Type:	Topic:	Use:
Article	Achievement in decline?	Possibilities of why 9th graders no longer score as well on achievement tests.
Article	Adhesion Disk	Adhesion Disk shows the measurable attraction between
Article	Artist Designs Materials Science Exhibits	Tom Rockwell's career as an artist and designer of scientific illustrations, science museums exhibits, and large sculptures or playgrounds that teach scientific concepts.
Article	Charge and Carry	Instruction for making a cheap electrophorus (charge carrier)
Article	Chemistry: Name that Chemical	Using sense of sight, smell, and touch, students attempt to identify unknown substances
Article	Diffraction Hands-On Activity	Instructions for a hands-on activity for students to show diffraction easily
Article	Electricity & Magnetism: The Bolt Catchers	Researchers fire rockets at the sky to create lighning in order to capture it and study its currents
Article	Hand Battery	Instructions for a hands-on activity to make a batter out of skin
Article	Inverse Square Law	Although this is math, it helps students understand the inverse r-squared dependence of graviation and electrostatic forces.
Article	Laser Jello	Students can make lenses from gelatin; can do total internal
Article	LPS School Test Results 2003-2004	Journal Star June 27, 2004 School Test Results for Elementary and Middle schools
Article	Pressure: Working in a Vacuum	How to evacuate air from a glass canning jar
Article	So Few Pulsars, So Few Females	By Jocelyn Bell Burrell from SCIENCE VOL 304 23 APRIL 2004 parallels the recognition of pulsars to the advancement of
Book	150 Science Experiments	8 animated units: Floating and Sinking; Shadows and Reflections; Machines and Movement; Sound and Music; Air
Book	A Sampler of National Science Education Standards	Addresses organization and need for standards and standards for: science teaching, professional development, assessment, science content, science program, and science education system; also includes web links and info about National Science
Book	A Teacher's Guide to Superconductivity for High School Stude	Includes: Intro, History, Fudamentals, Applications, and Chemistry of Superconductors, Temperature Measurements, Preparation of 1-2-3 Superconducting Pellet, Electrical Contacts, Handling Liquid Nitrogen, Demos, Experiments, Superconductivity Chemistry Problems and Solutions,
Book	Action Talk & Text, Learning & Teaching Through Inquiry	Includes identification of research questions, teaching strategies, and suggestions for facilitating inquiry-based learning and teaching for elementary, intermediate, and senior grades
Book	ATLAS of Science Literacy, American Association for the Adva	Science, Mathematics, Technology, Physics, Living Environment, Human Organism, Human Society, Designed World, Math, History, Themes & Systems, Habits of Mind, Reflections, Strand Maps & Benchmarks This book can be used by anyone for the teaching of science. Teachers/Science Educators would find it helpful to identify ideas that students will
Book	Atomic Structure and Valency	College-level physics/chemistry textbook

Book	Beam and Wave Electronics in Microwave Tubes	College-level physics textbook
Book	Beginning Science	Children's book that includes: gas, seeing in dark, orange ice cubes/icebergs, lifting air, moon, rain, roller coasters, proving
Book	Ben Franklin and the Magic Squares	Elementary book on Ben Franklin
Book	Building Activities using gears	Activities that use gears that we have in cabinet 8
Book	Bursts of Energy	Energy Education activities for Gr. K-6
Book	Chemical Bonding	Activities on chemical bonding
Book	Chemical Magic	A collection of demonstrations addressing gas liberation, color
Book	Circuit Diagrams	Booklet on how to draw circuits
Book	College Physics, 3rd Ed.	College-level introductory physics textbook
Book	College Physics, 4th Ed.	College-level introductory physics textbook
Book	Communicating in Science: Writing a Scientific Paper and Sp	Uses an essay as an example of a scientific paper, describes preparation of manucripts, speaking at meetings, and writing theses; addresses English as a second language, North Americans, and provides information regarding dictionaries, style books, and other literature
Book	Condensed States	Hands on activities and demonstrations in chemistry
Book	Conference on K-12 Outreach from University Science Departme	Collection of Papers from Universities on Outreach programs
Book	Connect to NCTM Standards 2000: Making the Standards Work a	8 lesson books, each for seperate grade between 1 and 8 regarding numbesr and operations, algebra, geometry, measurements, and data analysis and probability
Book	Construction for Children Projects in Design Technology	book showing how to make vehicles of all kinds--car, airplanie, boat, etc
Book	Dazzle 'em with Sytle--The Art of Oral Scientific Presentati	Guide for less experienced presenters that shows how to communicate scientific ideas clearly and powerfully through preparation, body language, tips, and use of visual aids
Book	Designing Mathematics or Science Curriculum Programs	Guide for using mathematics and science education standards, which includes: components of effective mathematics and science programs, criteria, and structured, focused, and coherent process for developing curriculum
Book	Do Penguins Have Knees?	In depth answers to every day trivial questions

Book	Electrical Circuits	Electrical Circuits - Teachers' guide
Book	Energy Concept Science	Teacher's guide for Energy topics: light, chemical change, heat, sound, magnets, and electricity
Book	Ever Wonder...	Series of columns answering everyday/scientific questions
Book	Foundations of Physical Science Teacher's Guide	Unit 6: Properties of Matter Unit 7: Changes in Matter Unit 8: Water and Solutions
Book	Foundations of Physical Science Textbook	Unit 1: Forces and Motion Unit 2: Work and Energy Unit 3: Electricity and Magnetism Unit 4: Sound and Waves Unit 5: Light and Optics Unit 6: Properties of Matter Unit 7: Changes in Matter Unit 8: Water and Solutions Unit 9: Heating and Cooling
Book	Foundations of Physical Science Workbook: Investigations	Experiments for: Unti 1: Forces and Motion Unit 2: Work and Energy Unit 3: Electricity and Magnetism Unit 4: Sound and Waves Unit 5: Light and Optics Unit 6: Properties of Matter Unit 7: Changes in Matter Unit 8: Water and Solutions Unit 9: Heating and Cooling
Book	Fundamentals of Classical Thermodynamics	College-level engineering/chemistry/physics textbook on thermodynamics
Book	Gases	Activities with gases
Book	Getting Science Grants: Effective Strategies for Funding Success	
Book	Giant Book of Challenging Thinking Puzzles	Use critical thinking to make observations, reason using assumptions, look for sequences, etc. to solve puzzles
Book	How Do They Do That?	Covers an array of topics: fireflies, polygraphs, pilots, lead, neon signs, bridges, diamonds, underwater tunnels, balloons,
Book	How Things Work	Uses physics to analyze how the objects work, such as: light dimmers, frisbees, flight, copy machines, smoke alarms,
Book	How to Entertain With Your Pocket Calculator	Pastimes, diversions, games, magic tricks, mini-tricks, keyboard puzzles, addition, multiplication, division, number puzzles, pyramids, etc.
Book	How to Talk so Kids Will Listen & Listen tso Kids Will Talk	Intends to improve communication between child and parent by means of coping with child's negative feelings, expressing anger without being hurtful, engaging child's wiling cooperation, setting firm limits, maintaining goodwill, using alternatives to
Book	Hydraulics	College-level engineering textbook
Book	Inquiry and Learning--Realizing Science Standards in the Cla	Contents: Thinking About Science and Science Teaching, Doing Science, Understanding Science, Teaching Science
Book	Inside Out--The Wonders of Modern Technology	Colorul, computer-generated illustrations show readers the inside workings of technology including: airplanes, space shuttles, ultrasounds, laser surgery, magnetic resonance imaging, solar energy, cable TV, holograms, remote control,

Book	Investigations Foundations of Physical Science	
Book	K'Nex--A set of individual posters on building bridges	Posters showing how to construct bridges
Book	Knowing and Teaching Elementary Mathematics	Addresses fundamental mathematics elememtary teachers need to become accomplished math teachers and compares with China; addresses teaching conditions in the United States, and suggests changes in teacher preparation, teacher support,
Book	Lateral Thinking Puzzles	100 mind benders force people to think laterally; includes puzzlers, clues, and answers
Book	Mastering the Periodic Table: Exercises on the Elements	Worksheets for: atomic numbers & weights, N and C families, metals, nonmetals, common & new elements, elements in human body, alkaline meatals, earth alkaline metals, unusual element symbols, elements in Periods 2,3,4,7, Find two groups,
Book	Matter and Its Changes	32 Lesson Plans/Activities regarding properties of matter and states of matter
Book	Mechanics: Berkeley Physics Course Vol. 1, 2nd Ed.	College-level mechanics textbook
Book	Meet Me in the Middle, Becoming an Accomplished Middle-Level	Addresses: differentiating instruction, motivating early adoloescents, teaming, teaching in block-length classes, using authentic & alternative assessment effectively, writing in all subjects, holding students & teachers accountable, involving parents, mentoring teachers, using games in the classroom,
Book	More Mathematical People Contemporary Conversations	Gives backgrounds, personalities, and interests for 18 mathematicians
Book	More Sideways Arithmetic from Wayside School	Sideways arithmetic problems and brainteasers that can be solved using simple math
Book	Mostly Magnets	AIMS Activities for grades 2 - 8 covering following topics:
Book	National Science Education Standards	Includes: Principles, Definitions, and Science Teaching, Professional Development for Teachers of Science, Assessment, Science Content, Science Education Program,
Book	Nature of Matter	Includes following sections: Introduction, Students' Notions
Book	Navigating through Geometry in Grades 3 - 5	Includes cd (applets, templates, puzzle set, tesselation art, blackline masters) and following sections: shapes, location, transformations, spatial visualization, blackline masters and solutions
Book	New Formulas for America's Workforce--Girls in Science and E	Includes following chapters: Teaching with a Difference, A Welcoming New Environment, Courses that Feed--not Weed, New Dimensions in Diversity, and Changing the Learning Environment
Book	Nine Crazy Ideas in Science	Nine controversial propositions on the following controversial topics (introduction to thinking like a scientist): More Guns

Book	Nonlinear Electrical Networks	College-level engineering/physics electricity textbook
Book	Numerical Analysis	College-level mathematics textbook
Book	Of Cabbages and Chemistry	Activities to explore acids and bases
Book	On Writing Well	Includes transactions, simplicity, clutter, style, the audience,
Book	Passport to Algebra and Geometry	Series of teaching tools, transparencies, solutions manual, answer masters, formal assessment, practice workbook, lesson plans, etc.
Book	Physics for Society	College-level introductory physics textbook, focusing on practical and real-world applications of physics principles
Book	Physics S.I. Version	College-level introductory physics textbook (S.I. units only)
Book	Physics: A General Introduction, 2nd Ed.	College-level introductory phyiscs textbook
Book	Pocket Guide to Technical Writing	Addresses writing quickly, organization, visual appeal, and grammar using guidelines and models, including letters, memos, proposals, and reports
Book	Postcards from Pluto--A Tour of the Solar System	Cartoon illustrations of solar system
Book	Primary Energy	General Energy Infobook and Energy Sources Stories for K-4
Book	Principles of Physics, 5th Ed.	College-level introductory physics textbook
Book	Problem Solving Across the Disciplines	Includes: Getting Started in Problem Solving, The Monty Hall and Other Probabilistic Problems, Ben Franklin's Advice and Other Decision Strategies, Prisoner's Dilemma and Other
Book	Rocks and Fossils	1 booklet and 1 poster explaining fossils and rocks
Book	Science and its Ways of Knowing	The three sections of essays--scientific method, developing theory, and contexts of discovery--aim to address physical and biological science relationships b/w fact and theory, the nature
Book	Science Demonstrations Handbook	Includes following chapters: Organizing a Science Day, Physics Activities (Magnetism, Surface Tension, Vacuum, Cool Physics, Misc), Chemistry Activities (Explosions, Polymers, Colloids,
Book	Science Explorer: Animals	Chapters: Sponges, Cnidarians, and Worms, Mollusks, Arthropods, and Echinoderms, Fishes, Amphibians, and Reptiles, Birds and Mammals, and Animal Behavior Skills
Book	Science Explorer: Astronomy	Chapters: Earth, Moon, and Sun, The Solar System, and Stars, Galaxies, and the Universe Skills handbook, exploration, practice, reinforcement, everyday application
Book	Science Explorer: Cells and Heredity	Chapters: Cell Structure and Function, Cell Proceses and Energy, Genetics: The Science of Heredity, Modern Genetics, and Changes Over Time Skills Handbook, Inquiry Activities,
Book	Science Explorer: Chemical Building Blocks	Chapters: Introduction to Matter, Changes in Matter, Elements and Periodic Table, and Carbon Chemistry Skills handbook, exploration, practice, reinforcement, everyday application

Book	Science Explorer: Chemical Interactions	Chapters: Chemical Reactions, Atoms and Bonding, Acids, Bases, and Solutions, Exploring Materials Skills Handbook, Exploration, practice, reinforcement, everday application
Book	Science Explorer: Earth's Changing Surface	Chapters: Mapping Earth's Surface, Weathering and Soil Formation, Erosion and Deposition, and A Trip Through Geologic Time Skills Handbook, opportunities, exploration and inquiry, practice, reinforcement, everyday application,
Book	Science Explorer: Electricity and Magnetism	Textbook includes following chapters: Magnetism & Electromagnetism, Electric Charges and Current, Electricity & Magnetism at Work, and Electronics Skills Handbook, exploration, inquiry, practice, reinforcement, everyday
Book	Science Explorer: Environmental Science	Chapters: Populations and Communities, Exosystems and Biomes, Living Resources, Land and Soil Resources, Air and Water Resources, and Energy Resources Skills Handbook, opportunities, exploration, inquiry, practice, reinforcement,
Book	Science Explorer: From Bacteria to Plants	Chapters: Living Things, Viruses and Bacteria, Protists and Fungi, Introduction to Plants, and Seed Plants Skills Handbook, Inquiry Activities, practice, everyday application, interdisciplinary activities, visual exploration
Book	Science Explorer: Human Biology and Health	Chapters: Healthy Body Systems, Bones, Muscles, and Skin, Food and Digestion, Circulation, Respiration and Excretion, Fighting Disease, The Nervous System, and the Endocrine System and Reproduction
Book	Science Explorer: Inside Earth	Chapters: Plate tectonics, earthquakes, volcanoes, minerals, rocks Skills Handbook, opportunities, exploration, inquiry, practice, reinforcement, everyday application, visual
Book	Science Explorer: Motion, Forces, and Energy	Chapters: Motion, Forces, Forces in Fluids, Work and Machines, Energy and Power, and Thermal Energy and Heat Skills Handbook, Inquiry Activities, exploration, practice, reinforcement, everday application, visual exploration
Book	Science Explorer: Weather and Climate	Chapters: Atmosphere, Weather Factors, Weather Patterns, and Climate and Climate Change Skills Handbook, Exploration, practice, reinforcement, everyday application, interdisciplinary activities
Book	Selecting Instructional Materials--A Guide for K-12 Science	Procedure to help decisionmakers evaluate and choose science materials for the classroom; explores the influence of parent attitudes, politics, and sales people on purchasing decisions.
Book	Sideways Arithmetic from Wayside School	Sideways arithmetic problems and brainteasers that can be solved using simple math
Book	Sizes--How Big (or Little) Things Really Are	Illustrated encyclopedia of measurement; includes every unit of measurement, visual prespective of proportion and dimension, conversions, and formulas
Book	Solutions	Activities with solutions
Book	STC Meets the Standards	Includes: introto science & technology for children curriculum, STC & National Science Education Standards, STC 1st, 2nd,
Book	Stop Faking It! ENERGY	Explanations of work, kinetic energy, potential energy, the transformation of energy, simple machines, heat energy,
Book	Stop Faking It! FORCE & MOTION	Combines easy explanations with activities and equipment to explain Newton's laws, physics of space travel, etc.

Book	Stop Faking It! LIGHT	Uses rays, waves, and particle models of light to explain reflection, refraction, optical instruments, polarization,
Book	Stop Faking It! SOUND	Introduces sound waves, uses models to explain sound-related occurrences, and explores instruments, addition and subtraction
Book	String and Sticky Tape Experiments	Uses string, tape, and other materials to demonstrate mechanics, properties of matter, hydrodynamics, heat, wave motion, light, sound, atomic and nuclear physics, electrostatics,
Book	Structures	A book for middle school students develops concepts and
Book	Successful Lab Reports (A manual for Science Students)	Designed for biology and chemistry undergraduates beginning to write science; addresses formating, presentation, interpruting data, scientific style within a report, structure of first draft, revisiont, and polishing
Book	Superconductivity	Activities on superconductivity
Book	Teacher's Guide for Physical Science	Explains Properties of Matter, Changes in Matter, and Water and Solutions
Book	The Art and Science of Lecture Demonstration	Addresses problems with talking to different age groups, visual aids: film, video-recording, & closed-circuit TV, audience psychology, travelling lecturers, dealing w/ disasters, and gives detailed descriptions of 50 old/new demos
Book	The Art of Construction--Projects & Principles for Beginning	Explains principles of building, uses projects and materials to show construction of bridges, arches, and simple machines, tension, compression laws of equilibrium, etc. Materials include: drinking straws, tongue depressors, paper, sponges, balloons, rulers, styrofoam, and eggs.
Book	The Art of Scientific Writing: From Student Reports to Prof	Includes following topics: reports, theses, papers (journal articles), books, materials, tools, methods, quantities, units, numbers, equations, formulas, figures, tables, and collecting and citing literature
Book	The Cheshire Cat & Other Eye-Popping Experiments on How we S	Experiments on Perception and deception to discover how eyes and brains work
Book	The Cool Hot Rod & Other Electrifying Experiments on Energy	Experiments on energy and matter
Book	The Craft of Scientific Presentations: Critical Steps to Su	Provides examples of contemporary and historical scientific presentations that aim to inform or persuade to show effectiveness and flaws of content, structure, visual aids, and delivery; provides strategies to incorporate graphics and text in projections as well.l
Book	The Elements of Style	Contents: Elementary Rules of Usage, Elementary Principles of Composition, A Few Matters of Form, Words & Expressions
Book	The Five Biggest Ideas in Science	Uses The Atom, The Periodic Law, The Big Bang, Plate Tectonics, and Evolution to help reader gain appreciation for
Book	The Flying Cicus of Physics WITH ANSWERS	collection of problems and questions about physics in everyday world like: frisbees, thunder, rainbows, sand dunes, soap bubbles, rubber bands, ski goggles, water pipes, eggs, teapots,

Book	The Handy Physics Answer Book	Simple answers to simple physics questions, which address: Movement, Work, Energy, Simple Machines, Objects at Rest, Fluids, Heat and Thermodynamics, Waves, Sound, Light,
Book	The Handy Science Answer Book	Answers over 1200 frequently asked, yet difficult-to-answer, science and technology questions in the following areas: Physics, Chemistry, Space, Earth, Climate, Weather, Minerals,
Book	The Know How Book of Experiments--Safe & Simple Experiments	Includes activities that demonstrate air pressure, gas formation, crystal growth, optics, sound, static electricity, friction, photosynthesis, evaporation, precipitation, and centrifugal force
Book	The Magic Wand and Other Bright Experiments on Light & Color	Experiments on Light and Color
Book	The Native Americans of the Nebraska Plains	Lessons: Intro, Social Order/Government, Dwellings--Earthlodge, Natural Resources--Dyes, Dwellings--Tipi, Natural Resources--Tools/Utensils, Natural Resources--Bison, Dress,
Book	The Role of Physics Departments in Preparing K-12 Teachers	Standards aim to improve preparation of science teachers and challenge colleges and universities to equip teachers with science content knowledge, an understanding of the processes and context of science, and technology use; discusses role of physics department in preparing future K-12 teachers and case
Book	The Science Teacher's Book of Lists	Lists for devloping instructional materials and lesson plans for elementary and secondary students in the following areas: plants, animals, health & nutrition, chemistry, physics, earth
Book	The Secret Life of the Brain	Outreach toolkit to be used with a PBS documentary
Book	The Spinning Blackboard & Other Dynamic Experimetns on Force	Experiments on Force and Motion
Book	The Visual Display of Quantitative Information	Includes Graphical Practice (excellence, integrity, sources, and sophistication) and Theory of Data Graphics (data-ink & redesign, chartjunk: vibrations, grids, & ducks, data-ink maximization & design, multifunctional graphical elements, data
Book	The Woman Scientist, Meeting the Challenges for a Successful	Explores status of women scientists in predominantly male oriented field of science
Book	Transparency Acetates PHYSICS 4th Edition	301 colorful Physics Transparencies covering a range of topics
Book	Turning the World Inside Out	Collection of inexpensive physics demonstrations that outline objectives, equipment needed, procedures, and instructions to
Book	Vibration and Shock in Damped Mechanical Systems	College-level physics/engineering vibrations textbook

Book	Why Can't You Tickle Yourself? And Other Bodily Curiosities	Fun Facts about bodily functions, including: flushing, blinking, dreaming, dying, hiccoughs, heartburn, sex, snoring
Book	Why Toast Lands Jelly-Side Down	How to design physics demonstrations and over 100 simple, inexpensive, examples
Book	Wonders in Science: Sound	Sound activities for children
Book	Wonders in Science: Temperature	Temperature activities for children
Book	Writing & Speaking in the Technology Professions	Provides concise advice from experts on how to communicate effectively in the workplace; it includes writing technical documents, giving oral presentations, presenting information visually, holding meetings, and listening
Book	Your First Year as an Elementary School Teacher	Provides solutions to common, difficult issues of teaching such as cooperation, learning, and respect.
Electron	Battery Charger	Duracel and Kodak Battery Chargers
Electron	Black Light	
Electron	Blender	
Electron	Camcorder & Accessories	Sony Digital Handycam 700x
Electron	Camera and video	Flex Cam Eductional
Electron	Computer Desktop Projector	InFocus
Electron	Digital Camera	Three cameras Kodak DC 5000
Electron	Electric Binder with Supplies	
Electron	Electric Rotator and rotator disks	
Electron	Hot Plates	Four
Electron	Hydraulic Pump	Hand Pump
Electron	Keyboard	Audio Casio
Electron	Lamps--Halogen and gooseneck	
Electron	Light Box and Optical Set	Dark boxes and light bulbs demonstrate light transmission through concave and convex lenses, diffraction, refraction, and
Electron	Magnetizer/Demagnetizer	
Electron	Motion Sensors	6 boxes with Motion Sensors working in connection with
Electron	Optical Transform Kit--Simulting Diffraction Experiments in	
Electron	Regulated Power Supply	This is used with the Light Boxes and Optical Sets

Electron	Soldering Station	Electrical
Electron	Strobe Light	
Electron	Temperature Probes	Vernier
Electron	Tripod	For Camera
Electron	Vernier Force Probes	Box of assorted student force probes working in connection with Universal Lab Interface and different connections to apple
Electron	Video Camera	Pansonic
Fun	Cells and Heredity BINGO	Review game for the first sections of the Cells and Heredity unit
Fun	Cells and Heredity Jeopardy	Power point jeopardy for cells and heredity unit
Fun	Cells and Heredity Jeopardy Objectives and Vocabulary	Outline for cells and heredity unit; provides basis for jeopardy
Fun	Chemistry Jeopardy	Covers: physical and chemical changes, evidence of chemical changes, chemical equations, types of chemical reactions, fire
Fun	Earth's Changing Surface Jeopardy	Includes questions covering vocabulary for Earth's Surface, Weathering, Soil Formation and Conservation, and Water Erosion
Fun	Electricity and Magnetism Jeopardy Game	Review of vocabulary for 6th Grade Electricity and Magnetism--including Electricity, Magnetism, Electromagnets, Circuits, Currents, Charges
Fun	Living Organisms: The Secret Life of Guinea Pigs	Powerpoint presentation: description, habitat, characteristics, classification, and training
Fun	Physics Baseball Cards	All-Stars Baseball Cards representing the following physicists: Alvarez, Bethe, Boltzmann, Gibbs, Kepler, Mayer, Poincare,
Hands-on	Acceleration Ramps	
Hands-on	Amazing Ice Melting Blocks	Totally Awesome to Watch!! This is one of the most striking demonstrations we have seen in a long time. Place an ice cube
Hands-on	Angular Momentum Tub	
Hands-on	Angular Momentum Turntable	
Hands-on	Astronomy Poster	
Hands-on	Atom, magnetic board	This is a magnetic board with magnets representing positive, negative and neutral charges. Atom orbitals are shown on the
Hands-on	Balance scale	Primary scale with teddy bears as measures
Hands-on	Balances, Peg Board	Used to demo torque and balance
Hands-on	Bernouli Beach Ball	Used with Bernouli Ball Experiement (a write up in file cabinet)
Hands-on	Bone Exploration Cat Skull	

Hands-on	Bone Exploration Human X-Rays	
Hands-on	BoomWhackers	Four sets (See also the Write-up). Each set consists of 8 plastic
Hands-on	Bubbles	
Hands-on	Bucky Ball	
Hands-on	Buoyancy	Tub contains special clay that can float as well as weights to
Hands-on	Buzzers	Borrowed from the Math Department
Hands-on	Center of Mass	Compliments Angular Momentum
Hands-on	Color cards-ROSCOLUX	Groups all of the newer colors, identified with 4-digit numbers in the front section of the swatchbook. These colors include the
Hands-on	Color Paddle Set - Filters	Primary Mix - Red, green, blue. Secondary Mix - Cyan, magenta, yellow. Diffraction gratings polarizers diffusers
Hands-on	Density	floating density sphere, PVC density specimens, density rods,
Hands-on	Density Shapes	various densities to test
Hands-on	Dinosaur Unit	Contains some useful posters and literature on dinosaurs.
Hands-on	DNA	
Hands-on	Electric Circuits	Insulating tubes, battery holders, switches, banana Clips, ohm
Hands-on	Electric Wires with Banana Plug Ends	
Hands-on	Electromagnet Tub	This tub contains five coils of wire and a module describing an electromagnets activity. You will need the
Hands-on	Electromagnet/Magnet Tub	This tup goes along with the Electromagnet Tub. It has all of the equipment needed to make an electromagnet. It includes nails
Hands-on	Electrostatics Tub	Variety of materials to be used with the Van deGraaf generator (pie plates, plastic and metal cups with packing peanuts, wig,
Hands-on	Energy	The tub contains a solar panel which powers either a fan or a
Hands-on	Fluids	
Hands-on	Gears	four sets of Gears for building simple machines
Hands-on	Generator Kit	Four mechanical generators each of them comes with bulbs.
Hands-on	Geometric Optics Tub	Tub includes: light, lenses, reflection and refraction tools, cards of optical illusions, etc.
Hands-on	Geometric Shapes	Volume
Hands-on	Germs: Glow in the Dark Germs Makeup	Quick spread of germs
Hands-on	Human Biology: Human Tissue Slides	cerebellum (brain), mammal spongy bone; skeletal muscle; hyaline cartilage; human simple squamous epithelium, blood, skin
Hands-on	Human Eye Tub	Contains a model of the human eye, self-screening vision tester
Hands-on	Human Heart Tub	model of human heart, blood pressure cuff, and stethoscope, diagram of heart
Hands-on	Hyman Fire Piston	Conversion of work into heat
Hands-on	Illusionator	Instrument for study the visual effects of illusions - has
Hands-on	K'Nex Bridges	One Tub
Hands-on	K'NEX Extra Parts	
Hands-on	K'Nex Forces and Energy	Two Tubs, useful for energy unit in grade 3. Hands on activities include building a rubber-band racer or racers with motors.

Hands-on	K'NEX MicroPower Motors	six extra motors for making K'NEX Cars
Hands-on	K'Nex Simple Machines	Two Tubs
Hands-on	Legos	Dacta (Build Machines)
Hands-on	Legos	Robotics
Hands-on	Lenz's Law	
Hands-on	Leo Sticks	
Hands-on	Liquid Nitrogen Dewar	
Hands-on	Magnetic Declinator	This is a device that can measure the angle between the reading of a compass needle and true North. There is only one
Hands-on	Magnetic Fields & Forces Kit	Includes 30 Assorted Magnets and Magna-View film
Hands-on	Magnetism stuff II	More magnetism related activities including: the magic Penny kit, a magnetic sculpture toy, a large horseshoe magnet, plastic
Hands-on	Magnets and Magnetism	Variety of equipment to use with unit work. Materials include: a Magnetism module, demagnetizer, Iron fillings, Wax paper, cow
Hands-on	Masses	1 g to 20 g hexagram sets; 1 g cubes; steel 10 g to 1000g;
Hands-on	MegaBlocks	4 sets
Hands-on	Microscope	Micromaster III (4, 10, 40 XR)
Hands-on	Microscope	Fischer Scientific compound (40x, 100x 400x)
Hands-on	Miniature Balancing Birds	Center of Gravity Experiments
Hands-on	Mirage (optical illusions)	
Hands-on	Morris & Lee and student cells	
Hands-on	Motion: Match Box Cars	Tub of match box cars for motion
Hands-on	Motors	wire cutter, electric motors, hand operated generator, etc
Hands-on	Motors and Generators	There are two hand generators and two electric motors.
Hands-on	Multimeters (4)	Used as ammeter, voltmeter, or ohmmeter
Hands-on	Name that Chemical	
Hands-on	Nanomaterials	Explores Nanoworld (Reference Videotape)
Hands-on	Oooh Aaah Chemistry	
Hands-on	Polymers	
Hands-on	Pressure: Bell Jar	
Hands-on	Pressure: Hands On Pressure Tub	
Hands-on	Prisms and Lenses	
Hands-on	Pulleys	The big tub contains single, double and triple pulleys, some
Hands-on	Roller Coaster Physics (K'NEX)	The parts in the purple tub build 4-6 lab stations at one time including inclined lane and ball loop trajectory; or 1 of 2

Hands-on	Seat Belts, Airbags, and Acceleration Ramps	2 Tubs
Hands-on	Shampoo Evaluation Kit	
Hands-on	Skeletal System Poster	
Hands-on	Slimey Chemistry	
Hands-on	Slinkys	Small and large slinkys
Hands-on	Solar Car	A toy car powered by sunlight or a 60-walt lightbulb. No
Hands-on	Solids, Liquids, and Gas	Tub
Hands-on	Sound	One Tub--function generators and digital sound meters Second
Hands-on	Spectroscopy	
Hands-on	Student Cell Set (3)	Can construct Votaic Cell which transforms chemical energy into kinetic energy using electrodes and electrolytes,
Hands-on	Sunder Ball	Mixture of gases combined with high frequency electromagnetic
Hands-on	sunscreen Evaluation Kit	
Hands-on	Superconductors	Electricity and Magnetism requires liquid nitrogen Balloons,
Hands-on	Temperature	
Hands-on	Temperature Show	Two tubs
Hands-on	Thermal Conductivity	
Hands-on	Thermometers, Infrared	
Hands-on	Timers	MyChron Digital Tub
Hands-on	Van De Graaf Generator	
Hands-on	Volt Meter and Cables	
Manual	Casio Keyboard, User's Guide	
Manual	Digital Function Generator--User Guide	Used with sound
Manual	Dissectable Electromagnet	Using eyebolt, battery holder, core, yoike, and coil assembly, one can explore magnetic fields, magnetic circuits, coils, wires,
Manual	Genecon--Manual Electric Generator	Instructions and example experiments for Genecon--Manual Electric Generator
Manual	MacMotion – Exploring Force and Motion	Using MacMotion software
Manual	Singerman Color Apparatus	Using No. 13014 Singerman Color Apparatus
Manual	Van de Graaff Electrostatic Generator Model N-100V	Using the Van de Graaff Electrostatic Generator

Software	Cassini-Huygens Mission to Saturn & Titan	Educational CD ROM: Ways of Seeing includes interactive activities, details of the Cassini mission, remote sensing curriculum, images, and classroom activities; also, posters,
Software	Voyager III Dynamic Sky Simulator	For Windows (Carina Software) uses deep space images and celestial data to capture beauty and dynamic motions of night sky
Supplies	Acrylic Paint	
Supplies	Badge Maker	Badge maker, button covers, button backings, circle cutter
Supplies	Balance scales	six triple beam and 4 split balance
Supplies	Batteries	Duracell Rechargeable
Supplies	Battery Holders	9 volt holders and C size holders
Supplies	Battery Testers	Battery Testers
Supplies	Beakers (glassware)	Ten Sets of 10 ml to 500 ml; Two 190 x 100; 2 200 ml to 2000 ml; and thirty 250 ml
Supplies	Borax	For making slime
Supplies	Centering Ring	Ring to use with the vacuum
Supplies	Chalk	
Supplies	Chromatography Paper	
Supplies	Clothespins	
Supplies	Common Science Equipment	acids and bases, pH paper, styrofoam, safety glasses, propane torch with flint striker, glue sticks, scissors, quick grip bar clamp, etc.
Supplies	Extension cords	
Supplies	Racquetballs	
Supplies	Seashells and Chart	Two Bags
Supplies	Spring Scales	2 Spring Scales
Supplies	Squand	Polymer-coated sand that dries immediately upon removing
Supplies	Stanchions and Chains	For roping off an area
Supplies	Test Tubes and Bases (glassware)	tubes/bases 250 ml
Supplies	Thermos	Gallon Igloo for liquid nitrogen
Supplies	Thread	
Supplies	Tongs	
Supplies	Tool-Grip	
Supplies	Tools	hammers, tin snips, etc.
Supplies	ULI's and Supplies	
Supplies	Vacuum Pump Oil	Hydraulic
Supplies	Whistling Whizzers	
Supplies	White Board Markers	Tub of markers
Supplies	White Boards	Nice to use along with buoyancy tub for keeping track of best
Supplies	Whiteboard Markers and cleaner	
Videotap	Forces and Motion	Tape I time and distance, investigations and experiments, speed, using scientific model to predict speed, position and time

Website	48 Optical Illusions & Visual Phenomena	Optical Illusions regarding motion and time, luminance and contrast, color, geometric and angles, size contancy, cognitive-gestalt effects, and faces
Website	Amusement Park Science	A general overview of all amusement park rides and the physics behind specific ones. It covers Merry-Go-Rounds, Bumper Cars,
Website	APS - American Physical Society	The American Physical Society represents some 45,000 physicists, and most of our work centers on scientific meetings
Website	Astronomy Education at the University of Nebraska	The ClassAction section provides interactive classroom materials for teaching astronomy
Website	Auroras: Paintings in the Sky	Includes a teacher page, aurora links, and a self-guided tour of auroras
Website	Biographies of Women Scientists	Biographies for approximately 150 women scientists
Website	Carolina World-Class Support for Science and Math	Offers products, classroom activities, teacher resources, news, articles, software information, etc. for all areas of the science and math curriculum
Website	Classroom Antarctica	Units for Teachers: The Big White, Exploration, Community, On Thin Ice, Sourther Life, Deep Freeze, International,
Website	Darwin Center	Botany (plants), Entomology (insects and spiders), Mineralogy
Website	Dinosaur Illustrations	Illustrations of specific dinosaurs listed from a to z.
Website	Education and Teacher Resources	Geoscience lesson plans, cd roms/books, on-line resources, opportunities, activities, and suggestions.
Website	Electricity and Magnetism Safety	A Project-Fulcrum generated page with some fundamentals about safety for Electricity and Magnetism. Transparencies included in file.
Website	Enchanted Learning	Resources for the following topics: K-3, Writing, Fiction, Biology, Physical Science, Language, Geography/History, and
Website	Forum on Science and Technology	
Website	Geoscience Education	Includes: Curriculum Materials, Professional Development, Conferences & Awards, Online Resources, Highlights,
Website	Guide to ARCUS Education and Public Outreach	Teachers and Researchers Explore and Collaborate in the Arctic
Website	Hands-On Activities from Jefferson Lab's BEAMS Program	Example Role Model Projects, Education Programs, Resources, Hands-On Activities, Games and Puzzles, Seminars, Workbench Projects, Other Sites, Homework Helpers, Search Option
Website	High Plains Regional Climate Center Photo Gallery	Index of photos pertaining to regional climate and weather events.
Website	Innerbody On-Line	Pictures of different physical systems

Website	Mathematical Moments	A website with short, one-page flyers on various topics. Probably applicable to many different topics. Very short and
Website	Newton's Second Law Applet	There is a wagon on an air track glider and a mass hanging over the side. The mass of the wagon and the hanging mass can be changed to see how they affect acceleration. There is
Website	Position, Velocity and Acceleration Applet	Shows plots of position, velocity and acceleration vs. time. Initial parameters are adjustable by the user.
Website	Recurring Science Misconceptions In K-6 Textbooks	Includes: General Misconceptions, Electricity Misconceptions, Comment Book, Suggest Your Own K-6 Textbook Misconceptions, and Science Myths spread by K-6 Textbooks, Books, Articles, and other links
Website	Roller Coaster Applet	The other site is an applet type of thing where you can make changes to a roller coaster and then see if the coaster will work.
Website	SAE Foundation - A World in Motion	Since 1986, the SAE Foundation has not only supported, but also nurtured students' enthusiasm for science and technology education. Through award winning K-12 Educational Programs,
Website	Science Education Resource Center (SERC)	Covers the following areas: Starting Point Teaching Entry Level Geosciences, Cutting Edge, Earth Exporation Toolbook, Teaching Quantitative Skills in Geosciences, Research on Learning in the Geosciences, and Using Data in the Classroom
Website	Seeing Your Retina	Instructions for a safe activity for students to see the blood supply of the retina and find their blind spots
Website	SimForest	SimForest is a computer simulation for 7th graders and up that
Website	Teachers Experiencing Antarctica and the Arctic (TEA)	TEA is partnership between teachers, researchers, students, school district, and community to increase content knowledge, enhance teaching skills, transfer the experience to classroom, assume leadership roles, and collaborate with network of
Website	The American Society of Parasitologists	Description of parasitologists and parasites
Website	The Encyclopedia of Astrobiology, Astronomy, and Spaceflight	Website gives clear explanations for hundreds of astronomical terms
Website	The Franklin Institute Online	Large database filled with many resources on all topics
Website	The Great Plant Escape	Interdisciplinary lessons to increase students overall understanding of plants--aimed at 4th and 5th grade students
Website	The Internet Campus	Internet Campus by EOA Scientific, developer of educational science software, contains multimedia exercises for: Earth,
Website	Toyota TAPESTRY Grants - NSTA	Toyota TAPESTRY recognizes outstanding educators who are making a difference by demonstrating excellence and creativity in science teaching. Since 1991 the program has awarded more
Workshee	Animal Kingdom Key	Matching worksheet of creatures and characteristics for 1st graders Pictures of plants and animals included
Workshee	Apple Enzyme Activity	Data sheet/worksheet Washington Red Delicious apples work the best (some apples were designed to contain very little
Workshee	Butterflies	Several worksheets on metamorphosis, camouflage, and
Workshee	DNA Extraction Activity	Using detergent, enzymes in meat tenderizer, and alcohol, one can see DNA

Workshee	Earth's layers: their location & thickness	
Workshee	Energy, Entrophy, and Environment	
Workshee	Experiment Questions	A worksheet of questions to ask students while conducting an experiment.
Workshee	Graph and Grid Games	Series of points that take shape when plotted as graph
Workshee	Horses: The Wild Bunch	Magazine that describes the habitats of horses (pictures included)
Workshee	Infection in the Classroom: Parasites as Models to Teach Bi	Briefly describes why classrooms should study parasites, gives suggestions on how to teach this section of the cirriculum to students, gives tips on organizing Parasite units, and provides other useful resources
Workshee	Making Observations / Thinking Like a Scientist	An inquiry activity for 3rd graders that demonstrates the scientific method; includes worksheets and transparencies
Workshee	Mathematicians help in global war on terror	Article addresses mathematical techniques that may help intelligence agencies fight terrorism.
Workshee	Mathematics and M&Ms	Use M & M's to build spread sheets and graphs
Workshee	Measurement Concept Worksheets	Exercises for the Concept of Measurement and Geometry
Workshee	Metric Unit of Study	metric rulers, conversion cards, student metric cards, common metric unit cards, 2 posters on metrics, and several activities to
Workshee	Microscope Lab	These worksheest provide instructions on operating
Workshee	Physics: Karate	Why you can break a board in half with your hands
Workshee	Polymers: How to Make your own Rubber	Two worksheets: 1) Ingredients for Rubber making and Instructions 2) Student Activity Sheet--Chart combination of different amounts of ingredients and results
Workshee	Real Life Applications of Fractions	Provides worksheets for grades 5 -7 on modeling fractions, comparing fractions, equivalent fractions, rounding and approximating fractions, mixed numbers / improper fractions,
Workshee	Reflection and Refraction: Disappearing Beaker	Reflection and Refraction of Light using cooking oil and beakers made of material with the same index of refraction as cooking oil
Workshee	Reproduction in Bacteria	
Workshee	Snowman Punnett Squares	This activity is about traits
Workshee	Soils by State from USDA-NRCS	Describes soil types by state, the effects of water and wind erosion, soil absorption, and temperature change. Also answers questions about worms.
Workshee	Solenoid: Building a Solenoid	Instructions on how to build a solenoid using: pencil, ruler, tray, battery, nail (or paperclip), insulated wire, and straw

Workshee	Specialized Cells Research Activity	Explore the development of organisms, the nature of cells, and discover their connections to human health and scientific research
Workshee	Spiders	Everything you want to know about spiders and their habitats.
Workshee	Zoo Scavenger Hunt	An example of how to set up a scavenger hunt worksheet for a trip to a museum, a series of displays, etc. This one was for the
Write-Up	6th Grade Summer Academy June 2004	Schedule and plans for the 6th Grade Sumer Academy used in June 2004.
Write-Up	Angular Momentum: Bicycle Wheel	Conservation of angular momentum
Write-Up	Angular Momentum: The Ice Skater	Ice skaters and divers use angular momentum to perform turns and spins.
Write-Up	Archeology Through Garbology	Excavation and analysis of artifacts found in garbage to understand lifestyles of people in the past
Write-Up	Bernoulli Ball	Faster fluid movement exerts less pressure
Write-Up	Bone Exploration	Examining cat bones and human x-rays
Write-Up	Center of Mass	A system of masses tends to rotate about the system's center
Write-Up	Chemistry: Identifying Acids and Bases with Red Cabbage	Demonstrates how to determine if a substance is acidic or basic
Write-Up	Chemistry: Script	
Write-Up	Color	Demonstrates additive and subtractive color mixing using color
Write-Up	Color Mixing Script	Two-person script regarding colors formed by light
Write-Up	Color PowerPoint Presentation	Color, Electromagnetic Spectrum, Wavelengths, Mixing Light/Colors, White Light, Mixing Pigments, and Absorption
Write-Up	Delicious Dirt	Using ice cream sandwiches, brownies, pudding cups, oreo
Write-Up	Disease Detectives	Picture stations set up around the room that display causes of health problems that spread
Write-Up	DNA Script: A Name-Tag for All Living Things	
Write-Up	Earth's Changing Surface Objectives and Content Background	Content background linked to LPS Earth's Changing Surface objectives.
Write-Up	Electromagnets	Demonstrates how an electric current flowing through a wire
Write-Up	Electrostatics	Origin of static electricity and different conductors and
Write-Up	Electrostatics Demonstration Script	Three-person script for an electrostatics demonstration; includes PowerPoint presentation from ScienceWorks
Write-Up	Electrostatics: Static Electricity Centers	Four centers: The Balloon Can-Can, Spinning Charge Explorer, Two Charged Balloons, and Electroscope

Write-Up	Electrostatics: Van de Graaff Demonstration	Using a small generator, strips of paper, pie tins, packing peanuts, a metal and plastic cup a lightning board, and a light ball explores charge, lightning, conductors and insulators.
Write-Up	Embryology: Animals that Lay Eggs	PowerPoint presentation of eggs from birds, an ostrich, reptiles, turtles, mammals, and a platypus (filled with pictures).
Write-Up	Energy: Energy from the Sun	Forms of energy and energy transformation between forms
Write-Up	Energy: Fruit and Vegetable Clock Chemical Cell	Chemical energy transformation to kinetic and thermal energy
Write-Up	Energy: Generator	Forms of energy and energy transformation from kinetic to heat
Write-Up	Energy: Handboiler	Forms of Energy and Energy Transformation
Write-Up	Energy: Kinetic and Potential Energy	Potential and kinetic energy--transparencies and experimentation (includes lab worksheets)
Write-Up	Energy: Transferring Energy with a Handboiler	Different forms of energy and how energy is transformed from one form to another
Write-Up	Failure and Fracture of Materials (How Things Break)	Brittle vs. ductile materials, work hardening, crack propagation, and the Bauschinger effect
Write-Up	Fluids	Operation of fountains using plastic tubes and 3 two liter bottles
Write-Up	Geometric Optics	Lenses
Write-Up	Germs: Glow in the Dark Germs	Germs spreading is demonstrated with glow in the dark lotion and a blacklight
Write-Up	Heredity: Mendel Law and Probability	Mendel's experiments and an activity that applies his methods to predict the occurrence of traits in offspring of parents with particular traits
Write-Up	Heredity: Paternity Analysis (Brain Teaser Game)	Figuring out paternity using locus and allele
Write-Up	Hot Tamale Demonstration	As students eat a hot tamale, the digestion process is described by reacting a hot tamale with molten potassium chlorate (flame
Write-Up	Kinematics: Newton's Third Law of Motion	Newton's 3rd Law of Motion
Write-Up	Kinematics: Seat Belts and Airbags	Play the role of a scientist to determine what makes a restraint effective
Write-Up	Lenses: Image Formation and the Anatomy of a Lens	Convergence and Divergence of prisms, lenses, double convex and concave lenses, refraction, and uses of lenses (includes transparencies)
Write-Up	Magnetism	Magnetic properties of matter and magnetic forces
Write-Up	Magnets and Magnetism	Properties of magnets and magnetic fields; activities show magnetically induced currents, magnetic field lines, magnet

Write-Up	Magnets, Magnetism, and Superconductors	Series of demos desinged to illustrate properties of magnets, magnetic fields, magnetically induced currents, magnetic field line shapes, materials made into magents, and incorporation of
Write-Up	Mathematics: Flag Symmetry	A brief activity that illustrates symmetry effectively using an American flag
Write-Up	Mathematics: Houdini Knows Math-Magic Card Trick	Math Card Trick Can be used at Math/Science nights, as an Ice Breaker, or for Skills Building Class
Write-Up	Mathematics: Math Magic Night	Activities for students and parents to increase interest in mathematics
Write-Up	Mathematics: The Numbers Game Math-Magic Card Trick	Used at Math/Science nights as an Ice Breaker or for Skills Building Class
Write-Up	Matter: Bubbles	Use soap solution to explore shapes: tetrahedron, cube,
Write-Up	Microbiology: Careers in Microbiological Science	Describes a microbiologist and the different disciplines he/she can go into, lists courses needed, and gives examples of pay
Write-Up	Optics: Laser Light Show	Diode Laser Walkman, a powered speaker with a mirror, and a microphone demonstrate how figures in laser light shows are
Write-Up	Optics: Reflection and Refraction	Reflection and refraction of light, principles of lenses and prisms, and activity for total internal reflection and fiber optic communication
Write-Up	Optics: The Human Laser	Students represent different parts of a laser
Write-Up	Physics of Juggling	Laws of motion, forces, and velocity using the skill of juggling
Write-Up	Pressure Demonstration Script	2 person script; includes PowerPoint presentation from ScienceWorks
Write-Up	Pressure: Are You Stronger than Air? The Magdeburg Sphere	Strength of air pressure under circumstances and vacuums
Write-Up	Pressure: Bed of Nails!	Lying on a bed of nails is possible in terms of pressure
Write-Up	Science Night	Angualar Momentum and Static Electricity activities for students
Write-Up	Science Olympiad Coaches Clinic	Science Olympiad Coaches Clinic
Write-Up	Science Skills: Improving Students' Note Taking Skills	Improve students' note-taking skills (recording oberservations, data, etc.) and show the importance of these skills
Write-Up	Scientific Method	Using the Scientific Method
Write-Up	Simple Machines: Pulley	Several pulley setups, Newton's laws, and mechanical advantages calculated
Write-Up	Spectroscopy	Uses slide projector, spectroscopes, mecury spectrum tube,
Write-Up	Torque	Why more difficult to hold an object at arm's length rather than

Write-Up	Yeast	View yeast under a microscope, observe the gas and its effects