND PROBABILITY: www.WrightGroup.com helps students develop their ability to interpret and reason with data analysis and probability. Students are continually confronted with the displays of data to interpret, organize and describe. Discussion of concepts is lead by the teacher and reproducible student pages provide enhancement practice.

Grades: 6-7.

PCI BASIC MATH PRACTICE TABLES, GRAPHS AND CHARTS:

<u>www.pcicatalog.com</u> provides multiple opportunities for practice and application through real-world problem solving. Reproducible binders provide activities appropriate for students from elementary through secondary.

ETA CUISENAIRE SUPER SOURCE: www.etacuisenaire.com is organized by grade levels which focus on one of following seven manipulatives, base ten blocks, color tiles, Cuisenaire rods, geoboards, pattern blocks, snap cubes, and tangrams. Simple three-step lesson plans, all the information you as the teacher need from how to get started to understanding where the mathematics is in each activity. Sequential instructions move the students from the concrete to the abstract by providing opportunities of experimentation. Activities can be selected by math strand or topic. Grades: 5-6, 7-8.

GREAT SOURCE EVERY DAY COUNTS® CALENDAR MATH:

www.greatsource.com is a program that has been updated and expanded with more information and activities to help teachers build students' math understanding over time. Still packed with a comprehensive Teacher's Guide, a calendar and calendar pieces, counting tape, clocks, and demo coins to help students see patterns, develop algebraic thinking, and explore math relationships throughout the year, the updated kit now includes ready-to-use activity pieces and assessment tools to make implementing the program even easier. A handy all-new flipchart with daily assessment questions for each element of the program, and copymasters for pre- and posttests help teachers evaluate students' understanding of critical math concepts. Grade: 6.

GREAT SOURCE EVERY DAY COUNTS® ALGEBRA READINESS:

<u>www.greatsource.com</u> is a program that revolves around a simple bulletin board containing a variety of elements that focus on interrelated mathematics strands. Students have the daily opportunity to experience up to a full year or more of activities to preview, review, practice, or discuss critical algebra readiness concepts. Grades: 6-9.

THOMPSON PETERSON'S GET WISE! SERIES: <u>www.petersons.com</u> consists of general skill books for middle school or high school students that present difficult topics in a fun, easy to understand manner. Grades: 7-11.

- **Get Wise! Mastering Word Problems** helps students improve their math skills in solving word problems. Led by the hip, clever, wisecracking Chi, Get Wise! Mastering Word Problems discusses ways to 'translate' word problems so they are easy to understand (and to solve) and offers entertaining drills, fun activities, and games to help readers apply their skills.
- **Get Wise! Mastering Math Skills** helps students improve their math. Led by the hip, wisecracking Chi, discusses the fundamentals of math in a satirical, conversational tone and cool and entertaining drills, fun activities, and games to help readers apply their skills.

GLENCOE SKILLS INTERVENTION FOR MIDDLE SCHOOL MATHEMATICS:

<u>www.glencoe.com</u> is a convenient educational tool that increases and maintains mathematical competency. The Skills Intervention programs are easy-to-use, manageable programs for summer school, after school, and intervention programs. Each teacher binder includes diagnostic pretests, full-color teaching transparencies, a teacher guide with answers, a student workbook, a tutorial intervention CD-ROM, and separate posttests for each strand covered. Additional student workbooks (in English or Spanish) and tutorial CD-ROMs are available separately. Grades: 6-8.

OPTIONS PUBLISHING FOUNDATIONS IN MATH: www.optionspublishing.com is designed for students who function below grade level. To move students towards success on level, they must correctly apply the prerequisite skills taught in the years prior to their current grade level. A Student Matrix provides an on-going record of diagnosis and growth. Students move through Guided Instruction with test preparation embedded into every question.

Grades: 6-8.

OPTIONS PUBLISHING COMPREHENSIVE MATH ASSESSMENT:

www.optionspublishing.com identifies which math concepts students have difficulty with AND which question types they need to practice. Instruct and Practice the Skills Students Need More Help With! It includes additional instruction and practice organized by math concept and question type.

It offers more: approaches to solve problems, practice on each math strand, and instruction and practice linked together. Question types include multiple choice, short response and extended response.

Grades: 6-8.

PRENTICE HALL SKILLS INTERVENTION KIT: www.phschool.com is aimed at students who are struggling with course-level work because they lack the basic skills required to succeed. Designed to foster independent study, this program includes all the tools teachers need to diagnose gaps, prescribe an individualized course of study, and monitor student progress. Available in English and Spanish, the Skills Intervention Kit can be used as a complete curriculum or to supplement any textbook. Grades: 6-12.

KEY CURRICULUM PRESS KEY TO . . .® WORKBOOKS: www.keypress.com offers alternative learning materials for alternative learning styles. Satisfy your hard-to-meet curriculum needs for students who don't easily fit into a regular school program or who have special learning difficulties. Key to... workbooks offer a positive alternative to large, expensive textbooks, which students often find complicated and intimidating. Only one concept is presented per page, so students have time to understand new ideas without being overwhelmed. Handwritten examples and exercises make work seem less intimidating. The vocabulary and reading level are simple. Instructions are clear and direct, so students can work alone or in small groups, giving you more time with those who need extra help.

Grades: 6-12.