



LJ Group



Educational
Solutions

**Living with Science Supporting
Illinois Science Standards**

CM501/A

Contents

Section 1 – Illinois Science Standards

Section 2 – Illinois School District Science Scores

Section 3 – LWS Correlation at a Glance

Section 4 – LWS Assignment Correlation

Section 5 – LWS Objectives Correlation

Section 6 – LWS Objective Lists

Section 1.

Illinois Science Standards

SCIENCE

The *Illinois Learning Standards for Science* were developed using the 1985 State Goals for Science, the National Science Education Standards, various other state and national works, and local education standards contributed by team members.

Science is a creative endeavor of the human mind. It offers a special perspective of the natural world in terms of understanding and interaction. The aim of science education is to develop in learners a rich and full understanding of the inquiry process; the key concepts and principles of life sciences, physical science, and earth and space sciences; and issues of science, technology, and society in historical and contemporary contexts. The National Science Education Standards present these understandings and their interactions with the natural world as eight science content standard categories. The *Illinois Learning Standards for Science* integrate these categories into a powerful resource for the design and evaluation of science curricula taught in Illinois schools.

The *Illinois Learning Standards for Science* are organized by goals that inform one another and depend upon one another for meaning. Expectations for learners related to the inquiry process are presented in standards addressing the doing of science and elements of technological design. Unifying concepts connect scientific understanding and process and are embedded in standards spanning life science, physical science, and earth and space science. The importance of this knowledge and its application is conveyed in standards describing the conventions and nature of the scientific enterprise and the interplay among science, technology and society in past, present and future contexts.

APPLICATIONS OF LEARNING

Through Applications of Learning, students demonstrate and deepen their understanding of basic knowledge and skills. These applied learning skills cross academic disciplines and reinforce the important learning of the disciplines. The ability to use these skills will greatly influence students' success in school, in the workplace and in the community.

SOLVING PROBLEMS

Recognize and investigate problems; formulate and propose solutions supported by reason and evidence.

Asking questions and seeking answers are at the heart of scientific inquiry. Following the steps of scientific inquiry, students learn how to gather evidence, review and understand their findings, and compare their solutions with those of others. They learn that there can be differing solutions to the same problem, some more useful than others. In the process, they learn and apply scientific principles. They also learn to be objective in deciding whether their solutions meet specifications and perform as desired.

COMMUNICATING

Express and interpret information and ideas.

Scientists must carefully describe their methods and results to a variety of audiences, including other scientists. This requires precise and complete descriptions and the presentation of conclusions supported by evidence. Young science students develop the powers of observation and description. Older students gain the ability to organize and study data, to determine its meaning, to translate their findings into clear understandable language and to compare their results with those of other investigators.

USING TECHNOLOGY



Use appropriate instruments, electronic equipment, computers and networks to access information, process ideas and communicate results.

Technology is invented and improved by the use of scientific principles. In turn, scientists depend on technology in performing experiments, analyzing data and communicating the results.

Science students learn to use a range of technologies: instruments, computer hardware and software, on-line services and equipment, primary source data and images, and communication networks. They learn how technology, in turn, is the result of a scientific design process that includes continual refinements and improvements.

WORKING ON TEAMS

Learn and contribute productively as individuals and as members of groups.

The practical application of science requires both individual and group efforts. Individuals bring unique insight and focus to the work of inquiry and problem solving. Working in groups, scientists pose questions, share hypotheses, divide their experimental efforts, and share data and results. Science students have the opportunity to work both ways—as individuals and as members of teams organized to conduct complex investigations and solve problems.

MAKING CONNECTIONS

Recognize and apply connections of important information and ideas within and among learning areas.

Science has many disciplines, all interrelated. Understanding the functioning of living things depends on knowing chemistry; understanding chemistry depends on knowing physics. In the same way, science itself is highly dependent on mathematics—and it also relates strongly to medicine, geography, physical development and health, social trends and issues, and many other topics. Science, at its best, provides knowledge and skills that improve the understanding of virtually all subjects.

STATE GOAL 11: Understand the processes of scientific inquiry and technological design to investigate questions, conduct experiments and solve problems.

Why This Goal Is Important: The inquiry process prepares learners to engage in science and apply methods of technological design. This understanding will enable students to pose questions, use models to enhance understanding, make predictions, gather and work with data, use appropriate measurement methods, analyze results, draw conclusions based on evidence, communicate their methods and results, and think about the implications of scientific research and technological problem solving.

A. Know and apply the concepts, principles and processes of scientific inquiry.

11.A.1a Describe an observed event.	11.A.2a Formulate questions on a specific science topic and choose the steps needed to answer the questions.	11.A.3a Formulate hypotheses that can be tested by collecting data.	11.A.4a Formulate hypotheses referencing prior research and knowledge.	11.A.5a Formulate hypotheses referencing prior research and knowledge.
11.A.1b Develop questions on scientific topics.	11.A.2b Collect data for investigations using scientific process skills including observing, estimating and measuring.	11.A.3b Conduct scientific experiments that control all but one variable.	11.A.4b Conduct controlled experiments or simulations to test hypotheses.	11.A.5b Design procedures to test the selected hypotheses.

11.A.1c Collect data for investigations using measuring instruments and technologies.	11.A.2c Construct charts and visualizations to display data.	11.A.3c Collect and record data accurately using consistent measuring and recording techniques and media.	11.A.4c Collect, organize and analyze data accurately and precisely.	11.A.5c Conduct systematic controlled experiments to test the selected hypotheses.
11.A.1d Record and store data using available technologies.	11.A.2d Use data to produce reasonable explanations.	11.A.3d Explain the existence of unexpected results in a data set.	11.A.4d Apply statistical methods to the data to reach and support conclusions.	11.A.5d Apply statistical methods to make predictions and to test the accuracy of results.
11.A.1e Arrange data into logical patterns and describe the patterns.	11.A.2e Report and display the results of individual and group investigations.	11.A.3e Use data manipulation tools and quantitative (e.g., mean, mode, simple equations) and representational methods (e.g., simulations, image processing) to analyze measurements.	11.A.4e Formulate alternative hypotheses to explain unexpected results.	11.A.5e Report, display and defend the results of investigations to audiences that may include professionals and technical experts.
11.A.1f Compare observations of individual and group results.		11.A.3f Interpret and represent results of analysis to produce findings.	11.A.4f Using available technology, report, display and defend to an audience conclusions drawn from investigations.	
		11.A.3g Report and display the process and results of a scientific investigation.		

B. Know and apply the concepts, principles and processes of technological design.

11.B.1a Given a simple design problem, formulate possible solutions.	11.B.2a Identify a design problem and propose possible solutions.	11.B.3a Identify an actual design problem and establish criteria for determining the success of a solution.	11.B.4a Identify a technological design problem inherent in a commonly used product.	11.B.5a Identify a design problem that has practical applications and propose possible solutions, considering such constraints as available tools, materials, time and costs.
---	--	--	---	--

11.B.1b Design a device that will be useful in solving the problem.	11.B.2b Develop a plan, design and procedure to address the problem identifying constraints (e.g., time, materials, technology).	11.B.3b Sketch, propose and compare design solutions to the problem considering available materials, tools, cost effectiveness and safety.	11.B.4b Propose and compare different solution designs to the design problem based upon given constraints including available tools, materials and time.	11.B.5b Select criteria for a successful design solution to the identified problem.
11.B.1c Build the device using the materials and tools provided.	11.B.2c Build a prototype of the design using available tools and materials.	11.B.3c Select the most appropriate design and build a prototype or simulation.	11.B.4c Develop working visualizations of the proposed solution designs (e.g., blueprints, schematics, flowcharts, cad-cam, animations).	11.B.5c Build and test different models or simulations of the design solution using suitable materials, tools and technology.
11.B.1d Test the device and record results using given instruments, techniques and measurement methods.	11.B.2d Test the prototype using suitable instruments, techniques and quantitative measurements to record data.	11.B.3d Test the prototype using available materials, instruments and technology and record the data.	11.B.4d Determine the criteria upon which the designs will be judged, identify advantages and disadvantages of the designs and select the most promising design.	11.B.5d Choose a model and refine its design based on the test results.
11.B.1e Report the design of the device, the test process and the results in solving a given problem.	11.B.2e Assess test results and the effectiveness of the design using given criteria and noting possible sources of error.	11.B.3e Evaluate the test results based on established criteria, note sources of error and recommend improvements.	11.B.4e Develop and test a prototype or simulation of the solution design using available materials, instruments and technology.	11.B.5e Apply established criteria to evaluate the suitability, acceptability, benefits, drawbacks and consequences for the tested design solution and recommend modifications and refinements.
	11.B.2f Report test design, test process and test results.	11.B.3f Using available technology, report the relative success of the design based on the test results and criteria.	11.B.4f Evaluate the test results based on established criteria, note sources of error and recommend improvements.	11.B.5f Using available technology, prepare and present findings of the tested design solution to an audience that may include professional and technical experts.

			11.B.4g Using available technology, report to an audience the relative success of the design based on the test results and criteria.	
--	--	--	---	--

STATE GOAL 12: Understand the fundamental concepts, principles and interconnections of the life, physical and earth/space sciences.

Why This Goal Is Important: This goal is comprised of key concepts and principles in the life, physical and earth/space sciences that have considerable explanatory and predictive power for scientists and non-scientists alike. These ideas have been thoroughly studied and have stood the test of time. Knowing and being able to apply these concepts, principles and processes help students understand what they observe in nature and through scientific experimentation. A working knowledge of these concepts and principles allows students to relate new subject matter to material previously learned and to create deeper and more meaningful levels of understanding.

A. Know and apply concepts that explain how living things function, adapt and change.

12.A.1a Identify and describe the component parts of living things (e.g., birds have feathers; people have bones, blood, hair, skin) and their major functions.	12.A.2a Describe simple life cycles of plants and animals and the similarities and differences in their offspring.	12.A.3a Explain how cells function as “building blocks” of organisms and describe the requirements for cells to live.	12.A.4a Explain how genetic combinations produce visible effects and variations among physical features and cellular functions of organisms.	12.A.5a Explain changes within cells and organisms in response to stimuli and changing environmental conditions (e.g., homeostasis, dormancy).
12.A.1b Categorize living organisms using a variety of observable features (e.g., size, color, shape, backbone).	12.A.2b Categorize features as either inherited or learned (e.g., flower color or eye color is inherited; language is learned).	12.A.3b Compare characteristics of organisms produced from a single parent with those of organisms produced by two parents.	12.A.4b Describe the structures and organization of cells and tissues that underlie basic life functions including nutrition, respiration, cellular transport, biosynthesis and reproduction.	12.A.5b Analyze the transmission of genetic traits, diseases and defects.
		12.A.3c Compare and contrast how different forms and structures reflect different functions (e.g., similarities and differences among animals that fly, walk or swim; structures of plant cells and animal cells).	12.A.4c Describe processes by which organisms change over time using evidence from comparative anatomy and physiology, embryology, the fossil record, genetics and biochemistry.	

B. Know and apply concepts that describe how living things interact with each other and with their environment.

12.B.1a Describe and compare characteristics of living things in relationship to their environments.	12.B.2a Describe relationships among various organisms in their environments (e.g., predator/prey, parasite/host, food chains and food webs).	12.B.3a Identify and classify biotic and abiotic factors in an environment that affect population density, habitat and placement of organisms in an energy pyramid.	12.B.4a Compare physical, ecological and behavioral factors that influence interactions and interdependence of organisms.	12.B.5a Analyze and explain biodiversity issues and the causes and effects of extinction.
12.B.1b Describe how living things depend on one another for survival.	12.B.2b Identify physical features of plants and animals that help them live in different environments (e.g., specialized teeth for eating certain foods, thorns for protection, insulation for cold temperature).	12.B.3b Compare and assess features of organisms for their adaptive, competitive and survival potential (e.g., appendages, reproductive rates, camouflage, defensive structures).	12.B.4b Simulate and analyze factors that influence the size and stability of populations within ecosystems (e.g., birth rate, death rate, predation, migration patterns).	12.B.5b Compare and predict how life forms can adapt to changes in the environment by applying concepts of change and constancy (e.g., variations within a population increase the likelihood of survival under new conditions).

C. Know and apply concepts that describe properties of matter and energy and the interactions between them.

12.C.1a Identify and compare sources of energy (e.g., batteries, the sun).	12.C.2a Describe and compare types of energy including light, heat, sound, electrical and mechanical.	12.C.3a Explain interactions of energy with matter including changes of state and conservation of mass and energy.	12.C.4a Use kinetic theory, wave theory, quantum theory and the laws of thermodynamics to explain energy transformations.	12.C.5a Analyze reactions (e.g., nuclear reactions, burning of fuel, decomposition of waste) in natural and man-made energy systems.
12.C.1b Compare large-scale physical properties of matter (e.g., size, shape, color, texture, odor).	12.C.2b Describe and explain the properties of solids, liquids and gases.	12.C.3b Model and describe the chemical and physical characteristics of matter (e.g., atoms, molecules, elements, compounds, mixtures).	12.C.4b Analyze and explain the atomic and nuclear structure of matter.	12.C.5b Analyze the properties of materials (e.g., mass, boiling point, melting point, hardness) in relation to their physical and/or chemical structures.

D. Know and apply concepts that describe force and motion and the principles that explain them.

12.D.1a Identify examples of motion (e.g., moving in a straight line, vibrating, rotating).	12.D.2a Explain constant, variable and periodic motions.	12.D.3a Explain and demonstrate how forces affect motion (e.g., action/reaction, equilibrium conditions, free-falling objects).	12.D.4a Explain and predict motions in inertial and accelerated frames of reference.	12.D.5a Analyze factors that influence the relative motion of an object (e.g., friction, wind shear, cross currents, potential differences).
--	---	--	---	---

12.D.1b Identify observable forces in nature (e.g., pushes, pulls, gravity, magnetism).	12.D.2b Demonstrate and explain ways that forces cause actions and reactions (e.g., magnets attracting and repelling; objects falling, rolling and bouncing).	12.D.3b Explain the factors that affect the gravitational forces on objects (e.g., changes in mass, distance).	12.D.4b Describe the effects of electromagnetic and nuclear forces including atomic and molecular bonding, capacitance and nuclear reactions.	12.D.5b Analyze the effects of gravitational, electromagnetic and nuclear forces on a physical system.
--	--	---	--	---

E. Know and apply concepts that describe the features and processes of the Earth and its resources.

12.E.1a Identify components and describe diverse features of the Earth's land, water and atmospheric systems.	12.E.2a Identify and explain natural cycles of the Earth's land, water and atmospheric systems (e.g., rock cycle, water cycle, weather patterns).	12.E.3a Analyze and explain large-scale dynamic forces, events and processes that affect the Earth's land, water and atmospheric systems (e.g., jetstream, hurricanes, plate tectonics).	12.E.4a Explain how external and internal energy sources drive Earth processes (e.g., solar energy drives weather patterns; internal heat drives plate tectonics).	12.E.5 Analyze the processes involved in naturally occurring short-term and long-term Earth events (e.g., floods, ice ages, temperature, sea-level fluctuations).
12.E.1b Identify and describe patterns of weather and seasonal change.	12.E.2b Describe and explain short-term and long-term interactions of the Earth's components (e.g., earthquakes, types of erosion).	12.E.3b Describe interactions between solid earth, oceans, atmosphere and organisms that have resulted in ongoing changes of Earth (e.g., erosion, El Nino).	12.E.4b Describe how rock sequences and fossil remains are used to interpret the age and changes in the Earth.	
12.E.1c Identify renewable and nonrenewable natural resources.	12.E.2c Identify and classify recyclable materials.	12.E.3c Evaluate the biodegradability of renewable and nonrenewable natural resources.		

F. Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.

12.F.1a Identify and describe characteristics of the sun, Earth and moon as familiar objects in the solar system.	12.F.2a Identify and explain natural cycles and patterns in the solar system (e.g., order of the planets; moon phases; seasons as related to Earth's tilt, one's latitude, and where Earth is in its yearly orbit around the sun).	12.F.3a Simulate, analyze and explain the effects of gravitational force in the solar system (e.g., orbital shape and speed, tides, spherical shape of the planets and moons).	12.F.4a Explain theories, past and present, for changes observed in the universe.	12.F.5a Compare the processes involved in the life cycle of stars (e.g., gravitational collapse, thermonuclear fusion, nova) and evaluate the supporting evidence.
--	---	---	--	---

<p>12.F.1b Identify daily, seasonal and annual patterns related to the Earth's rotation and revolution.</p>	<p>12.F.2b Explain the apparent motion of the sun and stars.</p>	<p>12.F.3b Describe the organization and physical characteristics of the solar system (e.g., sun, planets, satellites, asteroids, comets).</p>	<p>12.F.4b Describe and compare the chemical and physical characteristics of galaxies and objects within galaxies (e.g., pulsars, nebulae, black holes, dark matter, stars).</p>	<p>12.F.5b Describe the size and age of the universe and evaluate the supporting evidence (e.g., red-shift, Hubble's constant).</p>
	<p>12.F.2c Identify easily recognizable star patterns (e.g., the Big Dipper, constellations).</p>	<p>12.F.3c Compare and contrast the sun as a star with other objects in the Milky Way Galaxy (e.g., nebulae, dust clouds, stars, black holes).</p>		

STATE GOAL 13: Understand the relationships among science, technology and society in historical and contemporary contexts.

Why This Goal Is Important: Understanding the nature and practices of science such as ensuring the validity and replicability of results, building upon the work of others and recognizing risks involved in experimentation gives learners a useful sense of the scientific enterprise. In addition, the relationships among science, technology and society give humans the ability to change and improve their surroundings. Learners who understand this relationship will be able to appreciate the efforts and effects of scientific discovery and applications of technology on their own lives and on the society in which we live.

A. Know and apply the accepted practices of science.

<p>13.A.1a Use basic safety practices (e.g., not tasting materials without permission, "stop/drop/roll").</p>	<p>13.A.2a Demonstrate ways to avoid injury when conducting science activities (e.g., wearing goggles, fire extinguisher use).</p>	<p>13.A.3a Identify and reduce potential hazards in science activities (e.g., ventilation, handling chemicals).</p>	<p>13.A.4a Estimate and suggest ways to reduce the degree of risk involved in science activities.</p>	<p>13.A.5a Design procedures and policies to eliminate or reduce risk in potentially hazardous science activities.</p>
<p>13.A.1b Explain why similar results are expected when procedures are done the same way.</p>	<p>13.A.2b Explain why similar investigations may not produce similar results.</p>	<p>13.A.3b Analyze historical and contemporary cases in which the work of science has been affected by both valid and biased scientific practices.</p>	<p>13.A.4b Assess the validity of scientific data by analyzing the results, sample set, sample size, similar previous experimentation, possible misrepresentation of data presented and potential sources of error.</p>	<p>13.A.5b Explain criteria that scientists use to evaluate the validity of scientific claims and theories.</p>

13.A.1c Explain how knowledge can be gained by careful observation.	13.A.2c Explain why keeping accurate and detailed records is important.	13.A.3c Explain what is similar and different about observational and experimental investigations.	13.A.4c Describe how scientific knowledge, explanations and technological designs may change with new information over time (e.g., the understanding of DNA, the design of computers).	13.A.5c Explain the strengths, weaknesses and uses of research methodologies including observational studies, controlled laboratory experiments, computer modeling and statistical studies.
			13.A.4d Explain how peer review helps to assure the accurate use of data and improves the scientific process.	13.A.5d Explain, using a practical example (e.g., cold fusion), why experimental replication and peer review are essential to scientific claims.

B. Know and apply concepts that describe the interaction between science, technology and society.

13.B.1a Explain the uses of common scientific instruments (e.g., ruler, thermometer, balance, probe, computer).	13.B.2a Explain how technology is used in science for a variety of purposes (e.g., sample collection, storage and treatment; measurement; data collection, storage and retrieval; communication of information).	13.B.3a Identify and explain ways that scientific knowledge and economics drive technological development.	13.B.4a Compare and contrast scientific inquiry and technological design as pure and applied sciences.	13.B.5a Analyze challenges created by international competition for increases in scientific knowledge and technological capabilities (e.g., patent issues, industrial espionage, technology obsolescence).
13.B.1b Explain how using measuring tools improves the accuracy of estimates.	13.B.2b Describe the effects on society of scientific and technological innovations (e.g., antibiotics, steam engine, digital computer).	13.B.3b Identify important contributions to science and technology that have been made by individuals and groups from various cultures.	13.B.4b Analyze a particular occupation to identify decisions that may be influenced by a knowledge of science.	13.B.5b Analyze and describe the processes and effects of scientific and technological breakthroughs.
13.B.1c Describe contributions men and women have made to science and technology.	13.B.2c Identify and explain ways that science and technology influence the lives and careers of people.	13.B.3c Describe how occupations use scientific and technological knowledge and skills.	13.B.4c Analyze ways that resource management and technology can be used to accommodate population trends.	13.B.5c Design and conduct an environmental impact study, analyze findings and justify recommendations.

<p>13.B.1d Identify and describe ways that science and technology affect people's everyday lives (e.g., transportation, medicine, agriculture, sanitation, communication occupations).</p>	<p>13.B.2d Compare the relative effectiveness of reducing, reusing and recycling in actual situations.</p>	<p>13.B.3d Analyze the interaction of resource acquisition, technological development and ecosystem impact (e.g., diamond, coal or gold mining; deforestation).</p>	<p>13.B.4d Analyze local examples of resource use, technology use or conservation programs; document findings; and make recommendations for improvements.</p>	<p>13.B.5d Analyze the costs, benefits and effects of scientific and technological policies at the local, state, national and global levels (e.g., genetic research, Internet access).</p>
<p>13.B.1e Demonstrate ways to reduce, reuse and recycle materials.</p>	<p>13.B.2e Identify and explain ways that technology changes ecosystems (e.g., dams, highways, buildings, communication networks, power plants).</p>	<p>13.B.3e Identify advantages and disadvantages of natural resource conservation and management programs.</p>	<p>13.B.4e Evaluate claims derived from purported scientific studies used in advertising and marketing strategies.</p>	<p>13.B.5e Assess how scientific and technological progress has affected other fields of study, careers and job markets and aspects of everyday life.</p>
	<p>13.B.2f Analyze how specific personal and societal choices that humans make affect local, regional and global ecosystems (e.g., lawn and garden care, mass transit).</p>	<p>13.B.3f Apply classroom-developed criteria to determine the effects of policies on local science and technology issues (e.g., energy consumption, landfills, water quality).</p>		

Section 2.

Illinois School District Science Scores

Illinois State to District Grade 4 Science Performance

		% Warning	% Below	%Meet	%Exceed	% Meet or Exceed
Illinois State Performance		7.6	25.2	53.3	13.8	67.1
School District	County	% Warning	% Below	%Meet	%Exceed	% Meet or Exceed
BROOKLYN UNIT DISTRICT 188	ST. CLAIR	17.4	69.6	8.7	4.3	13.0
VENICE COMM UNIT SCHOOL DIST 3	MADISON	41.7	41.7	16.7	0.0	16.7
GEN GEO PATTON SCHOOL DIST 133	COOK	38.7	40.0	21.3	0.0	21.3
FAIRMONT SCHOOL DISTRICT 89	WILL	32.4	40.5	27.0	0.0	27.0
W HARVEY-DIXMOOR PUB SCH DIST147	COOK	19.7	49.1	29.5	1.7	31.2
LINCOLN ELEM SCHOOL DIST 156	COOK	22.0	44.9	30.5	2.5	33.0
CALUMET PUBLIC SCHOOLS DIST 132	COOK	14.0	52.1	33.1	0.8	33.9
PRAIRIE-HILLS ELEM SCH DIST 144	COOK	20.3	44.7	34.2	0.8	35.0
PEMBROKE C C SCHOOL DISTRICT 259	KANKAKEE	21.6	43.1	31.4	3.9	35.3
TOWER HILL CUSD 6	SHELBY	9.1	54.5	27.3	9.1	36.4
DOLTON SCHOOL DISTRICT 148	COOK	18.5	44.8	34.4	2.3	36.7
HARVEY SCHOOL DISTRICT 152	COOK	14.3	48.7	35.9	1.1	37.0
CHICAGO HEIGHTS SCHOOL DIST 170	COOK	19.2	43.5	35.8	1.5	37.3
BURNHAM SCHOOL DISTRICT 154-5	COOK	26.1	34.8	21.7	17.4	39.1
CITY OF CHICAGO SCHOOL DIST 299	COOK	18.5	42.3	36.2	3.0	39.2
LEPERTOWN C C SCH DIST 175	BUREAU	0.0	60.0	40.0	0.0	40.0
UTICA ELEM SCHOOL DIST 135	LASALLE	20.0	40.0	40.0	0.0	40.0
DOLTON SCHOOL DISTRICT 149	COOK	17.9	41.2	38.8	2.1	40.9
CALUMET CITY SCHOOL DISTRICT 155	COOK	14.1	45.0	38.9	2.0	40.9
CARBON CLIFF-BARSTOW SCH DIST 36	ROCK ISLAND	5.9	52.9	38.2	2.9	41.1
CICERO SCHOOL DISTRICT 99	COOK	14.5	43.9	38.0	3.5	41.5
MAYWOOD-MELROSE PARK-BROADVIEW-89	COOK	14.8	43.2	38.9	3.2	42.1
WAUKEGAN C U SCHOOL DIST 60	LAKE	15.5	41.4	39.6	3.5	43.1
HAZEL CREST SCHOOL DIST 152-5	COOK	7.9	48.8	40.2	3.1	43.3
BELLWOOD SCHOOL DIST 88	COOK	12.5	42.0	43.5	2.0	45.5
LINDOP SCHOOL DISTRICT 92	COOK	11.5	42.6	44.3	1.6	45.9
CAHOKIA COMM UNIT SCH DIST 187	ST. CLAIR	14.4	38.7	43.8	3.0	46.8
MADISON COMM UNIT SCH DIST 12	MADISON	19.4	33.3	44.4	2.8	47.2
HARTSBURG EMDEN C U S DIST 21	LOGAN	15.8	36.8	36.8	10.5	47.3
KANKAKEE SCHOOL DIST 111	KANKAKEE	12.7	39.8	41.6	5.9	47.5
SHELDON COMM UNIT SCHOOL DIST 5	IROQUOIS	9.5	42.9	47.6	0.0	47.6

JONESBORO C C SCHOOL DIST 43	UNION	2.6	48.7	41.0	7.7	48.7
ZION ELEMENTARY SCHOOL DISTRICT 6	LAKE	8.5	42.3	45.4	3.8	49.2
CAIRO UNIT SCHOOL DISTRICT 1	ALEXANDER	12.7	38.0	47.9	1.4	49.3
SOUTH HOLLAND SCHOOL DIST 151	COOK	9.4	40.9	45.9	3.8	49.7
NORTH CHICAGO SCHOOL DIST 187	LAKE	13.8	35.6	46.8	3.7	50.5
COUNTRY CLUB HILLS SCH DIST 160	COOK	15.9	33.5	50.0	0.6	50.6
ROCKFORD SCHOOL DIST 205	WINNEBAGO	12.0	36.6	44.4	7.0	51.4
MEREDOSIA-CHAMBERSBURG CUSD 11	MORGAN	3.4	44.8	44.8	6.9	51.7
AURORA EAST UNIT SCHOOL DIST 131	KANE	10.8	37.2	45.5	6.5	52.0
EAST ST LOUIS SCHOOL DIST 189	ST. CLAIR	10.5	37.6	47.7	4.3	52.0
DONGOLA SCH UNIT DIST 66	UNION	8.7	39.1	39.1	13.0	52.1
SUMMIT SCHOOL DIST 104	COOK	6.1	41.5	48.2	4.3	52.5
BARRY COMM UNIT SCHOOL DIST 1	PIKE	15.6	31.3	46.9	6.3	53.2
MULBERRY GROVE C U SCH DIST 1	BOND	6.7	40.0	50.0	3.3	53.3
BROOKWOOD SCHOOL DIST 167	COOK	8.9	37.7	50.0	3.4	53.4
WILLOW SPRINGS SCHOOL DIST 108	COOK	5.8	40.4	48.1	5.8	53.9
SANDOVAL C U SCHOOL DIST 501	MARION	12.0	34.0	50.0	4.0	54.0
SPRINGFIELD SCHOOL DISTRICT 186	SANGAMON	13.2	32.8	45.6	8.4	54.0
COBDEN SCH UNIT DIST 17	UNION	10.5	35.1	49.1	5.3	54.4
KINGS CONSOLIDATED SCH DIST 144	OGLE	9.1	36.4	54.5	0.0	54.5
COOK COUNTY SCHOOL DIST 130	COOK	9.4	35.3	50.9	4.4	55.3
SUNNYBROOK SCHOOL DISTRICT 171	COOK	11.8	32.7	42.7	12.7	55.4
LARAWAY C C SCHOOL DIST 70C	WILL	15.6	28.9	51.1	4.4	55.5
CHESTER-EAST LINCOLN CCS DIST 61	LOGAN	6.0	38.0	52.0	4.0	56.0
PEORIA SCHOOL DISTRICT 150	PEORIA	9.0	35.0	45.7	10.3	56.0
SOUTHERN C U SCHOOL DIST 120	HENDERSON	6.3	37.5	50.0	6.3	56.3
JOLIET PUBLIC SCH DIST 86	WILL	9.3	34.3	51.6	4.8	56.4
GALATIA C U SCHOOL DIST 1	SALINE	0.0	43.5	52.2	4.3	56.5
ROCK ISLAND SCHOOL DISTRICT 41	ROCK ISLAND	11.6	31.9	49.2	7.4	56.6
SOUTH CENTRAL COMM UNIT DIST 401	MARION	10.0	33.3	51.7	5.0	56.7
MATTESON ELEM SCHOOL DIST 162	COOK	9.7	33.6	50.5	6.2	56.7
CENTURY COMM UNIT SCH DIST 100	PULASKI	7.8	35.3	49.0	7.8	56.8
MARSEILLES ELEM SCHOOL DIST 150	LASALLE	9.2	33.8	49.2	7.7	56.9
COMM CONS SCHOOL DIST 168	COOK	9.4	33.5	52.9	4.1	57.0
LA MOILLE C U SCHOOL DIST 303	BUREAU	3.6	39.3	50.0	7.1	57.1
HOYLETON CONS SCH DISTRICT 29	WASHINGTON	14.3	28.6	42.9	14.3	57.2
SCHILLER PARK SCHOOL DIST 81	COOK	6.4	36.4	50.0	7.3	57.3
AURORA WEST UNIT SCHOOL DIST 129	KANE	7.7	34.7	51.4	6.2	57.6
KANSAS COMM UNIT SCHOOL DIST 3	EDGAR	11.5	30.8	50.0	7.7	57.7
CRETE MONEE C U SCHOOL DIST 201U	WILL	12.5	29.8	51.9	5.9	57.8
BERKELEY SCHOOL DIST 87	COOK	7.0	35.1	52.6	5.3	57.9

LASALLE ELEM SCHOOL DIST 122	LASALLE	11.7	30.1	51.5	6.8	58.3
LUDLOW C C SCHOOL DIST 142	CHAMPAIGN	5.9	35.3	52.9	5.9	58.8
FARRINGTON C C SCHOOL DIST 99	JEFFERSON	0.0	40.0	60.0	0.0	60.0
SOUTH HOLLAND SCHOOL DIST 150	COOK	8.4	31.6	54.7	5.3	60.0
BEARDSTOWN C U SCH DIST 15	CASS	5.6	34.4	50.0	10.0	60.0
HOOVER-SCHRUM MEMORIAL SD 157	COOK	6.4	33.0	52.1	8.5	60.6
PARK FOREST SCHOOL DIST 163	COOK	7.5	31.7	55.1	5.7	60.8
COMMUNITY CONS SCH DIST 204	PERRY	7.7	30.8	53.8	7.7	61.5
ROUND LAKE AREA SCHS - DIST 116	LAKE	5.4	33.0	55.2	6.5	61.7
BERWYN NORTH SCHOOL DIST 98	COOK	5.4	32.8	55.9	6.0	61.9
DECATUR SCHOOL DISTRICT 61	MACON	7.5	30.3	51.3	10.8	62.1
EAST MOLINE SCHOOL DISTRICT 37	ROCK ISLAND	6.7	31.2	51.4	10.7	62.1
SPARTA C U SCHOOL DIST 140	RANDOLPH	6.2	31.8	51.2	10.9	62.1
CHAMPAIGN COMM UNIT SCH DIST 4	CHAMPAIGN	10.3	27.5	46.5	15.8	62.3
RIVERTON C U SCHOOL DIST 14	SANGAMON	8.2	29.5	50.0	12.3	62.3
LICK CREEK C C SCH DISTRICT 16	UNION	0.0	37.5	50.0	12.5	62.5
HAMPTON SCHOOL DISTRICT 29	ROCK ISLAND	12.5	25.0	45.8	16.7	62.5
CHICAGO RIDGE SCHOOL DIST 127-5	COOK	11.1	25.9	56.5	6.5	63.0
STEELEVILLE C U SCH DIST 138	RANDOLPH	3.7	33.3	55.6	7.4	63.0
LANSING SCHOOL DISTRICT 158	COOK	9.1	27.7	54.1	9.1	63.2
ATWOOD HAMMOND C U SCH DIST 39	PIATT	4.9	31.7	46.3	17.1	63.4
WHEELING C C SCHOOL DIST 21	COOK	7.3	29.3	51.6	11.8	63.4
SCHOOL DISTRICT 46	KANE	9.1	27.3	55.1	8.4	63.5
DANVILLE C C SCHOOL DIST 118	VERMILION	6.4	30.0	53.2	10.4	63.6
EGYPTIAN COMM UNIT SCH DIST 5	ALEXANDER	5.5	30.9	47.3	16.4	63.7
CUMBERLAND C U SCHOOL DIST 77	CUMBERLAND	9.6	26.5	54.2	9.6	63.8
CLAY CITY COMM UNIT DIST 10	CLAY	8.3	27.8	47.2	16.7	63.9
UNION COMMUNITY UNIT SCH DIST 115	HENDERSON	8.0	28.0	58.0	6.0	64.0
WEST CHICAGO ELEM SCHOOL DIST 33	DUPAGE	9.2	26.8	52.4	11.6	64.0
NORTH WAMAC SCHOOL DISTRICT 186	CLINTON	0.0	35.7	57.1	7.1	64.2
ALBERS SCHOOL DISTRICT 63	CLINTON	14.3	21.4	50.0	14.3	64.3
MANNHEIM SCHOOL DIST 83	COOK	7.5	28.3	57.8	6.5	64.3
RED HILL C U SCHOOL DIST 10	LAWRENCE	7.7	27.9	58.7	5.8	64.5
CARLYLE C U SCHOOL DISTRICT 1	CLINTON	7.5	28.0	49.5	15.0	64.5
BLUFORD C C SCHOOL DIST 114	JEFFERSON	5.9	29.4	55.9	8.8	64.7
BUSHNELL PRAIRIE CITY CUS D 170	MCDONOUGH	7.0	28.1	49.1	15.8	64.9
HARVARD C U SCHOOL DIST 50	MCHENRY	6.9	28.3	49.7	15.2	64.9
PEORIA HGHTS C U SCH DIST 325	PEORIA	1.8	33.3	45.6	19.3	64.9
CARBONDALE ELEM SCH DIST 95	JACKSON	8.3	26.7	55.0	10.0	65.0
ALTON COMM UNIT SCHOOL DIST 11	MADISON	6.8	28.3	53.0	12.0	65.0
INDIAN SPRINGS SCHOOL DIST 109	COOK	5.1	29.8	54.9	10.2	65.1

LIBERTY COMM UNIT SCHOOL DIST 2	ADAMS	13.8	20.7	51.7	13.8	65.5
POPE CO COMM UNIT DIST 1	POPE	9.1	25.5	60.0	5.5	65.5
HILLSIDE SCHOOL DIST 93	COOK	3.4	31.0	62.1	3.4	65.5
GEORGETOWN-RIDGE FARM C U D 4	VERMILION	4.4	30.0	51.1	14.4	65.5
VANDALIA C U SCH DIST 203	FAYETTE	1.6	32.8	58.2	7.4	65.6
ELDORADO COMM UNIT DISTRICT 4	SALINE	7.1	27.3	55.6	10.1	65.7
ELEM SCHOOL DISTRICT 159	COOK	4.8	29.4	58.8	7.0	65.8
PONTIAC C C SCHOOL DIST 429	LIVINGSTON	9.9	24.3	52.6	13.2	65.8
EDGAR COUNTY C U DIST 6	EDGAR	6.8	27.3	38.6	27.3	65.9
ATWOOD HEIGHTS DISTRICT 125	COOK	6.8	27.3	58.0	8.0	66.0
PARIS COMM UNIT SCHOOL DIST 4	EDGAR	6.5	27.4	43.5	22.6	66.1
CENTRALIA SCHOOL DIST 135	MARION	5.2	28.6	55.2	11.0	66.2
WOOD RIVER-HARTFORD ELEM S D 15	MADISON	2.4	31.3	60.2	6.0	66.2
EDWARDS COUNTY C U SCH DIST 1	EDWARDS	6.7	27.0	50.6	15.7	66.3
AKIN COMM CONS SCHOOL DIST 91	FRANKLIN	0.0	33.3	44.4	22.2	66.6
ST GEORGE C C SCHOOL DIST 258	KANKAKEE	0.0	33.3	53.3	13.3	66.6
BUNCOMBE CONS SCHOOL DIST 43	JOHNSON	0.0	33.3	66.7	0.0	66.7
RAMSEY COMM UNIT SCH DIST 204	FAYETTE	2.4	31.0	64.3	2.4	66.7
OAKDALE C C SCHOOL DISTRICT 1	WASHINGTON	0.0	33.3	55.6	11.1	66.7
TRI POINT C U SCH DIST 6-J	LIVINGSTON	8.3	25.0	62.5	4.2	66.7
CHRISTOPHER UNIT 99	FRANKLIN	3.2	30.2	61.9	4.8	66.7
GIRARD COMM UNIT SCHOOL DIST 3	MACOUPIN	9.8	23.5	47.1	19.6	66.7
ROXANA COMM UNIT SCHOOL DIST 1	MADISON	6.8	26.5	51.3	15.4	66.7
COULTERVILLE UNIT SCHOOL DIST 1	RANDOLPH	6.7	26.7	60.0	6.7	66.7
SCOTT-MORGAN C U SCHOOL DIST 2	SCOTT	5.6	27.8	66.7	0.0	66.7
URBANA SCHOOL DIST 116	CHAMPAIGN	8.8	24.4	48.8	18.0	66.8
SALEM SCHOOL DIST 111	MARION	8.0	25.0	57.1	9.8	66.9
FREEPORT SCHOOL DIST 145	STEPHENSON	5.7	27.2	54.4	12.7	67.1
SOMONAUK C U SCHOOL DIST 432	DEKALB	4.9	28.0	48.8	18.3	67.1
QUINCY SCHOOL DISTRICT 172	ADAMS	4.6	28.0	55.2	12.2	67.4
OREGON C U SCHOOL DIST-220	OGLE	8.3	24.2	54.2	13.3	67.5
CENTRAL CITY SCHOOL DIST 133	MARION	9.7	22.6	64.5	3.2	67.7
TAFT SCHOOL DISTRICT 90	WILL	3.2	29.0	64.5	3.2	67.7
WILLOW GROVE SCHOOL DISTRICT 46	CLINTON	9.7	22.6	48.4	19.4	67.8
GIFFORD C C SCHOOL DIST 188	CHAMPAIGN	8.0	24.0	56.0	12.0	68.0
PEKIN PUBLIC SCHOOL DIST 108	TAZEWELL	6.3	25.6	56.3	11.9	68.2
PAXTON-BUCKLEY-LODA CU DIST 10	FORD	8.2	23.5	56.1	12.2	68.3
WARREN COMM UNIT SCHOOL DIST 205	JODAVIESS	0.0	31.6	60.5	7.9	68.4
MARTINSVILLE C U SCH DIST 3C	CLARK	5.3	26.3	57.9	10.5	68.4
WOODLAND C U S DIST 5	LIVINGSTON	7.9	23.7	57.9	10.5	68.4
EVANSTON C C SCHOOL DIST 65	COOK	5.9	25.6	48.0	20.4	68.4

GRANT COMM CONS SCH DIST 110	ST. CLAIR	5.3	26.3	57.9	10.5	68.4
CHENOA C U SCHOOL DISTRICT 9	MCLEAN	5.3	26.3	55.3	13.2	68.5
MIDLOTHIAN SCHOOL DIST 143	COOK	4.7	26.7	59.9	8.7	68.6
NORTH BOONE C U SCH DIST 200	BOONE	5.1	26.3	55.6	13.1	68.7
SPOON RIVER VALLEY C U S DIST 4	FULTON	6.3	25.0	53.1	15.6	68.7
RANTOUL CITY SCHOOL DIST 137	CHAMPAIGN	6.1	25.0	52.2	16.7	68.9
COMMUNITY UNIT SCHOOL DIST 4	ADAMS	3.6	27.3	65.5	3.6	69.1
MORRISONVILLE C U SCH DIST 1	CHRISTIAN	3.8	26.9	61.5	7.7	69.2
COMMUNITY CONS SCH DIST 180	DUPAGE	7.4	23.5	57.4	11.8	69.2
POSEN-ROBBINS EL SCH DIST 143-5	COOK	8.4	22.4	58.7	10.5	69.2
GRAND RIDGE C C SCHOOL DIST 95	LASALLE	4.1	26.5	57.1	12.2	69.3
ALEXIS C U SCH DIST 400	WARREN	8.7	21.7	65.2	4.3	69.5
NEWARK COMM CONS SCH DIST 66	KENDALL	0.0	30.4	56.5	13.0	69.5
PIKELAND C U SCH DIST 10	PIKE	7.2	23.2	57.6	12.0	69.6
OTTAWA ELEM SCHOOL DIST 141	LASALLE	4.2	26.3	58.3	11.3	69.6
HIAWATHA C U SCHOOL DIST 426	DEKALB	9.1	21.2	54.5	15.2	69.7
ROBINSON C U SCHOOL DIST 2	CRAWFORD	5.9	24.4	51.3	18.5	69.8
ELVERADO C U SCHOOL DIST 196	JACKSON	14.0	16.3	60.5	9.3	69.8
GAVIN SCHOOL DIST 37	LAKE	3.7	26.6	60.6	9.2	69.8
MERIDIAN C U SCH DISTRICT 101	PULASKI	3.2	27.0	49.2	20.6	69.8
CYPRESS SCHOOL DIST 64	JOHNSON	0.0	30.0	70.0	0.0	70.0
PALESTINE C U SCHOOL DIST 3	CRAWFORD	10.0	20.0	67.5	2.5	70.0
MARQUARDT SCHOOL DISTRICT 15	DUPAGE	4.8	25.2	51.2	18.8	70.0
CARRIER MILLS-STONEFORT CUSD 2	SALINE	0.0	30.0	70.0	0.0	70.0
POTOMAC C U SCH DIST 10	VERMILION	5.0	25.0	70.0	0.0	70.0
GREENFIELD C U SCHOOL DIST 10	GREENE	0.0	30.0	56.7	13.3	70.0
HILLSBORO COMM UNIT SCH DIST 3	MONTGOMERY	1.2	28.7	54.5	15.6	70.1
BERWYN SOUTH SCHOOL DISTRICT 100	COOK	5.1	24.7	61.4	8.9	70.3
VIRDEN COMM UNIT SCHOOL DIST 4	MACOUPIN	4.7	25.0	62.5	7.8	70.3
BETHEL SCHOOL DISTRICT 82	JEFFERSON	0.0	29.4	52.9	17.6	70.5
COLONA SCHOOL DISTRICT 190	HENRY	1.6	27.9	60.7	9.8	70.5
GALVA COMM UNIT SCH DIST 224	HENRY	7.8	21.6	52.9	17.6	70.5
STERLING C U DIST 5	WHITESIDE	4.9	24.6	59.5	11.0	70.5
PLEASANT VALLEY SCH DIST 62	PEORIA	3.9	25.5	62.7	7.8	70.5
VILLA GROVE C U SCH DIST 302	DOUGLAS	5.9	23.5	54.9	15.7	70.6
FOREST PARK SCHOOL DIST 91	COOK	4.6	24.8	52.3	18.3	70.6
WILLIAMSFIELD C U S DIST 210	KNOX	5.9	23.5	70.6	0.0	70.6
HAVANA COMM UNIT SCHOOL DIST 126	MASON	1.2	28.2	63.5	7.1	70.6
EAST ALTON SCHOOL DISTRICT 13	MADISON	2.8	26.6	55.0	15.6	70.6
RIVERVIEW C C SCHOOL DISTRICT 2	WOODFORD	2.9	26.5	55.9	14.7	70.6
IROQUOIS WEST C U S DIST 10	IROQUOIS	2.1	27.1	62.5	8.3	70.8

PUFFER HEFTY SCHOOL DIST 69	DUPAGE	0.0	29.3	53.7	17.1	70.8
HARDIN CO COMM UNIT DIST 1	HARDIN	1.8	27.3	54.5	16.4	70.9
LYONS SCHOOL DIST 103	COOK	5.9	23.1	62.6	8.4	71.0
COMM CONSOLIDATED SCH DIST 62	COOK	5.4	23.6	59.7	11.4	71.1
FLORA COMM UNIT SCH DIST 35	CLAY	6.3	22.5	55.9	15.3	71.2
NORTH PALOS SCHOOL DIST 117	COOK	3.9	24.9	57.5	13.7	71.2
BEACH PARK C C SCHOOL DIST 3	LAKE	6.1	22.7	61.6	9.6	71.2
CAMP POINT C U SCHOOL DIST 3	ADAMS	1.1	27.5	56.0	15.4	71.4
HARLEM UNIT DIST 122	WINNEBAGO	7.0	21.6	62.9	8.5	71.4
MOUNT OLIVE C U SCHOOL DIST 5	MACOUPIN	8.2	20.4	53.1	18.4	71.5
MORRIS SCHOOL DISTRICT 54	GRUNDY	6.3	22.0	57.9	13.8	71.7
MOMENCE COMM UNIT SCH DIST 1	KANKAKEE	3.3	25.0	63.0	8.7	71.7
HAMILTON CO C U SCHOOL DIST 10	HAMILTON	9.8	18.5	52.2	19.6	71.8
BENSENVILLE SCHOOL DISTRICT 2	DUPAGE	2.5	25.6	58.6	13.3	71.9
LINCOLN ELEM SCHOOL DIST 27	LOGAN	4.1	24.0	57.9	14.0	71.9
HOMER COMM CONS SCH DIST 33C	WILL	4.1	24.0	61.0	10.9	71.9
DEPUE UNIT SCHOOL DIST 103	BUREAU	12.0	16.0	72.0	0.0	72.0
PINCKNEYVILLE SCH DIST 50	PERRY	4.0	24.0	61.3	10.7	72.0
FRANKLIN C U SCHOOL DISTRICT 1	MORGAN	0.0	28.0	68.0	4.0	72.0
CARTERVILLE C U SCH DIST 5	WILLIAMSON	2.5	25.4	47.5	24.6	72.1
MOUNT VERNON SCHOOL DIST 80	JEFFERSON	4.4	23.3	53.3	18.9	72.2
COAL CITY C U SCHOOL DISTRICT 1	GRUNDY	3.8	24.1	62.7	9.5	72.2
VALLEY VIEW CUSD #365U	WILL	2.7	25.1	59.4	12.8	72.2
LINCOLNWOOD SCHOOL DIST 74	COOK	2.4	25.0	55.6	16.9	72.5
EMMONS SCHOOL DISTRICT 33	LAKE	13.7	13.7	52.9	19.6	72.5
STEGER SCHOOL DISTRICT 194	COOK	3.9	23.5	63.4	9.2	72.6
LEBANON COMM UNIT SCH DIST 9	ST. CLAIR	5.5	21.9	58.9	13.7	72.6
EAST PEORIA SCHOOL DISTRICT 86	TAZEWELL	2.2	25.1	59.6	13.0	72.6
SPRING VALLEY C C SCH DIST 99	BUREAU	4.5	22.7	62.1	10.6	72.7
COMMUNITY UNIT SCH DIST 2	LASALLE	1.5	25.8	63.6	9.1	72.7
TROY COMM CONS SCH DIST 30C	WILL	3.1	24.2	62.7	10.0	72.7
EDINBURG C U SCH DIST 4	CHRISTIAN	6.1	21.2	66.7	6.1	72.8
BUNKER HILL C U SCHOOL DIST 8	MACOUPIN	4.3	22.9	64.3	8.6	72.9
WALTONVILLE C U SCHOOL DIST 1	JEFFERSON	8.1	18.9	56.8	16.2	73.0
HAMILTON C C SCHOOL DIST 328	HANCOCK	5.8	21.2	69.2	3.8	73.0
SCHUYLER CO C U SCH DIST 1	SCHUYLER	6.3	20.8	54.2	18.8	73.0
MERIDIAN C U SCH DIST 223	OGLE	1.6	25.4	62.7	10.3	73.0
WALTHAM C C SCHOOL DIST 185	LASALLE	3.8	23.1	50.0	23.1	73.1
CERRO GORDO C U SCHOOL DIST 100	PIATT	0.0	26.8	58.5	14.6	73.1
SOUTHWESTERN C U SCH DIST 9	MACOUPIN	2.9	23.9	60.1	13.0	73.1
GRANITE CITY C U SCHOOL DIST 9	MADISON	3.5	23.4	65.5	7.6	73.1

UNION SCHOOL DIST 81	WILL	7.7	19.2	65.4	7.7	73.1
WOODSTOCK C U SCHOOL DIST 200	MCHEMRY	3.3	23.5	58.3	14.9	73.2
LITCHFIELD C U SCHOOL DIST 12	MONTGOMERY	8.9	17.9	68.8	4.5	73.3
FRANKFORT COMM UNIT SCH DIST 168	FRANKLIN	1.5	25.0	62.9	10.6	73.5
ZEIGLER-ROYALTON C U S DIST 188	FRANKLIN	3.5	22.8	59.6	14.0	73.6
GRIDLEY C U SCH DIST 10	MCLEAN	0.0	26.3	57.9	15.8	73.7
CENTRAL SCHOOL DIST 104	ST. CLAIR	2.4	23.8	64.3	9.5	73.8
SOUTH BELOIT C U SCH DIST 320	WINNEBAGO	0.0	26.0	70.8	3.1	73.9
PLEASANT HILL SCHOOL DIST 69	PEORIA	0.0	26.1	65.2	8.7	73.9
ROSEMONT ELEM SCHOOL DIST 78	COOK	0.0	25.9	66.7	7.4	74.1
EAST MAINE SCHOOL DIST 63	COOK	3.8	22.0	62.4	11.8	74.2
CARMI-WHITE COUNTY C U S DIST 5	WHITE	4.3	21.6	62.1	12.1	74.2
WINTHROP HARBOR SCHOOL DIST 1	LAKE	6.2	19.6	62.9	11.3	74.2
SKOKIE SCHOOL DIST 73-5	COOK	2.0	23.8	60.4	13.9	74.3
STREATOR ELEM SCHOOL DIST 44	LASALLE	3.3	22.4	62.4	11.9	74.3
BETHALTO C U SCHOOL DIST 8	MADISON	0.5	25.2	55.0	19.3	74.3
WHITESIDE SCHOOL DIST 115	ST. CLAIR	1.0	24.8	54.5	19.8	74.3
BIG HOLLOW SCHOOL DIST 38	LAKE	0.0	25.6	67.1	7.3	74.4
STAUNTON COMM UNIT SCH DIST 6	MACOUPIN	1.4	24.3	59.5	14.9	74.4
WESTMER COMM UNIT SCH DIST 203	MERCER	4.3	21.3	61.7	12.8	74.5
HERRIN C U SCH DIST 4	WILLIAMSON	4.6	20.8	57.2	17.3	74.5
ROCHELLE COMM CONS DIST 231	OGLE	4.1	21.4	54.1	20.4	74.5
PRINCEVILLE C U SCH DIST 326	PEORIA	4.3	21.3	61.7	12.8	74.5
CHARLESTON C U SCHOOL DIST 1	COLES	3.2	22.2	51.9	22.7	74.6
COMM UNIT SCH DIST 300	KANE	5.0	20.3	60.9	13.7	74.6
BURBANK SCHOOL DISTRICT 111	COOK	4.2	21.1	63.2	11.5	74.7
GILLESPIE COMM UNIT SCH DIST 7	MACOUPIN	7.2	18.0	63.1	11.7	74.8
BLOOMINGTON SCH DIST 87	MCLEAN	5.0	20.2	53.7	21.1	74.8
GOREVILLE COMM UNIT DIST 1	JOHNSON	2.1	22.9	66.7	8.3	75.0
ROOKS CREEK C C SCH DIST 425	LIVINGSTON	0.0	25.0	50.0	25.0	75.0
ST ANNE C C SCHOOL DIST 256	KANKAKEE	0.0	25.0	60.4	14.6	75.0
GRASS LAKE SCHOOL DIST 36	LAKE	0.0	25.0	60.0	15.0	75.0
BRUSSELS COMM UNIT SCHOOL DIST 42	CALHOUN	0.0	25.0	50.0	25.0	75.0
VIRGINIA C U SCH DIST 64	CASS	3.6	21.4	67.9	7.1	75.0
STEWART ELEM SCHOOL DIST 220	LEE	0.0	25.0	62.5	12.5	75.0
ASHTON COMM UNIT SCH DIST 275	LEE	0.0	25.0	53.6	21.4	75.0
HIGH MOUNT SCHOOL DIST 116	ST. CLAIR	0.0	25.0	67.5	7.5	75.0
ORANGEVILLE C U SCHOOL DIST 203	STEPHENSON	12.5	12.5	56.3	18.8	75.1
BRADFORD COMM UNIT SCH DIST 1	STARK	6.3	18.8	68.8	6.3	75.1
MACOMB COMM UNIT SCH DIST 185	MCDONOUGH	2.7	22.1	54.9	20.4	75.3
GALESBURG C U SCHOOL DIST 205	KNOX	5.4	19.2	62.9	12.5	75.4

SKOKIE SCHOOL DIST 69	COOK	3.3	21.2	57.6	17.9	75.5
CHANEY-MONGE SCH DISTRICT 88	WILL	4.1	20.4	67.3	8.2	75.5
BROWNSTOWN C U SCH DIST 201	FAYETTE	4.9	19.5	68.3	7.3	75.6
WEST RICHLAND C U SCH DISTRICT 2	RICHLAND	7.3	17.1	58.5	17.1	75.6
FOREST RIDGE SCHOOL DIST 142	COOK	4.5	19.9	66.5	9.1	75.6
CARROLLTON C U SCHOOL DIST 1	GREENE	6.7	17.8	55.6	20.0	75.6
COLLINSVILLE C U SCH DIST 10	MADISON	3.9	20.4	62.3	13.4	75.7
ANNA C C SCH DIST 37	UNION	1.5	22.7	56.1	19.7	75.8
HARRISBURG C U SCHOOL DIST 3	SALINE	5.1	19.1	55.4	20.4	75.8
MOLINE UNIT SCHOOL DISTRICT 40	ROCK ISLAND	4.0	20.1	59.0	16.8	75.8
PAYSON COMM UNIT SCHOOL DIST 1	ADAMS	8.0	16.0	64.0	12.0	76.0
BELVIDERE C U SCH DIST 100	BOONE	5.1	19.0	63.2	12.8	76.0
SCHOOL DISTRICT 45	DUPAGE	2.3	21.6	59.0	17.0	76.0
LAHARPE COMM UNIT SCH DIST 335	HANCOCK	0.0	23.8	54.8	21.4	76.2
DU QUOIN C U SCHOOL DISTRICT 300	PERRY	3.3	20.5	62.3	13.9	76.2
TRICO COMM UNIT SCH DISTRICT 176	JACKSON	3.4	20.3	61.0	15.3	76.3
NORRIS CITY-OMAHA-ENFIELD CUSD 3	WHITE	5.1	18.6	66.1	10.2	76.3
SILVIS SCHOOL DISTRICT 34	ROCK ISLAND	0.0	23.6	61.1	15.3	76.4
BOND CO C U SCHOOL DIST 2	BOND	2.8	20.7	57.9	18.6	76.5
ST ELMO C U SCHOOL DIST 202	FAYETTE	0.0	23.5	70.6	5.9	76.5
SAVANNA COMMUNITY UNIT DIST 300	CARROLL	7.8	15.6	73.4	3.1	76.5
ADDISON SCHOOL DIST 4	DUPAGE	4.4	19.0	60.9	15.6	76.5
WAUCONDA COMM UNIT S DIST 118	LAKE	3.8	19.7	60.3	16.2	76.5
HOOPESTON AREA C U SCH DIST 11	VERMILION	1.2	22.2	60.5	16.0	76.5
ATHENS COMM UNIT SCH DIST 213	MENARD	4.9	18.5	67.9	8.6	76.5
MENDOTA C C SCHOOL DIST 289	LASALLE	1.7	21.7	55.8	20.8	76.6
KEWANEE COMM UNIT SCH DIST 229	HENRY	3.4	19.8	56.0	20.7	76.7
PLANO COMM UNIT SCHOOL DIST 88	KENDALL	5.1	18.2	67.7	9.1	76.8
EVERGREEN PK ELEM SCH DIST 124	COOK	4.1	19.1	62.3	14.5	76.8
PROPHETSTOWN-LYNDON-TAMPICO CUSD3	WHITESIDE	2.9	20.3	43.5	33.3	76.8
SENECA COMM CONS SCH DIST 170	LASALLE	7.2	15.9	66.7	10.1	76.8
ODIN SCHOOL DIST 122	MARION	0.0	23.1	65.4	11.5	76.9
OHIO COMM CONS SCHOOL DIST 17	BUREAU	0.0	23.1	61.5	15.4	76.9
NEPONSET COM CONS DIST 307	BUREAU	7.7	15.4	61.5	15.4	76.9
RHODES SCHOOL DIST 84-5	COOK	4.6	18.5	56.9	20.0	76.9
RANKIN COMMUNITY SCHOOL DIST 98	TAZEWELL	3.8	19.2	65.4	11.5	76.9
MURPHYSBORO C U SCH DIST 186	JACKSON	3.5	19.4	59.4	17.6	77.0
MARION COMM UNIT SCH DIST 2	WILLIAMSON	3.3	19.7	54.3	22.7	77.0
EARLVILLE COMM UNIT SCH DIST 9	LASALLE	5.1	17.9	66.7	10.3	77.0
WILL COUNTY SCHOOL DISTRICT 92	WILL	3.9	19.1	66.7	10.3	77.0
KEENEYVILLE SCHOOL DISTRICT 20	DUPAGE	4.8	17.9	66.2	11.0	77.2

AVON COMM UNIT SCH DIST 176	FULTON	9.1	13.6	54.5	22.7	77.2
POLO COMM UNIT SCHOOL DIST 222	OGLE	3.5	19.3	63.2	14.0	77.2
WETHERSFIELD C U SCH DIST 230	HENRY	2.3	20.5	56.8	20.5	77.3
PLAINFIELD SCHOOL DIST 202	WILL	2.9	19.8	65.5	11.8	77.3
MASSAC UNIT DISTRICT #1	MASSAC	3.5	19.2	57.6	19.8	77.4
WINDSOR COMM UNIT SCH DIST 1	SHELBY	5.0	17.5	62.5	15.0	77.5
WINFIELD SCHOOL DISTRICT 34	DUPAGE	4.1	18.4	61.2	16.3	77.5
GALLATIN C U SCHOOL DISTRICT 7	GALLATIN	1.4	21.1	52.1	25.4	77.5
OGLESBY ELEM SCH DIST 125	LASALLE	2.5	20.0	62.5	15.0	77.5
NORTH CLAY C U SCHOOL DISTRICT 25	CLAY	2.0	20.4	63.3	14.3	77.6
SANDWICH C U SCHOOL DIST 430	DEKALB	1.6	20.8	63.0	14.6	77.6
COMMUNITY CONSOLIDATED S D 93	DUPAGE	3.3	19.1	61.8	15.8	77.6
LENA WINSLOW C U SCH DIST 202	STEPHENSON	2.4	20.0	72.9	4.7	77.6
LISLE C U SCH DIST 202	DUPAGE	2.4	19.8	57.9	19.8	77.7
MIDWEST CENTRAL CUSD 191	MASON	3.2	19.1	51.1	26.6	77.7
ST ROSE SCHOOL DISTRICT 14-15	CLINTON	5.6	16.7	66.7	11.1	77.8
LA GRANGE SCHOOL DIST 105 (SOUTH)	COOK	2.8	19.4	52.8	25.0	77.8
JASPER COUNTY COMM UNIT DIST 1	JASPER	1.9	20.4	70.4	7.4	77.8
FLOSSMOOR SCHOOL DISTRICT 161	COOK	3.3	18.9	52.2	25.6	77.8
DEKALB COMM UNIT SCH DIST 428	DEKALB	4.8	17.3	61.6	16.3	77.9
CANTON UNION SCHOOL DIST 66	FULTON	1.9	20.2	59.6	18.3	77.9
HAWTHORN C C SCHOOL DIST 73	LAKE	2.0	20.1	56.9	21.0	77.9
PUTNAM CO C U SCHOOL DIST 535	PUTNAM	2.9	19.1	64.7	13.2	77.9
PECATONICA C U SCH DIST 321	WINNEBAGO	1.7	20.3	66.1	11.9	78.0
PERU ELEM SCHOOL DISTRICT 124	LASALLE	1.1	20.9	57.1	20.9	78.0
MCHENRY C C SCHOOL DIST 15	MCHENRY	2.4	19.5	64.6	13.4	78.0
CALHOUN COMM UNIT SCH DIST 40	CALHOUN	3.1	18.8	65.6	12.5	78.1
ELMWOOD C U SCHOOL DISTRICT 322	PEORIA	7.3	14.5	61.8	16.4	78.2
RACCOON CONS SCHOOL DIST 1	MARION	3.1	18.8	59.4	18.8	78.2
CREVE COEUR SCHOOL DISTRICT 76	TAZEWELL	3.4	18.4	66.7	11.5	78.2
SOUTH PEKIN SCHOOL DIST 137	TAZEWELL	0.0	21.7	56.5	21.7	78.2
WESTMONT C U SCHOOL DIST 201	DUPAGE	2.3	19.4	57.4	20.9	78.3
OAKWOOD COMM UNIT DIST #76	VERMILION	2.4	19.3	54.2	24.1	78.3
NORRIDGE SCHOOL DIST 80	COOK	2.0	19.6	57.8	20.6	78.4
DIXON UNIT SCHOOL DIST 170	LEE	1.8	19.7	61.0	17.4	78.4
NEW HOLLAND-MIDDLETOWN E DIST 88	LOGAN	14.3	7.1	71.4	7.1	78.5
CHESTER COMM UNIT SCH DIST 139	RANDOLPH	7.6	13.9	68.4	10.1	78.5
ELWOOD C C SCH DIST 203	WILL	2.4	19.0	69.0	9.5	78.5
CRAB ORCHARD C U SCH DIST 3	WILLIAMSON	7.1	14.3	75.0	3.6	78.6
PRAIRIE DU ROCHER C C S D 134	RANDOLPH	0.0	21.4	78.6	0.0	78.6
WESTCHESTER SCHOOL DIST 92-5	COOK	2.3	19.1	64.9	13.7	78.6

REED CUSTER C U SCH DIST 255U	WILL	0.8	20.5	62.3	16.4	78.7
RIVER GROVE SCHOOL DIST 85-5	COOK	1.5	19.7	71.2	7.6	78.8
FOX LAKE GRADE SCHOOL DIST 114	LAKE	2.2	18.9	66.7	12.2	78.9
ALTAMONT COMM UNIT SCH DIST 10	EFFINGHAM	5.3	15.8	63.2	15.8	79.0
COMM CONS SCH DIST 59	COOK	4.8	16.2	56.3	22.7	79.0
ARMSTRONG-ELLIS CONS SCH DIST 61	VERMILION	0.0	21.1	57.9	21.1	79.0
RIDGELAND SCHOOL DISTRICT 122	COOK	2.0	18.9	62.7	16.4	79.1
SHERRARD COMM UNIT SCH DIST 200	ROCK ISLAND	4.3	16.5	60.4	18.7	79.1
WABASH C U SCH DIST 348	WABASH	0.8	20.0	58.4	20.8	79.2
DIAMOND LAKE SCHOOL DIST 76	LAKE	4.0	16.8	61.6	17.6	79.2
WOLF BRANCH SCH DIST 113	ST. CLAIR	5.0	15.8	55.4	23.8	79.2
SCHAUMBURG C C SCHOOL DIST 54	COOK	3.5	17.2	67.8	11.5	79.3
RIVERDALE C U SCHOOL DIST 100	ROCK ISLAND	4.3	16.3	56.5	22.8	79.3
FLANAGAN C U SCHOOL DIST 4	LIVINGSTON	10.3	10.3	51.7	27.6	79.3
CASEY-WESTFIELD C U SCH DIST 4C	CLARK	2.0	18.6	68.6	10.8	79.4
GERMANTOWN SCHOOL DISTRICT 60	CLINTON	0.0	20.6	58.8	20.6	79.4
ELMWOOD PARK C U SCH DIST 401	COOK	3.8	16.8	60.6	18.8	79.4
GENOA KINGSTON C U S DIST 424	DEKALB	3.1	17.6	64.9	14.5	79.4
OSWEGO COMM UNIT SCHOOL DIST 308	KENDALL	2.5	18.0	64.3	15.2	79.5
YORKVILLE COMM UNIT SCH DIST 115	KENDALL	2.6	17.8	59.7	19.9	79.6
HEYWORTH C U SCH DIST 4	MCLEAN	2.7	17.6	54.1	25.7	79.8
GRIGGSVILLE-PERRY C U SCH DIST 4	PIKE	8.0	12.0	80.0	0.0	80.0
NOKOMIS COMM UNIT SCH DIST 22	MONTGOMERY	0.0	20.0	73.3	6.7	80.0
HUTSONVILLE C U SCHOOL DIST 1	CRAWFORD	0.0	20.0	40.0	40.0	80.0
KELL CONSOLIDATED SCHOOL DIST 2	MARION	0.0	20.0	80.0	0.0	80.0
INA COMM CONS SCHOOL DIST 8	JEFFERSON	5.0	15.0	60.0	20.0	80.0
ALEDO COMM UNIT SCH DIST 201	MERCER	1.3	18.7	56.0	24.0	80.0
BENTON COMM CONS SCH DIST 47	FRANKLIN	5.5	14.5	53.6	26.4	80.0
BRACEVILLE SCHOOL DIST 75	GRUNDY	0.0	20.0	73.3	6.7	80.0
CENTRAL COMM UNIT SCHOOL DIST 4	IROQUOIS	3.2	16.8	62.1	17.9	80.0
ANTIOCH C C SCHOOL DISTRICT 34	LAKE	2.7	17.4	65.2	14.8	80.0
EAST COLOMA SCHOOL DIST 12	WHITESIDE	4.0	16.0	76.0	4.0	80.0
WEST LINCOLN-BROADWELL E S D #92	LOGAN	0.0	20.0	60.0	20.0	80.0
A-C CENTRAL CUSD 262	CASS	2.5	17.5	50.0	30.0	80.0
CRESTON COMM CONS SCHOOL DIST 161	OGLE	0.0	20.0	60.0	20.0	80.0
DUPO COMM UNIT SCH DISTRICT 196	ST. CLAIR	1.8	18.2	68.2	11.8	80.0
JACKSONVILLE SCHOOL DIST 117	MORGAN	4.5	15.4	60.3	19.8	80.1
MONMOUTH UNIT SCH DIST 38	WARREN	1.1	18.7	63.7	16.5	80.2
QUEEN BEE SCHOOL DISTRICT 16	DUPAGE	0.8	19.0	65.4	14.8	80.2
MARENGO-UNION ELEM CONS DIST 165	MCHENRY	3.2	16.7	68.3	11.9	80.2
OAK PARK ELEM SCHOOL DIST 97	COOK	3.6	16.2	49.1	31.2	80.3

PRINCETON ELEM SCHOOL DIST 115	BUREAU	0.0	19.6	66.1	14.3	80.4
BELLE VALLEY SCHOOL DIST 119	ST. CLAIR	0.9	18.7	54.2	26.2	80.4
COMMUNITY UNIT SCHOOL DIST 16	SANGAMON	5.9	13.7	56.9	23.5	80.4
MANHATTAN SCHOOL DIST 114	WILL	0.9	18.5	64.8	15.7	80.5
TOLONO C U SCHOOL DIST 7	CHAMPAIGN	4.3	15.1	64.5	16.1	80.6
LAKE VILLA C C SCHOOL DIST 41	LAKE	1.6	17.8	60.4	20.2	80.6
MATTOON C U SCHOOL DIST 2	COLES	1.2	18.1	66.9	13.8	80.7
OBLONG C U SCHOOL DIST 4	CRAWFORD	1.8	17.5	57.9	22.8	80.7
BEMENT COMM UNIT SCHOOL DIST 5	PIATT	0.0	19.2	65.4	15.4	80.8
ARCOLA C U SCHOOL DISTRICT 306	DOUGLAS	0.0	19.0	61.9	19.0	80.9
WORTH SCHOOL DISTRICT 127	COOK	0.0	19.1	62.7	18.2	80.9
PLEASANT PLAINS C U SCHOOL DIST 8	SANGAMON	4.5	14.6	60.7	20.2	80.9
PANA COMM UNIT SCHOOL DIST 8	CHRISTIAN	4.0	15.0	74.0	7.0	81.0
KNOXVILLE C U SCHOOL DIST 202	KNOX	2.5	16.5	69.6	11.4	81.0
MUNDELEIN ELEM SCHOOL DIST 75	LAKE	3.0	16.1	61.9	19.1	81.0
CATLIN C U SCH DIST 5	VERMILION	0.0	19.0	78.6	2.4	81.0
TRIAD COMM UNIT SCHOOL DIST 2	MADISON	3.0	16.0	60.8	20.2	81.0
FARMINGTON CENTRAL C U S D 265	PEORIA	2.0	17.0	65.0	16.0	81.0
IUKA COMM CONS SCHOOL DIST 7	MARION	0.0	18.9	70.3	10.8	81.1
FIELD COMM CONS SCHOOL DIST 3	JEFFERSON	5.4	13.5	54.1	27.0	81.1
SKOKIE SCHOOL DIST 68	COOK	2.8	16.0	64.6	16.6	81.2
WOODRIDGE SCHOOL DIST 68	DUPAGE	2.5	16.3	61.0	20.2	81.2
TINLEY PARK COMM CONS SCH DST 146	COOK	0.4	18.4	62.0	19.2	81.2
EAST RICHLAND C U SCH DIST 1	RICHLAND	3.9	14.8	60.0	21.3	81.3
NORTH GREENE UNIT DIST 3	GREENE	4.4	14.3	56.0	25.3	81.3
SULLIVAN C U SCHOOL DIST 300	MOULTRIE	5.1	13.6	62.7	18.6	81.3
PARIS-UNION SCHOOL DIST 95	EDGAR	2.0	16.7	64.7	16.7	81.4
FRANKLIN PARK SCHOOL DIST 84	COOK	1.5	17.0	69.6	11.9	81.5
ILLINI CENTRAL C U SCH DIST 189	MASON	2.9	15.7	62.9	18.6	81.5
HENRY-SENACHWINE CUSD 5	MARSHALL	1.9	16.7	61.1	20.4	81.5
DIVERNON C U SCHOOL DIST 13	SANGAMON	0.0	18.5	70.4	11.1	81.5
NASHVILLE C C SCH DISTRICT 49	WASHINGTON	2.0	16.3	61.2	20.4	81.6
MONTICELLO C U SCHOOL DIST 25	PIATT	0.8	17.6	62.4	19.2	81.6
MOKENA SCHOOL DIST 159	WILL	0.8	17.6	65.6	16.0	81.6
MORRISON COMM UNIT SCH DIST 6	WHITESIDE	1.9	16.3	59.6	22.1	81.7
NIPPERSINK SCHOOL DIST 2	MCHENRY	4.7	13.6	63.9	17.8	81.7
BALL CHATHAM C U SCHOOL DIST 5	SANGAMON	2.7	15.6	61.1	20.6	81.7
MCCLELLAN C C SCHOOL DIST 12	JEFFERSON	0.0	18.2	72.7	9.1	81.8
MALDEN COMM CONS SCH DIST 84	BUREAU	9.1	9.1	54.5	27.3	81.8
PRAIRIE CENTRAL C U SCHOOL DIST 8	LIVINGSTON	2.3	15.9	62.9	18.9	81.8
ALLEN TWP C C SCHOOL DIST 65	LASALLE	0.0	18.2	63.6	18.2	81.8

TRIOPIA C U SCHOOL DISTRICT 27	MORGAN	0.0	18.2	60.6	21.2	81.8
ITASCA SCHOOL DIST 10	DUPAGE	3.6	14.5	60.2	21.7	81.9
WOOD DALE SCHOOL DISTRICT 7	DUPAGE	0.0	17.9	65.8	16.2	82.0
RIVER BEND COMM UNIT DIST 2	WHITESIDE	1.2	16.9	65.1	16.9	82.0
THOMASBORO C C SCHOOL DIST 130	CHAMPAIGN	3.6	14.3	60.7	21.4	82.1
OAK LAWN-HOMETOWN SCH DIST 123	COOK	1.4	16.4	59.2	22.9	82.1
ABINGDON C U SCHOOL DIST 217	KNOX	0.0	17.9	62.5	19.6	82.1
HARRISON SCHOOL DISTRICT 36	MCHENRY	3.6	14.3	62.5	19.6	82.1
COLUMBIA COMM UNIT SCH DIST 4	MONROE	0.0	17.9	66.7	15.4	82.1
CRYSTAL LAKE C C SCH DIST 47	MCHENRY	2.4	15.3	65.2	17.0	82.2
MEDINAH SCHOOL DISTRICT 11	DUPAGE	2.7	14.9	74.3	8.1	82.4
FORRESTVILLE VALLEY C U S D 221	OGLE	0.0	17.6	67.1	15.3	82.4
HERSCHER COMM UNIT SCH DIST 2	KANKAKEE	2.4	15.2	59.8	22.6	82.4
DIMMICK C C SCHOOL DIST 175	LASALLE	0.0	17.6	82.4	0.0	82.4
PONTIAC-W HOLLIDAY SCH DIST 105	ST. CLAIR	3.5	14.0	57.9	24.6	82.5
DODDS COMM CONS SCHOOL DIST 7	JEFFERSON	0.0	17.4	69.6	13.0	82.6
SAUNEMIN C CONSOL SCH DIST 438	LIVINGSTON	0.0	17.4	60.9	21.7	82.6
HARMONY EMGE SCHOOL DIST 175	ST. CLAIR	1.4	15.9	65.2	17.4	82.6
TAYLORVILLE C U SCH DIST 3	CHRISTIAN	0.4	16.9	63.1	19.6	82.7
ARGENTA-OREANA COMM UNIT SCH D 1	MACON	3.1	14.1	62.5	20.3	82.8
SANDRIDGE SCHOOL DISTRICT 172	COOK	2.9	14.3	74.3	8.6	82.9
WARSAW COMM UNIT SCH DISTRICT 316	HANCOCK	0.0	17.1	75.6	7.3	82.9
IROQUOIS CO C U SCHOOL DIST 9	IROQUOIS	0.0	17.1	62.9	20.0	82.9
TRI CITY COMM UNIT SCH DIST 1	SANGAMON	3.8	13.2	67.9	15.1	83.0
FORD HEIGHTS SCHOOL DISTRICT 169	COOK	6.6	10.4	49.1	34.0	83.1
GLENVIEW C C SCHOOL DIST 34	COOK	1.7	15.1	65.7	17.5	83.2
DALZELL SCHOOL DISTRICT 98	BUREAU	0.0	16.7	83.3	0.0	83.3
SMITHTON C C SCHOOL DIST 130	ST. CLAIR	8.3	8.3	61.1	22.2	83.3
COWDEN-HERRICK CUSD 3A	SHELBY	4.8	11.9	66.7	16.7	83.4
INDIAN CREEK COMM UNIT DIST 425	DEKALB	1.7	15.0	61.7	21.7	83.4
CAMBRIDGE C U SCH DIST 227	HENRY	0.0	16.7	66.7	16.7	83.4
SESSER-VALIER COMM UNIT S D 196	FRANKLIN	0.0	16.7	65.2	18.2	83.4
MANTENO COMM UNIT SCH DIST 5	KANKAKEE	0.8	15.7	69.3	14.2	83.5
BUTLER SCHOOL DISTRICT 53	DUPAGE	1.8	14.5	50.9	32.7	83.6
MORTON GROVE SCHOOL DIST 70	COOK	1.2	15.3	67.1	16.5	83.6
JOHNSTON CITY C U SCH DIST 1	WILLIAMSON	1.9	14.4	61.5	22.1	83.6
ARBOR PARK SCHOOL DISTRICT 145	COOK	2.3	14.1	68.8	14.8	83.6
PANHANDLE COMM UNIT SCH DIST 2	MONTGOMERY	2.3	14.0	67.4	16.3	83.7
FRANKFORT C C SCH DIST 157C	WILL	2.1	14.2	58.4	25.3	83.7
LOVINGTON C U SCHOOL DIST 303	MOULTRIE	0.0	16.1	54.8	29.0	83.8
RED BUD C U SCHOOL DIST 132	RANDOLPH	1.8	14.3	62.5	21.4	83.9

BROWN COUNTY C U SCH DIST 1	BROWN	0.0	16.1	59.7	24.2	83.9
BROOKFIELD LAGRANGE PARK S D 95	COOK	2.0	14.0	56.0	28.0	84.0
HOMewood SCHOOL DISTRICT 153	COOK	0.8	15.2	61.7	22.3	84.0
PORTA COMM UNIT SCHOOL DIST 202	MENARD	2.0	14.0	64.0	20.0	84.0
CONSOLIDATED SCHOOL DISTRICT 158	MCHEMRY	2.0	14.0	69.1	14.9	84.0
CENTRAL A & M C U DIST #21	SHELBY	4.5	11.4	61.4	22.7	84.1
NILES ELEM SCHOOL DIST 71	COOK	1.4	14.5	69.6	14.5	84.1
LEWISTOWN SCHOOL DIST 97	FULTON	3.2	12.7	74.6	9.5	84.1
GRANT PARK C U SCHOOL DIST 6	KANKAKEE	2.3	13.6	61.4	22.7	84.1
HIGHLAND COMM UNIT SCH DIST 5	MADISON	1.9	14.1	66.7	17.4	84.1
LOCKPORT SCHOOL DIST 91	WILL	2.3	13.6	69.3	14.8	84.1
NORTHWEST C U SCH DISTRICT 175	MCDONOUGH	4.5	11.4	68.2	15.9	84.1
MINOOKA COMM CONS S DIST 201	GRUNDY	1.3	14.6	70.7	13.4	84.1
COMM UNIT SCH DIST 3 FULTON CTY	FULTON	2.6	13.2	81.6	2.6	84.2
BUREAU VALLEY CUSD 340	BUREAU	2.8	13.0	61.1	23.1	84.2
BLOOMINGDALE SCHOOL DISTRICT 13	DUPAGE	2.5	13.3	63.9	20.3	84.2
BISMARCK HENNING C U SCHOOL DIST	VERMILION	1.6	14.3	66.7	17.5	84.2
WESTVILLE C U SCHOOL DIST 2	VERMILION	1.1	14.6	68.5	15.7	84.2
NEW LENOX SCHOOL DIST 122	WILL	2.3	13.4	63.1	21.1	84.2
NORWOOD ELEM SCHOOL DIST 63	PEORIA	0.0	15.8	71.9	12.3	84.2
BREESE SCHOOL DISTRICT 12	CLINTON	4.3	11.4	58.6	25.7	84.3
BLUE RIDGE COMM UNIT SCH DIST 18	DEWITT	2.9	12.9	58.6	25.7	84.3
FAIRFIELD PUBLIC SCHOOL DIST 112	WAYNE	3.9	11.8	68.6	15.7	84.3
FREMONT SCHOOL DIST 79	LAKE	1.7	14.0	55.8	28.5	84.3
V I T COMM UNIT SCH DISTRICT 2	FULTON	0.0	15.6	78.1	6.3	84.4
KINNIKINNICK C C SCH DIST 131	WINNEBAGO	0.0	15.5	64.2	20.2	84.4
GIBSON CITY-MELVIN-SIBLEY CUSD 5	FORD	2.2	13.3	61.1	23.3	84.4
LELAND COMM UNIT SCH DIST 1	LASALLE	0.0	15.6	56.3	28.1	84.4
CARTHAGE COMM UNIT SCH DIST #338	HANCOCK	0.0	15.5	58.6	25.9	84.5
ARTHUR C U SCHOOL DIST 305	DOUGLAS	2.6	12.8	66.7	17.9	84.6
LADD COMM CONS SCHOOL DIST 94	BUREAU	0.0	15.4	73.1	11.5	84.6
LEE CENTER C U SCHOOL DIST 271	LEE	1.9	13.5	59.6	25.0	84.6
ESWOOD C C DISTRICT 269	OGLE	0.0	15.4	61.5	23.1	84.6
BOURBONNAIS SCHOOL DIST 53	KANKAKEE	0.8	14.5	60.8	23.9	84.7
GURNEE SCHOOL DIST 56	LAKE	2.1	13.3	62.1	22.6	84.7
WESCLIN C U SCHOOL DISTRICT 3	CLINTON	0.0	15.2	62.5	22.3	84.8
ALSIP-HAZLGRN-OAKLWN S DIST 126	COOK	1.1	14.1	63.6	21.2	84.8
LA GRANGE SCHOOL DIST 102	COOK	0.4	14.8	60.7	24.1	84.8
WOODLAND C C SCHOOL DIST 50	LAKE	1.8	13.5	66.7	18.1	84.8
BEECHER C U SCH DIST 200U	WILL	0.0	15.2	67.4	17.4	84.8
SOUTHEASTERN C U SCH DIST 337	HANCOCK	1.9	13.2	69.8	15.1	84.9

LAKE BLUFF ELEM SCHOOL DIST 65	LAKE	4.3	10.8	49.6	35.3	84.9
EDWARDSVILLE C U SCHOOL DIST 7	MADISON	0.6	14.5	65.7	19.2	84.9
ROCK FALLS ELEMENTARY SCH DIST 13	WHITESIDE	2.0	13.1	67.7	17.2	84.9
PEOTONE C U SCH DIST 207U	WILL	3.4	11.8	60.5	24.4	84.9
THOMPSONVILLE SCHOOL DISTRICT 62	FRANKLIN	0.0	15.0	75.0	10.0	85.0
VALMEYER COMM UNIT SCH DIST 3	MONROE	0.0	15.0	65.0	20.0	85.0
ALWOOD COMM UNIT SCH DIST 225	HENRY	4.3	10.6	72.3	12.8	85.1
CLINTON C U SCHOOL DIST 15	DEWITT	2.5	12.4	65.2	19.9	85.1
MCLEAN COUNTY UNIT DIST NO 5	MCLEAN	1.4	13.5	58.0	27.1	85.1
SARATOGA COMM CONS S DIST 60C	GRUNDY	1.5	13.4	67.2	17.9	85.1
SUMMIT HILL SCHOOL DIST 161	WILL	2.0	12.8	67.6	17.6	85.2
RIVER TRAILS SCHOOL DIST 26	COOK	2.0	12.9	64.4	20.8	85.2
DALLAS CITY C U SCH DIST 336	HANCOCK	0.0	14.8	70.4	14.8	85.2
ROSEVILLE C U SCH DIST 200	WARREN	0.0	14.8	66.7	18.5	85.2
AMBOY COMM UNIT SCHOOL DIST 272	LEE	1.1	13.6	65.9	19.3	85.2
WOODLAWN COMM CONS SCH DIST 4	JEFFERSON	2.4	12.2	78.0	7.3	85.3
ST CHARLES C U SCHOOL DIST 303	KANE	1.8	13.0	66.6	18.7	85.3
BRADLEY SCHOOL DIST 61	KANKAKEE	0.6	14.1	74.0	11.3	85.3
MT CARROLL COMM UNIT DIST 304	CARROLL	0.0	14.6	61.0	24.4	85.4
ANNAWAN COMM UNIT SCH DIST 226	HENRY	0.0	14.6	61.0	24.4	85.4
IL VALLEY CENTRAL UNIT DIST 321	PEORIA	1.3	13.3	60.7	24.7	85.4
MARISSA C U SCH DIST 40	ST. CLAIR	4.2	10.4	62.5	22.9	85.4
WILMINGTON C U SCH DIST 209U	WILL	0.9	13.8	66.4	19.0	85.4
COMM CONSOLIDATED SCH DISTRICT 46	LAKE	2.5	11.8	62.8	22.9	85.7
ST JOSEPH C C SCHOOL DIST 169	CHAMPAIGN	0.0	14.3	57.1	28.6	85.7
RIDGEVIEW COMM UNIT SCH DIST 19	MCLEAN	2.4	11.9	61.9	23.8	85.7
LOGAN COMM CONS SCH DIST 110	FRANKLIN	0.0	14.3	85.7	0.0	85.7
DELAVAN COMM UNIT DIST 703	TAZEWELL	0.0	14.3	65.7	20.0	85.7
ILLIOPOLIS C U SCHOOL DIST 12	SANGAMON	0.0	14.3	85.7	0.0	85.7
LAWRENCE CO C U DISTRICT 20	LAWRENCE	3.0	11.1	61.6	24.2	85.8
PALATINE C C SCHOOL DIST 15	COOK	2.3	11.8	57.5	28.4	85.9
N PEKIN & MARQUETTE HGHT S D 102	TAZEWELL	1.4	12.7	66.2	19.7	85.9
ALDEN HEBRON SCHOOL DIST 19	MCHENRY	0.0	14.0	58.1	27.9	86.0
ROCKRIDGE C U SCHOOL DIST 300	ROCK ISLAND	0.0	14.0	68.6	17.4	86.0
OLYMPIA C U SCHOOL DIST 16	MCLEAN	1.9	12.0	63.3	22.8	86.1
GARDNER COMM CONS SCH DIST 72C	GRUNDY	3.4	10.3	48.3	37.9	86.2
NORTHWESTERN C U SCH DIST 2	MACOUPIN	3.4	10.3	79.3	6.9	86.2
KANELAND C U SCHOOL DIST 302	KANE	1.3	12.4	65.9	20.4	86.3
BATAVIA UNIT SCHOOL DIST 101	KANE	1.9	11.7	67.6	18.8	86.4
EFFINGHAM COMM UNIT SCH DIST 40	EFFINGHAM	0.5	13.1	63.6	22.8	86.4
BELLEVILLE SCHOOL DIST 118	ST. CLAIR	1.2	12.4	62.6	23.8	86.4

DEER CREEK-MACKINAW CUSD 701	TAZEWELL	0.0	13.6	69.7	16.7	86.4
MAHOMET-SEYMOUR C U SCH DIST 3	CHAMPAIGN	0.5	13.0	61.6	24.9	86.5
OKAW VALLEY C U S D 302	MOULTRIE	0.0	13.5	57.7	28.8	86.5
BARTONVILLE SCHOOL DIST 66	PEORIA	2.7	10.8	75.7	10.8	86.5
WEST PIKE COMM UNIT SCH DIST 2	PIKE	0.0	13.3	73.3	13.3	86.6
TUSCOLA C U SCHOOL DIST 301	DOUGLAS	4.9	8.5	61.0	25.6	86.6
MOUNT PROSPECT SCHOOL DIST 57	COOK	0.8	12.6	67.6	19.0	86.6
SYCAMORE C U SCHOOL DIST 427	DEKALB	0.5	12.9	69.5	17.1	86.6
SCALES MOUND C U SCH DISTRICT 211	JODAVIESS	0.0	13.3	66.7	20.0	86.7
NORTHBROOK ELEM SCHOOL DIST 27	COOK	1.5	11.9	67.4	19.3	86.7
CHANNAHON SCHOOL DISTRICT 17	WILL	1.2	12.1	69.4	17.3	86.7
ROSELLE SCHOOL DISTRICT 12	DUPAGE	0.0	13.3	71.1	15.7	86.8
GALENA UNIT SCHOOL DIST 120	JODAVIESS	0.0	13.0	65.2	21.7	86.9
WEST NORTHFIELD SCHOOL DIST 31	COOK	0.0	13.1	61.6	25.3	86.9
DWIGHT COMMON SCHOOL DIST 232	LIVINGSTON	0.0	13.0	53.2	33.8	87.0
JERSEY C U SCH DIST 100	JERSEY	1.3	11.7	67.5	19.5	87.0
PATOKA COMM UNIT SCH DIST 100	MARION	0.0	12.9	61.3	25.8	87.1
SUNSET RIDGE SCHOOL DIST 29	COOK	1.3	11.5	62.8	24.4	87.2
KIRBY SCHOOL DIST 140	COOK	1.1	11.6	63.1	24.2	87.3
O FALLON C C SCHOOL DIST 90	ST. CLAIR	0.6	12.1	51.9	35.4	87.3
PLEASANT HILL C U SCH DIST 3	PIKE	4.2	8.3	58.3	29.2	87.5
SALT CREEK SCHOOL DIST 48	DUPAGE	2.8	9.7	59.7	27.8	87.5
ALLENDALE C C SCHOOL DIST 17	WABASH	0.0	12.5	62.5	25.0	87.5
CENTRAL STICKNEY SCH DIST 110	COOK	0.0	12.5	72.9	14.6	87.5
NORTH SHORE SD 112	LAKE	1.9	10.5	63.4	24.1	87.5
ROCKDALE SCHOOL DISTRICT 84	WILL	0.0	12.5	83.3	4.2	87.5
DIETERICH COMM UNIT SCH DIST 30	EFFINGHAM	0.0	12.5	68.8	18.8	87.6
MARSHALL C U SCHOOL DIST 2C	CLARK	1.5	10.8	73.8	13.8	87.6
ASHLEY C C SCH DISTRICT 15	WASHINGTON	0.0	12.5	56.3	31.3	87.6
EAST PRAIRIE SCHOOL DIST 73	COOK	4.2	8.3	68.8	18.8	87.6
PRAIRIE GROVE C SCH DIST 46	MCHENRY	1.8	10.6	54.0	33.6	87.6
ORLAND SCHOOL DISTRICT 135	COOK	1.7	10.6	64.8	22.9	87.7
AVOCA SCHOOL DIST 37	COOK	0.0	12.3	58.5	29.2	87.7
SHELBYVILLE C U SCHOOL DIST 4	SHELBY	2.0	10.2	68.4	19.4	87.8
MERIDIAN COMM UNIT SCH DIST 15	MACON	1.2	10.8	57.8	30.1	87.9
EWING NORTHERN C C DISTRICT 115	FRANKLIN	0.0	12.0	64.0	24.0	88.0
WINNEBAGO C U SCH DIST 323	WINNEBAGO	0.7	11.1	58.5	29.6	88.1
WAYNE CITY C U SCHOOL DIST 100	WAYNE	0.0	11.9	54.8	33.3	88.1
BARRINGTON C U SCHOOL DIST 220	LAKE	1.4	10.5	59.6	28.5	88.1
LOWPOINT-WASHBURN C U S DIST 21	WOODFORD	0.0	11.8	58.8	29.4	88.2
FOX RIVER GROVE CONS S D 3	MCHENRY	0.0	11.8	71.1	17.1	88.2

KOMAREK SCHOOL DIST 94	COOK	0.0	11.8	73.5	14.7	88.2
RIVER RIDGE C U SCH DIST 210	JODAVIESS	0.0	11.8	55.9	32.4	88.3
PROSPECT HEIGHTS SCHOOL DIST 23	COOK	1.3	10.4	57.1	31.2	88.3
CORNELL C C SCH DIST 426	LIVINGSTON	0.0	11.8	76.5	11.8	88.3
GOLF ELEM SCHOOL DIST 67	COOK	1.7	10.0	63.3	25.0	88.3
NEW HOPE C C SCHOOL DIST 6	WAYNE	0.0	11.8	47.1	41.2	88.3
MILLBURN C C SCHOOL DIST 24	LAKE	0.8	10.9	61.7	26.6	88.3
MONTMORENCY C C SCH DIST 145	WHITESIDE	0.0	11.8	82.4	5.9	88.3
MIDLAND COMMUNITY UNIT DIST 7	MARSHALL	2.9	8.7	66.7	21.7	88.4
MASCOUTAH C U DISTRICT 19	ST. CLAIR	0.4	11.1	57.2	31.3	88.5
ROCKTON SCH DIST 140	WINNEBAGO	0.0	11.5	62.2	26.4	88.6
NORTH WAYNE C U SCHOOL DIST 200	WAYNE	2.9	8.6	65.7	22.9	88.6
CENTRAL COMM UNIT SCH DIST 301	KANE	0.5	10.9	69.0	19.6	88.6
LEMONT-BROMBEREK CSD 113A	COOK	1.5	9.9	70.2	18.4	88.6
MILLSTADT C C SCH DIST 160	ST. CLAIR	0.0	11.4	60.8	27.8	88.6
DAKOTA COMM UNIT SCH DIST 201	STEPHENSON	2.8	8.3	56.9	31.9	88.8
HINCKLEY BIG ROCK C U S D 429	DEKALB	0.0	11.1	76.5	12.3	88.8
NIANTIC-HARRISTOWN C U S D 6	MACON	0.0	11.1	69.4	19.4	88.8
HERITAGE COMM UNIT SCH DIST 8	CHAMPAIGN	4.4	6.7	71.1	17.8	88.9
OGDEN COMM CONS SCH DIST 212	CHAMPAIGN	0.0	11.1	77.8	11.1	88.9
SOUTH FORK SCHOOL DISTRICT 14	CHRISTIAN	0.0	11.1	74.1	14.8	88.9
IRVINGTON C C SCH DISTRICT 11	WASHINGTON	0.0	11.1	88.9	0.0	88.9
ODELL COMM CONS SCHOOL DIST 435	LIVINGSTON	11.1	0.0	66.7	22.2	88.9
COMMUNITY UNIT SCHOOL DIST 200	DUPAGE	1.1	9.8	57.1	31.9	89.0
CARLINVILLE C U SCHOOL DIST 1	MACOUPIN	2.8	8.3	63.3	25.7	89.0
APTAKISIC-TRIPP C C S DIST 102	LAKE	0.8	10.2	64.9	24.2	89.1
ROSSVILLE-ALVIN CU SCH DIST 7	VERMILION	0.0	10.8	70.3	18.9	89.2
NEW ATHENS C U SCHOOL DIST 60	ST. CLAIR	0.0	10.8	62.2	27.0	89.2
EASTLAND COMM UNIT SCH DIST 308	CARROLL	0.0	10.6	68.1	21.3	89.4
DARIEN SCHOOL DIST 61	DUPAGE	1.2	9.4	64.1	25.3	89.4
WINCHESTER C U SCH DIST 1	SCOTT	3.0	7.6	77.3	12.1	89.4
SHAWNEE C U SCH DIST 84	UNION	0.0	10.6	59.6	29.8	89.4
GENESECO COMM UNIT SCH DIST 228	HENRY	1.6	8.9	58.9	30.5	89.4
LAKE ZURICH C U SCH DIST 95	LAKE	1.9	8.7	61.7	27.7	89.4
PRAIRIEVIEW COMM CONS DIST 192	CHAMPAIGN	0.0	10.5	73.7	15.8	89.5
BYRON COMM UNIT SCHOOL DIST 226	OGLE	0.0	10.6	54.5	35.0	89.5
AUBURN COMM UNIT SCHOOL DIST 10	SANGAMON	1.2	9.3	61.6	27.9	89.5
INDIAN PRAIRIE C U SCH DIST 204	DUPAGE	1.2	9.2	61.5	28.1	89.6
WATERLOO COMM UNIT SCH DIST 5	MONROE	1.1	9.2	64.1	25.5	89.6
GENEVA COMM UNIT SCH DIST 304	KANE	1.0	9.3	59.3	30.4	89.7
PALOS COMM CONS SCHOOL DIST 118	COOK	0.5	9.8	64.5	25.2	89.7

MORTON C U SCHOOL DISTRICT 709	TAZEWELL	0.0	10.3	69.2	20.5	89.7
ELMHURST SCHOOL DIST 205	DUPAGE	1.1	9.1	56.2	33.7	89.9
DAMIANSVILLE SCHOOL DISTRICT 62	CLINTON	0.0	10.0	80.0	10.0	90.0
JASPER COMM CONS SCHOOL DIST 17	WAYNE	0.0	10.0	50.0	40.0	90.0
DISTRICT 50 SCHOOLS	TAZEWELL	1.3	8.8	72.5	17.5	90.0
LOMBARD SCHOOL DISTRICT 44	DUPAGE	0.3	9.6	61.4	28.7	90.1
ORION COMM UNIT SCHOOL DIST 223	HENRY	0.0	9.8	58.5	31.7	90.2
PENNOYER SCHOOL DIST 79	COOK	0.0	9.7	80.6	9.7	90.3
ASTORIA COMM UNIT SCH DIST 1	FULTON	0.0	9.7	64.5	25.8	90.3
MONROE SCHOOL DIST 70	PEORIA	0.0	9.7	64.5	25.8	90.3
DOWNERS GROVE GRADE SCH DIST 58	DUPAGE	0.4	9.2	58.5	31.9	90.4
ROME COMM CONS SCHOOL DIST 2	JEFFERSON	2.4	7.1	61.9	28.6	90.5
GLEN ELLYN SCHOOL DISTRICT 41	DUPAGE	1.8	7.8	65.1	25.4	90.5
LIMESTONE WALTERS C C S DIST 316	PEORIA	4.8	4.8	66.7	23.8	90.5
FREEBURG C C SCHOOL DIST 70	ST. CLAIR	0.0	9.5	50.5	40.0	90.5
PALOS HEIGHTS SCHOOL DIST 128	COOK	1.3	8.0	57.3	33.3	90.6
WALLACE C C SCHOOL DIST 195	LASALLE	0.0	9.4	65.6	25.0	90.6
COLCHESTER C U SCHOOL DIST 180	MCDONOUGH	0.0	9.3	81.4	9.3	90.7
PARK RIDGE C C SCHOOL DIST 64	COOK	1.3	7.9	66.4	24.3	90.7
MT ZION COMM UNIT SCH DIST 3	MACON	1.5	7.7	59.2	31.6	90.8
VIENNA SCHOOL DIST 55	JOHNSON	0.0	9.1	70.9	20.0	90.9
FISHER C U SCHOOL DISTRICT 1	CHAMPAIGN	0.0	9.1	78.2	12.7	90.9
NAUVOO-COLUSA C U S DIST 325	HANCOCK	0.0	9.1	63.6	27.3	90.9
INDUSTRY C U SCH DIST 165	MCDONOUGH	0.0	9.1	72.7	18.2	90.9
BRIMFIELD C U SCHOOL DIST 309	PEORIA	0.0	9.1	72.7	18.2	90.9
NEOGA COMM UNIT SCHOOL DIST 3	CUMBERLAND	0.0	9.1	65.2	25.8	91.0
CARY C C SCHOOL DIST 26	MCHENRY	1.5	7.5	60.3	30.7	91.0
FAIRVIEW SCHOOL DIST 72	COOK	0.0	8.8	73.5	17.6	91.1
SHILOH COMM UNIT SCH DIST 1	EDGAR	5.9	2.9	64.7	26.5	91.2
OAK GROVE SCHOOL DIST 68	LAKE	0.0	8.8	64.9	26.3	91.2
JAMAICA C U SCHOOL DIST 12	VERMILION	0.0	8.8	79.4	11.8	91.2
SHIRLAND C C SCHOOL DIST 134	WINNEBAGO	0.0	8.7	78.3	13.0	91.3
GLENCOE SCHOOL DIST 35	COOK	0.7	8.0	65.3	26.0	91.3
EAST DUBUQUE UNIT SCH DIST 119	JODAVIESS	6.5	2.2	65.2	26.1	91.3
WAVERLY C U SCHOOL DIST 6	MORGAN	0.0	8.7	65.2	26.1	91.3
LIBERTYVILLE SCHOOL DIST 70	LAKE	0.7	7.8	60.1	31.3	91.4
FIELDCREST CUSD #6	WOODFORD	2.9	5.7	54.3	37.1	91.4
ILLINI BLUFFS CU SCH DIST 327	PEORIA	0.0	8.6	75.7	15.7	91.4
CHADWICK-MILLEDGEVILLE CUSD 399	CARROLL	5.7	2.9	68.6	22.9	91.5
STOCKTON C U SCHOOL DIST 206	JODAVIESS	0.0	8.5	53.2	38.3	91.5
CENTER CASS SCHOOL DIST 66	DUPAGE	2.1	6.4	58.2	33.3	91.5

NAPERVILLE C U DIST 203	DUPAGE	0.6	7.9	61.1	30.4	91.5
R O W V A COMM UNIT SCH DIST 208	KNOX	4.3	4.3	70.2	21.3	91.5
ROCHESTER COMM UNIT SCH DIST 3A	SANGAMON	0.8	7.7	73.8	17.7	91.5
RUTLAND C C SCHOOL DIST 230	LASALLE	0.0	8.3	58.3	33.3	91.6
PAWNEE COMM UNIT SCHOOL DIST 11	SANGAMON	0.0	8.3	58.3	33.3	91.6
CENTRAL SCHOOL DISTRICT 51	TAZEWELL	1.4	6.9	52.8	38.9	91.7
PEARL CITY C U SCH DIST 200	STEPHENSON	0.0	8.3	62.5	29.2	91.7
STEWARDSON-STRASBURG CU DIST 5A	SHELBY	0.0	8.3	55.6	36.1	91.7
MILLER TWP CC SCH DIST 210	LASALLE	0.0	8.3	41.7	50.0	91.7
EUREKA C U DIST 140	WOODFORD	0.0	8.3	63.6	28.1	91.7
SPRING LAKE C C SCH DIST 606	TAZEWELL	0.0	8.3	41.7	50.0	91.7
GLEN ELLYN C C SCHOOL DIST 89	DUPAGE	1.5	6.5	70.1	21.8	91.9
BENJAMIN SCHOOL DISTRICT 25	DUPAGE	0.9	7.2	64.9	27.0	91.9
GOWER SCHOOL DIST 62	DUPAGE	0.0	8.1	58.6	33.3	91.9
MAZON-VERONA-KINSMAN ESD 2C	GRUNDY	0.0	8.1	75.7	16.2	91.9
DURAND C U SCH DIST 322	WINNEBAGO	0.0	8.0	74.0	18.0	92.0
RIVER FOREST SCHOOL DIST 90	COOK	2.0	6.0	39.3	52.7	92.0
STARK COUNTY C U SCH DIST 100	STARK	0.0	8.1	69.4	22.6	92.0
MILFORD COMM CONS SCH DIST 280	IROQUOIS	0.0	8.0	84.0	8.0	92.0
ERIE COMM UNIT SCH DIST 1	WHITESIDE	0.0	8.0	66.0	26.0	92.0
JOHNSBURG C U SCHOOL DIST 12	MCHENRY	1.1	6.9	68.1	23.9	92.0
DEERFIELD SCHOOL DIST 109	LAKE	0.3	7.6	63.9	28.2	92.1
METAMORA C C SCH DIST 1	WOODFORD	0.0	7.9	59.2	32.9	92.1
SELMAVILLE C C SCH DIST 10	MARION	3.8	3.8	61.5	30.8	92.3
ARLINGTON HEIGHTS SCH DIST 25	COOK	0.4	7.3	61.3	31.0	92.3
CASS SCHOOL DIST 63	DUPAGE	1.0	6.7	73.1	19.2	92.3
KILDEER COUNTRYSIDE C C S DIST 96	LAKE	0.5	7.2	64.8	27.5	92.3
LOSTANT COMM UNIT SCH DIST 425	LASALLE	0.0	7.7	53.8	38.5	92.3
LAKE FOREST SCHOOL DIST 67	LAKE	0.4	7.2	66.7	25.7	92.4
MERRIAM COMM CONS SCHOOL DIST 19	WAYNE	0.0	7.1	71.4	21.4	92.8
WILLIAMSVILLE C U SCHOOL DIST 15	SANGAMON	1.0	6.1	64.3	28.6	92.9
TRI VALLEY C U SCHOOL DISTRICT 3	MCLEAN	0.0	6.9	50.6	42.5	93.1
UNITY POINT C C SCHOOL DIST 140	JACKSON	0.0	6.8	59.5	33.8	93.3
HOLLIS CONS SCHOOL DIST 328	PEORIA	0.0	6.7	60.0	33.3	93.3
UNION RIDGE SCHOOL DIST 86	COOK	0.0	6.7	77.8	15.6	93.4
WARRENSBURG-LATHAM C U DIST 11	MACON	0.0	6.6	67.0	26.4	93.4
EL PASO C U DISTRICT 375	WOODFORD	1.6	4.9	63.9	29.5	93.4
OAKLAND C U SCHOOL DIST 5	COLES	0.0	6.5	74.2	19.4	93.6
RICHLAND SCHOOL DIST 88A	WILL	2.1	4.3	74.5	19.1	93.6
GEFF C C SCHOOL DISTRICT 14	WAYNE	6.3	0.0	62.5	31.3	93.8
DONOVAN COMM UNIT SCHOOL DIST 3	IROQUOIS	2.1	4.2	81.3	12.5	93.8

CRESCENT CITY C C SCHOOL DIST 275	IROQUOIS	0.0	6.3	50.0	43.8	93.8
LINCOLNSHIRE-PRAIRIEVIEW S D 103	LAKE	0.5	5.7	51.6	42.2	93.8
NORTHBROOK/GLENVIEW SCH DIST 30	COOK	1.8	4.4	70.2	23.7	93.9
WILMETTE SCHOOL DIST 39	COOK	0.3	5.7	56.6	37.4	94.0
PRAIRIE HILL C C SCH DIST 133	WINNEBAGO	0.0	5.9	64.7	29.4	94.1
NORTHBROOK SCHOOL DIST 28	COOK	0.0	5.9	56.5	37.6	94.1
GREENVIEW C U SCH DIST 200	MENARD	0.0	5.9	64.7	29.4	94.1
ROBEIN SCHOOL DISTRICT 85	TAZEWELL	0.0	5.6	77.8	16.7	94.5
GIANT CITY C C SCHOOL DIST 130	JACKSON	0.0	5.4	70.3	24.3	94.6
MT PULASKI COMM UNIT DIST 23	LOGAN	0.0	5.3	92.1	2.6	94.7
OPDYKE-BELLE-RIVE CC SCH DIST 5	JEFFERSON	0.0	5.3	89.5	5.3	94.8
LEROY COMMUNITY UNIT SCH DIST 2	MCLEAN	0.0	5.2	58.6	36.2	94.8
GRAYVILLE C U SCHOOL DIST 1	WHITE	0.0	5.3	63.2	31.6	94.8
RIVERSIDE SCHOOL DIST 96	COOK	0.0	5.0	51.2	43.8	95.0
TONICA COMM CONS SCH DIST 79	LASALLE	0.0	5.0	70.0	25.0	95.0
KENILWORTH SCHOOL DIST 38	COOK	0.0	4.9	65.6	29.5	95.1
WESTERN SPRINGS SCHOOL DIST 101	COOK	1.9	3.1	61.3	33.8	95.1
WASHINGTON SCHOOL DIST 52	TAZEWELL	0.0	4.9	63.7	31.4	95.1
AVISTON SCHOOL DISTRICT 21	CLINTON	0.0	4.8	61.9	33.3	95.2
JOPPA-MAPLE GROVE UNIT DIST 38	MASSAC	0.0	4.8	71.4	23.8	95.2
DUNLAP C U SCHOOL DIST 323	PEORIA	0.6	4.2	67.9	27.3	95.2
MAERCKER SCHOOL DISTRICT 60	DUPAGE	0.0	4.6	49.1	46.3	95.4
YORKWOOD C U SCH DIST 225	WARREN	0.0	4.5	68.2	27.3	95.5
BARTELSO SCHOOL DISTRICT 57	CLINTON	0.0	4.3	65.2	30.4	95.6
WINNETKA SCHOOL DIST 36	COOK	0.4	4.0	62.4	33.2	95.6
BANNOCKBURN SCHOOL DIST 106	LAKE	0.0	4.3	73.9	21.7	95.6
TEUTOPOLIS C U SCHOOL DIST 50	EFFINGHAM	0.8	3.4	62.2	33.6	95.8
LAGRANGE HIGHLANDS SCH DIST 106	COOK	0.0	4.1	71.4	24.5	95.9
THOMSON COM UNIT DIST 301	CARROLL	0.0	4.0	64.0	32.0	96.0
TREMONT COMM UNIT DIST 702	TAZEWELL	1.3	2.7	57.3	38.7	96.0
WEST WASHINGTON CO C U DIST 10	WASHINGTON	0.0	3.9	64.7	31.4	96.1
HINSDALE C C SCHOOL DIST 181	DUPAGE	0.0	3.9	53.4	42.7	96.1
MAROA FORSYTH C U SCH DIST 2	MACON	1.3	2.6	64.9	31.2	96.1
PLEASANTDALE SCHOOL DIST 107	COOK	0.0	3.8	66.3	30.0	96.3
GERMANTOWN HILLS SCHOOL DIST 69	WOODFORD	1.3	2.5	61.3	35.0	96.3
THORNTON SCHOOL DISTRICT 154	COOK	0.0	3.7	66.7	29.6	96.3
ROANOKE BENSON C U S DIST 60	WOODFORD	0.0	3.1	78.1	18.8	96.9
RILEY C C SCHOOL DIST 18	MCHENRY	0.0	2.7	81.1	16.2	97.3
SHILOH VILLAGE SCHOOL DIST 85	ST. CLAIR	0.0	2.3	65.9	31.8	97.7
LEXINGTON C U SCH DIST 7	MCLEAN	0.0	2.0	74.0	24.0	98.0
NEW SIMPSON HILL CONS DIST 32	JOHNSON	0.0	0.0	61.3	38.7	100.0

BEECHER CITY C U SCHOOL DIST 20	EFFINGHAM	0.0	0.0	35.3	64.7	100.0
GRAND PRAIRIE C C SCH DIST 6	JEFFERSON	0.0	0.0	64.3	35.7	100.0
SUMMERSVILLE SCHOOL DIST 79	JEFFERSON	0.0	0.0	51.7	48.3	100.0
WARREN C U SCH DIST 222	WARREN	0.0	0.0	86.4	13.6	100.0
CHERRY SCHOOL DIST 92	BUREAU	0.0	0.0	66.7	33.3	100.0
DESOTO CONS SCHOOL DISTRICT 86	JACKSON	0.0	0.0	77.1	22.9	100.0
TAMAROA SCHOOL DIST 5	PERRY	0.0	0.0	61.5	38.5	100.0
NETTLE CREEK C C SCH DIST 24C	GRUNDY	0.0	0.0	53.8	46.2	100.0
SOUTH WILMINGTON CONS SCH DIST 74	GRUNDY	0.0	0.0	72.7	27.3	100.0
LISBON COMM CONS SCH DIST 90	KENDALL	0.0	0.0	58.3	41.7	100.0
CISSNA PARK COMM UNIT SCH DIST 6	IROQUOIS	0.0	0.0	63.0	37.0	100.0
DEER PARK C C SCHOOL DIST 82	LASALLE	0.0	0.0	66.7	33.3	100.0
DELAND-WELDON C U SCH DIST 57	PIATT	0.0	0.0	63.2	36.8	100.0
LIVINGSTON C C SCHOOL DIST 4	MADISON	0.0	0.0	100.0	0.0	100.0
RIVERDALE SCHOOL DIST 14	WHITESIDE	0.0	0.0	80.0	20.0	100.0
NELSON ELEM SCHOOL DIST 8	LEE	0.0	0.0	80.0	20.0	100.0
ST LIBORY CONS SCH DIST 30	ST. CLAIR	0.0	0.0	66.7	33.3	100.0
SIGNAL HILL SCH DIST 181	ST. CLAIR	0.0	0.0	40.5	59.5	100.0
RONDOUT SCHOOL DIST 72	LAKE	0.0	0.0	43.8	56.3	100.1

Section 3.

LWS Correlation at a Glance

	ST20 - Physical Science	ST21 - Life Science	ST22 - Earth Science	ST23 - Scientific Reasoning
Early Elementary				
Know and apply the concepts, principles and processes of scientific inquiry.				
Know and apply the concepts, principles and processes of technological design.				
Know and apply concepts that explain how living things function, adapt and change.				
Know and apply concepts that describe how living things interact with each other and with their environment.				
Know and apply concepts that describe properties of matter and energy and the interactions between them.				
Know and apply concepts that describe force and motion and the principles that explain them.				
Know and apply concepts that describe the features and processes of the Earth and its resources.				
Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.				
Know and apply the accepted practices of science.				
Know and apply concepts that describe the interaction between science, technology and society.				

	ST20 - Physical Science	ST21 - Life Science	ST22 - Earth Science	ST23 - Scientific Reasoning
Late Elementary				
Know and apply the concepts, principles and processes of scientific inquiry.				
Know and apply the concepts, principles and processes of technological design.				
Know and apply concepts that explain how living things function, adapt and change.				
Know and apply concepts that describe how living things interact with each other and with their environment.				
Know and apply concepts that describe properties of matter and energy and the interactions between them.				
Know and apply concepts that describe force and motion and the principles that explain them.				
Know and apply concepts that describe the features and processes of the Earth and its resources.				
Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.				
Know and apply the accepted practices of science.				
Know and apply concepts that describe the interaction between science, technology and society.				

Section 4.

LWS Assignment Correlation

Early Elementary Section / Standards Statement

Physical Science 1	Physical Science 2	Life Science 1	Life Science 2	Earth Science 1	Earth Science 2	Scientific Reasoning 1	Scientific Reasoning 2
--------------------	--------------------	----------------	----------------	-----------------	-----------------	------------------------	------------------------

GOAL 11

Know and apply the concepts, principles and processes of scientific inquiry.

Describe an observed event.	2,3,4,5,8	1,3,4,7		4,8	3	6,8		
Develop questions on scientific topics.	20	20	20	20	20	20	20	20
Collect data for investigations using measuring instruments and technologies.	1,5,11	8			13		1,5,11,13	1,11
Record and store data using available technologies.								1,11
Arrange data into logical patterns and describe the patterns.		3,8,5		1	7			1
Compare observations of individual and group results.	20		20		20	20		

Know and apply the concepts, principles and processes of technological design.

Given a simple design problem, formulate possible solutions.							8	8
Design a device that will be useful in solving the problem.							8	8
Build the device using the materials and tools provided.							8	8
Test the device and record results using given instruments, techniques and measurement methods.							8	8
Report the design of the device, the test process and the results in solving a given problem.							8	8

GOAL 12

Know and apply concepts that explain how living things function, adapt and change.

Identify and describe the component parts of living things (e.g., birds have feathers; people have bones, blood, hair, skin) and their major functions.			1,2,5	2				
Categorize living organisms using a variety of observable features (e.g., size, color, shape, backbone).				3				

Know and apply concepts that describe how living things interact with each other and with their environment.

Describe and compare characteristics of living things in relationship to their environments.						1,11		
Describe how living things depend on one another for survival.								

Describe how living things depend on one another for survival.

Identify and compare sources of energy (e.g., batteries, the sun).	7,13	2,7,13		7		5	2,8,13	
Compare large-scale physical properties of matter (e.g., size, shape, color, texture, odor).	2,6	1,4,8			5	4,8,13	7,11	3,7

Know and apply concepts that describe force and motion and the principles that explain them.

Identify examples of motion (e.g., moving in a straight line, vibrating, rotating).	1,3,5							
Identify observable forces in nature (e.g., pushes, pulls, gravity, magnetism).	1,2,5,11,13							

Know and apply concepts that describe the features and processes of the Earth and its resources.

Identify components and describe diverse features of the Earth's land, water and atmospheric systems.					1,2,3,7	3,4,5		
Identify and describe patterns of weather and seasonal change.					3,7	3,6		
Identify renewable and nonrenewable natural resources.					5	5	2	

Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.

Identify and describe characteristics of the sun, Earth and moon as familiar objects in the solar system.					2,6	2,6		
Identify daily, seasonal and annual patterns related to the Earth's rotation and revolution.					3,6	6		

GOAL 13

Know and apply the accepted practices of science.

Use basic safety practices (e.g., not tasting materials without permission, "stop/drop/roll").		5,6	8	1		3	8	
Explain why similar results are expected when procedures are done the same way.								
Explain how knowledge can be gained by careful observation.	2,8,12,14	4,12		4,12		8,14		

Know and apply concepts that describe the interaction between science, technology and society.

Explain the uses of common scientific instruments (e.g., ruler, thermometer, balance, probe, computer).					7		1	1,11
Explain how using measuring tools improves the accuracy of estimates.	1,5,11	8			13		1,5,11	1,11
Describe contributions men and women have made to science and technology.								
Identify and describe ways that science and technology affect people's everyday lives (e.g., transportation, medicine, agriculture, sanitation, communication occupations).	3			4,8			2	2,4,6,8
Demonstrate ways to reduce, reuse and recycle materials.					5,13		2	

Late Elementary Section / Standards Statement

Physical Science 1	Physical Science 2	Life Science 1	Life Science 2	Earth Science 1	Earth Science 2	Scientific Reasoning 1	Scientific Reasoning 2
--------------------	--------------------	----------------	----------------	-----------------	-----------------	------------------------	------------------------

Know and apply the concepts, principles and processes of scientific inquiry.

GOAL 11	Formulate questions on a specific science topic and choose the steps needed to answer the questions.				3				
	Collect data for investigations using scientific process skills including observing, estimating and measuring.	1,2,5	1,3,7,8	8	2,6,8	1	4,6	1,3,5	1
	Construct charts and visualizations to display data.	20	8	20		20		20	1
	Use data to produce reasonable explanations.	20		20		20		20	
	Report and display the results of individual and group investigations.							20	

Know and apply the concepts, principles and processes of technological design.

Identify a design problem and propose possible solutions.							8	8
Develop a plan, design and procedure to address the problem identifying constraints (e.g., time, materials, and technology).							8	8
Build a prototype of the design using available tools and materials.							8	8
Test the prototype using suitable instruments, techniques and quantitative measurements to record data.							8	8
Assess test results and the effectiveness of the design using given criteria and noting possible sources of error.							8	8
Report test design, test process and test results.							8	8

GOAL12

Know and apply concepts that explain how living things function, adapt and change.

Describe simple life cycles of plants and animals and the similarities and differences in their offspring.			2,3					
Categorize features as either inherited or learned (e.g., flower color or eye color is inherited; language is learned).			2,3					

Know and apply concepts that describe how living things interact with each other and with their environment.

Describe relationships among various organisms in their environments (e.g., predator/prey, parasite/host, food chains and food webs).			4	7				
Identify physical features of plants and animals that help them live in different environments (e.g., specialized teeth for eating certain foods, thorns for protection, insulation for cold temperature).			4	4,6		1		

Describe how living things depend on one another for survival.

Describe and compare types of energy including light, heat, sound, electrical and mechanical.	7,13	2,7,13		7		5	8	
Describe and explain the properties of solids, liquids and gases.	2,6,11	1,8			5	7	7,8,13	3

Know and apply concepts that describe force and motion and the principles that explain them.

Explain constant, variable and periodic motions.	1,5							5
Demonstrate and explain ways that forces cause actions and reactions (e.g., magnets attracting and repelling; objects falling, rolling and bouncing).	1,2,3,5,7	1						

Know and apply concepts that describe the features and processes of the Earth and its resources.

Identify and explain natural cycles of the Earth's land, water and atmospheric systems (e.g., rock cycle, water cycle, weather patterns).					7	3,4		
Describe and explain short-term and long-term interactions of the Earth's components (e.g., earthquakes, types of erosion).					5,13	4,7,8		
Identify and classify recyclable materials.					5,13			

Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.

Identify and explain natural cycles and patterns in the solar system (e.g., order of the planets; moon phases; seasons as related to Earth's tilt, one's latitude, and where Earth is in its yearly orbit around the sun).						2,3,6	2,6		
Explain the apparent motion of the sun and stars.							6		
Identify easily recognizable star patterns (e.g., the Big Dipper, constellations).									

Know and apply the accepted practices of science.

Demonstrate ways to avoid injury when conducting science activities (e.g., wearing goggles, fire extinguisher use).		2,5,6	8	1			3,7	8	
Explain why similar investigations may not produce similar results.									
Explain why keeping accurate and detailed records are important.									

Know and apply concepts that describe the interaction between science, technology and society.

GOAL 13

Explain how technology is used in science for a variety of purposes (e.g., sample collection, storage and treatment; measurement; data collection, storage and retrieval; communication of information).									
Describe the effects on society of scientific and technological innovations (e.g., antibiotics, steam engine, and digital computer).									
Identify and explain ways that science and technology influence the lives and careers of people.									
Compare the relative effectiveness of reducing, reusing and recycling in actual situations.									
Identify and explain ways that technology changes ecosystems (e.g., dams, highways, buildings, communication networks, and power plants).									
Analyze how specific personal and societal choices that humans make affect local, regional and global ecosystems (e.g., lawn and garden care, mass transit).									

Section 5.

LWS Objectives Correlation

Illinois EE Science Standard Goal 11

- | | |
|--|---|
| <p>1 Know and apply the concepts, principles and processes of scientific inquiry.</p> | <p>1 Describe an observed event.
 <i>Observes the mixing of colored light to make other colors, including the making of white light.</i>
 <i>Observes the change from kinetic energy into heat and sound energy when rubbing hands together.</i>
 <i>Observes the relationship between volume of air and pitch of sound made by a percussion instrument.</i>
 <i>Observes the effect of adding an insoluble material to a liquid.</i>
 <i>Observes the effect that distance has on light levels.</i>
 <i>Observes the effects of tap water, salt water and fertilizer on the growth of plants in a nine day period.</i>
 <i>Observes the growth of a plant when grown under different watering conditions.</i>
 <i>Observes the relationship between length of tube and pitch of sound made by a wind instrument.</i>
 <i>Observes the relationship between length of rubber band and pitch of sound made by a stringed instrument.</i>
 <i>Observes the force of friction.</i>
 <i>Observes the weather during different seasons in a virtual representation of New York.</i>
 <i>Observes that images are reversed when reflected in a mirror.</i>
 <i>Observes how a varying incline effects the speed of a model car.</i>
 <i>Determines if objects are transparent or opaque using a light ray box.</i>
 <i>Identifies that sound travels as a vibration by speaking into a balloon.</i>
 <i>Observes the magnetic attraction and repulsion forces between the poles of magnets.</i>
 <i>Observes the growth of a plant when grown under different temperature conditions.</i></p> <p>2 Develop questions on scientific topics.
 <i>Writes a report on science.</i>
 <i>Writes a report about a life science topic.</i>
 <i>Critiques written and oral explanations of science.</i>
 <i>Writes a report about a physical science topic.</i>
 <i>Debates issues that relate to physical science.</i>
 <i>Critiques written and oral explanations of a physical science.</i>
 <i>Debates issues that relate to life science.</i>
 <i>Critiques written and oral explanations of a life science.</i>
 <i>Writes a report about an Earth and space science topic.</i>
 <i>Critiques written and oral explanations of an Earth and space science.</i>
 <i>Debates issues that relate to science.</i>
 <i>Debates issues that relate to Earth and space science.</i></p> |
|--|---|

- | | |
|--|--|
| <p>2 Know and apply the concepts, principles and processes of technological design.</p> | <p>3 Collect data for investigations using measuring instruments and technologies.
 <i>Identifies different ways to measure things.</i>
 <i>Measures temperature-using thermometers.</i>
 <i>States how temperature can be measured and identifies the temperature of the human body.</i>
 <i>Measures pulling forces using a Newton meter.</i>
 <i>Measures the effect that the force of gravity has on a mass placed on an inclined plane.</i>
 <i>Identifies that pushes and pulls are forces that can be measured in Newton's.</i>
 <i>Identifies symbols and instruments that can be used to represent and measure the weather.</i>
 <i>Uses a motion sensor to measure distances.</i>
 <i>Uses a ruler and a motion sensor to measure height.</i>
 <i>Uses a digital light meter to measure light levels in a room.</i>
 <i>Identifies how the level of light can be measured.</i>
 <i>Measures and compares the heat insulation properties of different materials.</i>
 <i>Uses an analogue light meter to measure light levels in a room.</i></p> <p>4 Record and store data using available technologies.
 <i>Measures temperature using thermometers.</i>
 <i>Uses graphs to plot the change of temperature over periods of time.</i>
 <i>States how temperature can be measured and identifies the temperature of the human body.</i></p> <p>5 Arrange data into logical patterns and describe the patterns.
 <i>Uses graphs to plot the change of temperature over periods of time.</i>
 <i>Determines the effect of exercise on heart rate.</i>
 <i>Discovers the relationship between heartbeat and pulse.</i>
 <i>Observes the relationship between volume of air and pitch of sound made by a percussion instrument.</i>
 <i>Observes the relationship between length of tube and pitch of sound made by a wind instrument.</i>
 <i>Discovers that the stretch of spring is proportional to the weight placed on it.</i>
 <i>Compares the heat loss in different materials using graphs.</i>
 <i>Uses a virtual weather station to record temperature and rainfall.</i>
 <i>Observes the relationship between length of rubber band and pitch of sound made by a stringed instrument.</i></p> <p>6 Compare observations of individual and group results.
 <i>Debates issues that relate to physical science.</i>
 <i>Debates issues that relate to Earth and space science.</i>
 <i>Makes a presentation about an Earth and space science topic.</i>
 <i>Debates issues that relate to science.</i>
 <i>Makes a presentation about a physical science topic.</i>
 <i>Makes a presentation on science.</i>
 <i>Debates issues that relate to life science.</i>
 <i>Makes a presentation about a life science topic.</i></p> |
| | <p>1 Given a simple design problem, formulate possible solutions.
 <i>Observes the weakness of a beam bridge.</i>
 <i>Constructs a bridge to span a gap.</i>
 <i>Uses different supports to make a bridge stronger.</i></p> |

- 2 Design a device that will be useful in solving the problem.**
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.
- 3 Build the device using the materials and tools provided.**
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.
Uses different supports to make a bridge stronger.
- 4 Test the device and record results using given instruments, techniques and measurement methods.**
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.
- 5 Report the design of the device, the test process and the results in solving a given problem.**
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.

Illinois EE Science Standard Goal 12

- | | | |
|--|-----------------|--|
| <p>1 Know and apply concepts that explain how living things function, adapt and change.</p> | <p>1</p> | <p>Identify and describe the component parts of living things (e.g., birds have feathers; people have bones, blood, hair, skin) and their major functions.
 <i>Investigates the bones of the human body.</i>
 <i>Investigates the joints of the human body.</i>
 <i>Investigates the lungs of the human body.</i>
 <i>Investigates the stomach of the human body.</i>
 <i>Investigates the heart of the human body.</i>
 <i>Observes flower pollen magnified by a microscope.</i>
 <i>Discovers how insects aid pollination in the life cycle of a plant.</i>
 <i>Uses software to discover methods of seeds dispersal from different plants.</i></p> |
| | <p>2</p> | <p>Categorize living organisms using a variety of observable features (e.g., size, color, shape, and backbone).
 <i>Uses classification keys to sort animals.</i>
 <i>Creates questions in a classification key to sort a group of farmyard animals.</i></p> |
| <p>2 Know and apply concepts that describe how living things interact with each other and with their environment.</p> | <p>1</p> | <p>Describe and compare characteristics of living things in relationship to their environments.
 <i>Discovers the habitats of different animals.</i>
 <i>Describes characteristics of animals habitats.</i>
 <i>Discovers the characteristics of animals that allow them to survive in their natural habitats.</i></p> |
| | <p>2</p> | <p>Describe how living things depend on one another for survival.
 <i>Uses a matching game to find what foods humans can obtain from animals.</i>
 <i>Uses a matching game to find what foods humans can obtain from plants.</i>
 <i>States the energy transfer that occurs between plants to animals and animals to animals in food chains.</i>
 <i>Identifies the producers primary consumers and secondary consumers in food chains.</i>
 <i>Classifies animals as carnivores, herbivores or omnivores.</i></p> |

- | | | |
|--|-----------------|---|
| <p>3 Know and apply concepts that describe properties of matter and energy and the interactions between them.</p> | <p>1</p> | <p>Identify and compare sources of energy (e.g., batteries, the sun).
 <i>Finds the effects of giving a crawler more energy.
 Discovers where kinetic, potential, chemical, light, heat and sound energy can occur.
 Explores the effects of global warming and alternative energy sources.
 Modifies a crawler so that it can store enough energy to reach the top of a slope.
 Uses a model car on a track to find when the car has enough energy to travel over a hill.
 Identifies renewable and non-renewable energy sources.
 Uses components, like lamps and buzzers, to discover that electrical energy can be changed into different energies.
 Identifies different types of energy.
 Uses flow diagrams to track the conversion of energy.
 States the energy transfer that occurs between plants to animals and animals to animals in food chains.
 Recognizes different forms of energy.
 Discovers that a dynamo can be used to convert kinetic energy into electrical energy.
 Observes the change from kinetic energy into heat and sound energy when rubbing hands together.
 Identifies how a device called a crawler works on different surfaces when given varying amounts of energy.</i></p> |
| | <p>2</p> | <p>Compare large-scale physical properties of matter (e.g., size, shape, color, texture, and odor).
 <i>Compares the force of friction between different materials.
 Observes the force of friction.
 Observes the effect of adding an insoluble material to a liquid.
 Tests if materials are soluble or insoluble.
 Sort rocks into sedimentary, metamorphic and igneous rock types.
 Determines if materials are electrical conductors or electrical insulators using a simple lamp circuit.
 Observes the mixing of colored light to make other colors, including the making of white light.
 Relates the weight, shape and size of a material to its density.
 Identifies how different materials can be recycled.
 Describes the different conditions for the formation of various rocks.
 Describes the changes that occur in different materials when they are cooled.
 Identifies where different natural materials come from.
 Describes the changes that occur in different materials when they are heated.
 Describes what happens to soluble and insoluble materials when they are added to a liquid.
 Measures and compares the heat insulation properties of different materials.
 Compares the heat loss in different materials using graphs.
 Identifies flexible, inflexible and elastic material properties.
 Identifies what natural materials have been used to make a series of sample objects.
 Determines which materials stick to a magnet.</i></p> |

<p>4 Know and apply concepts that describe force and motion and the principles that explain them.</p>	<p>1</p>	<p>Identify examples of motion (e.g., moving in a straight line, vibrating, rotating). <i>Measures pulling forces using a Newton meter.</i> <i>States if illustrated movements are pushes or pulls.</i> <i>Measures the effect that the force of gravity has on a mass placed on an inclined plane.</i> <i>Observes how a varying incline effects the speed of a model car.</i> <i>Squashes a ball and stretches a spring to observe the effects of pushing and pulling forces.</i> <i>Identifies that sound travels as a vibration by speaking into a balloon.</i> <i>Identifies that sound travels through string as a vibration by using a string telephone.</i></p>
	<p>2</p>	<p>Identify observable forces in nature (e.g., pushes, pulls, gravity, magnetism). <i>Measures the effect that the force of gravity has on a mass placed on an inclined plane.</i> <i>Determines which materials stick to a magnet.</i> <i>Identifies that pushes and pulls are forces that can be measured in Newton's.</i> <i>Observes how a varying incline effects the speed of a model car.</i> <i>Squashes a ball and stretches a spring to observe the effects of pushing and pulling forces.</i> <i>Observes the magnetic attraction and repulsion forces between the poles of magnets.</i> <i>Measures pulling forces using a Newton meter.</i> <i>States if illustrated movements are pushes or pulls.</i> <i>Discovers that materials containing iron stick to magnets.</i> <i>Describes the effect of pushing and pulling forces.</i></p>
<p>5 Know and apply concepts that describe the features and processes of the Earth and its resources.</p>	<p>1</p>	<p>Identify components and describe diverse features of the Earth's land, water and atmospheric systems. <i>Discovers some of the causes of global warming.</i> <i>Uses a software simulation to find out how seasons are linked to the position of the Earth in relation to the Sun.</i> <i>Uses a checklist of the seven life processes to identify if things are living or not living.</i> <i>Identifies what effect pollution can have on rivers and ponds.</i> <i>Uses software to find out why there is day and night.</i> <i>Uses a shadow trainer to find out why shadows change shape during the day.</i> <i>Observes the weather during different seasons in a virtual representation of New York.</i> <i>Uses a virtual weather station to record temperature and rainfall.</i> <i>Replicates and observes the stages of the water cycle.</i> <i>States the different forms of water in the water cycle.</i> <i>Sort rocks into sedimentary, metamorphic and igneous rock types.</i> <i>States the necessary conditions for the formation of clouds and precipitation.</i> <i>Explores the effects of global warming and alternative energy sources.</i> <i>Discovers symbols that are used to represent the weather.</i> <i>Describes the different conditions for the formation of various rocks.</i></p>

6 Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.

- 2 Identify and describe patterns of weather and seasonal change.**
*Uses a virtual weather station to record temperature and rainfall.
 Discovers symbols that are used to represent the weather.
 States the necessary conditions for the formation of clouds and precipitation.
 Uses a software simulation to find out how seasons are linked to the position of the Earth in relation to the Sun.
 States the effects that the Sun has on the light levels on the planets of the solar system.
 Observes the effect that distance has on light levels.
 Replicates and observes the stages of the water cycle.
 States the different forms of water in the water cycle.
 Observes the weather during different seasons in a virtual representation of New York.*
- 3 Identify renewable and nonrenewable natural resources.**
*Uses a simple classification key to sort three different types of metal.
 Identifies renewable and non-renewable energy sources.
 Identifies how different materials can be recycled.
 Explores the effects of global warming and alternative energy sources.
 Discovers some of the causes of global warming.*
- 1 Identify and describe characteristics of the sun, Earth and moon as familiar objects in the solar system.**
*Uses a shadow trainer to find out why shadows change shape during the day.
 Uses software to find out why there is day and night.
 States the effects that the Sun has on the light levels on the planets of the solar system.
 Recognizes planets in the solar system.
 States the position of the planets in the solar system.
 Uses software to discover facts about the Moon and its relation to the Earth.
 Observes the effect that distance has on light levels.
 Uses software to discover the different phases of the Moon.*
- 2 Identify daily, seasonal and annual patterns related to the Earth's rotation and revolution.**
*Observes the effect that distance has on light levels.
 States the effects that the Sun has on the light levels on the planets of the solar system.
 Observes the weather during different seasons in a virtual representation of New York.
 Uses a software simulation to find out how seasons are linked to the position of the Earth in relation to the Sun.
 Uses software to discover facts about the Moon and its relation to the Earth.
 Uses software to discover the different phases of the Moon.*

Illinois EE Science Standard Goal 13

- | | | |
|--|-----------------|---|
| <p>1 Know and apply the accepted practices of science.</p> | <p>1</p> | <p>Use basic safety practices (e.g., not tasting materials without permission, "stop/drop/roll").
 <i>Discovers the elastic properties of metal springs.
 Replicates and observes the stages of the water cycle.
 Uses litmus paper to find out if samples are acidic, basic or neutral.
 Discovers how electricity flows in series and parallel circuits.
 Modifies a crawler so that it can store enough energy to reach the top of a slope.
 Determines the effect of exercise on heart rate.</i></p> |
| | <p>2</p> | <p>Explain why similar results are expected when procedures are done the same way.
 <i>N/A</i></p> |
| | <p>3</p> | <p>Explain how knowledge can be gained by careful observation.
 <i>Observes the mixing of colored light to make other colors, including the making of white light.
 Identifies the attraction and repulsion between magnets and other objects.
 Observes the effect of adding an insoluble material to a liquid.
 States the appropriate climate to grow different plants.
 Describes the behavior of light.
 Observes that images are reversed when reflected in a mirror.
 Observes the magnetic attraction and repulsion forces between the poles of magnets.
 Describes what happens to soluble and insoluble materials when they are added to a liquid.
 Describes the appearance of reflections and shadows.
 Observes the growth of a plant when grown under different watering conditions.</i></p> |
| <p>2 Know and apply concepts that describe the interaction between science, technology and society.</p> | <p>1</p> | <p>Explain the uses of common scientific instruments (e.g., ruler, thermometer, balance, probe, computer).
 <i>Measures temperature using thermometers.
 Uses a ruler and a motion sensor to measure height.
 Uses a virtual weather station to record temperature and rainfall.
 States how temperature can be measured and identifies the temperature of the human body.</i></p> |

- 2 Explain how using measuring tools improves the accuracy of estimates.**
Identifies symbols and instruments which can be used to represent and measure the weather.
Measures temperature using thermometers.
Identifies different ways to measure things.
Uses a digital light meter to measure light levels in a room.
Identifies that pushes and pulls are forces that can be measured in Newton's.
Measures and compares the heat insulation properties of different materials.
Uses an analogue light meter to measure light levels in a room.
Uses a ruler and a motion sensor to measure height.
Uses a motion sensor to measure distances.
Measures pulling forces using a Newton meter.
Measures the effect that the force of gravity has on a mass placed on an inclined plane.
States how temperature can be measured and identifies the temperature of the human body.
- 3 Describe contributions men and women have made to science and technology.**
N/A
- 4 Identify and describe ways that science and technology affect people's everyday lives (e.g., transportation, medicine, agriculture, sanitation, communication occupations).**
Sends messages using coded signals.
Uses wing flaps and rudders to control the direction of airplanes in the air.
Sends messages using radio waves.
Describes different forms of climate control used to grow plants.
Sends messages using light signals.
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Constructs a windlass to observe that a gear will increase the amount of lift for each turn of its handle.
Identifies that sound travels through string as a vibration by using a string telephone.
Changes the balance of a model airplane to see the effect on flight.
Determines the nutrients that plants need to grow.
Identifies renewable and non-renewable energy sources.
Observes the effects of tap water, salt water and fertilizer on the growth of plants in a nine day period.
Changes the size and shape of a wing of a model airplane to see the effect in the lift given.
- 5 Demonstrate ways to reduce, reuse and recycle materials.**
Identifies renewable and non-renewable energy sources.
Identifies processes by which different materials can be recycled.
Identifies how different materials can be recycled.

Illinois EE Science Standard Goal 11

- | | |
|--|---|
| <p>1 Know and apply the concepts, principles and processes of scientific inquiry.</p> | <p>1 Describe an observed event.
 <i>Observes the mixing of colored light to make other colors, including the making of white light.</i>
 <i>Observes the change from kinetic energy into heat and sound energy when rubbing hands together.</i>
 <i>Observes the relationship between volume of air and pitch of sound made by a percussion instrument.</i>
 <i>Observes the effect of adding an insoluble material to a liquid.</i>
 <i>Observes the effect that distance has on light levels.</i>
 <i>Observes the effects of tap water, salt water and fertilizer on the growth of plants in a nine day period.</i>
 <i>Observes the growth of a plant when grown under different watering conditions.</i>
 <i>Observes the relationship between length of tube and pitch of sound made by a wind instrument.</i>
 <i>Observes the relationship between length of rubber band and pitch of sound made by a stringed instrument.</i>
 <i>Observes the force of friction.</i>
 <i>Observes the weather during different seasons in a virtual representation of New York.</i>
 <i>Observes that images are reversed when reflected in a mirror.</i>
 <i>Observes how a varying incline effects the speed of a model car.</i>
 <i>Determines if objects are transparent or opaque using a light ray box.</i>
 <i>Identifies that sound travels as a vibration by speaking into a balloon.</i>
 <i>Observes the magnetic attraction and repulsion forces between the poles of magnets.</i>
 <i>Observes the growth of a plant when grown under different temperature conditions.</i></p> <p>2 Develop questions on scientific topics.
 <i>Writes a report on science.</i>
 <i>Writes a report about a life science topic.</i>
 <i>Critiques written and oral explanations of science.</i>
 <i>Writes a report about a physical science topic.</i>
 <i>Debates issues that relate to physical science.</i>
 <i>Critiques written and oral explanations of a physical science.</i>
 <i>Debates issues that relate to life science.</i>
 <i>Critiques written and oral explanations of a life science.</i>
 <i>Writes a report about an Earth and space science topic.</i>
 <i>Critiques written and oral explanations of an Earth and space science.</i>
 <i>Debates issues that relate to science.</i>
 <i>Debates issues that relate to Earth and space science.</i></p> |
|--|---|

- | | | |
|--|---|---|
| <p>2 Know and apply the concepts, principles and processes of technological design.</p> | <p>3 Collect data for investigations using measuring instruments and technologies.
 <i>Identifies different ways to measure things.</i>
 <i>Measures temperature using thermometers.</i>
 <i>States how temperature can be measured and identifies the temperature of the human body.</i>
 <i>Measures pulling forces using a Newton meter.</i>
 <i>Measures the effect that the force of gravity has on a mass placed on an inclined plane.</i>
 <i>Identifies that pushes and pulls are forces that can be measured in Newton's.</i>
 <i>Identifies symbols and instruments which can be used to represent and measure the weather.</i>
 <i>Uses a motion sensor to measure distances.</i>
 <i>Uses a ruler and a motion sensor to measure height.</i>
 <i>Uses a digital light meter to measure light levels in a room.</i>
 <i>Identifies how the level of light can be measured.</i>
 <i>Measures and compares the heat insulation properties of different materials.</i>
 <i>Uses an analogue light meter to measure light levels in a room.</i></p> <p>4 Record and store data using available technologies.
 <i>Measures temperature using thermometers.</i>
 <i>Uses graphs to plot the change of temperature over periods of time.</i>
 <i>States how temperature can be measured and identifies the temperature of the human body.</i></p> <p>5 Arrange data into logical patterns and describe the patterns.
 <i>Uses graphs to plot the change of temperature over periods of time.</i>
 <i>Determines the effect of exercise on heart rate.</i>
 <i>Discovers the relationship between heartbeat and pulse.</i>
 <i>Observes the relationship between volume of air and pitch of sound made by a percussion instrument.</i>
 <i>Observes the relationship between length of tube and pitch of sound made by a wind instrument.</i>
 <i>Discovers that the stretch of spring is proportional to the weight placed on it.</i>
 <i>Compares the heat loss in different materials using graphs.</i>
 <i>Uses a virtual weather station to record temperature and rainfall.</i>
 <i>Observes the relationship between length of rubber band and pitch of sound made by a stringed instrument.</i></p> <p>6 Compare observations of individual and group results.
 <i>Debates issues that relate to physical science.</i>
 <i>Debates issues that relate to Earth and space science.</i>
 <i>Makes a presentation about an Earth and space science topic.</i>
 <i>Debates issues that relate to science.</i>
 <i>Makes a presentation about a physical science topic.</i>
 <i>Makes a presentation on science.</i>
 <i>Debates issues that relate to life science.</i>
 <i>Makes a presentation about a life science topic.</i></p> | <p>1 Given a simple design problem, formulate possible solutions.
 <i>Observes the weakness of a beam bridge.</i>
 <i>Constructs a bridge to span a gap.</i>
 <i>Uses different supports to make a bridge stronger.</i></p> |
|--|---|---|

- 2 Design a device that will be useful in solving the problem.**
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.
- 3 Build the device using the materials and tools provided.**
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.
Uses different supports to make a bridge stronger.
- 4 Test the device and record results using given instruments, techniques and measurement methods.**
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.
- 5 Report the design of the device, the test process and the results in solving a given problem.**
Uses different supports to make a bridge stronger.
Constructs a bridge to span a gap.
Observes the weakness of a beam bridge.

Illinois LE Science Standard Goal 12

- | | |
|--|---|
| <p>1 Know and apply concepts that explain how living things function, adapt and change.</p> | <p>1 Describe simple life cycles of plants and animals and the similarities and differences in their offspring.
<i>Uses a board-game to discover the stages in the life cycle of a plant.
Uses software to discover methods of seeds dispersal from different plants.
Using software, discovers the different stages of the human life cycle.
Using software, discovers the different stages in the life cycle of butterflies and frogs.</i></p> <p>2 Categorize features as either inherited or learned (e.g., flower color or eye color is inherited; language is learned).
<i>Using software, discovers the different stages in the life cycle of butterflies and frogs.
Uses a board-game to discover the stages in the life cycle of a plant.
Uses software to discover methods of seeds dispersal from different plants.
Using software, discovers the different stages of the human life cycle.</i></p> |
| <p>2 Know and apply concepts that describe how living things interact with each other and with their environment.</p> | <p>1 Describe relationships among various organisms in their environments (e.g., predator/prey, parasite/host, food chains and food webs).
<i>Uses a matching game to find what foods humans can obtain from animals.
Classifies animals as carnivores, herbivores or omnivores.
Identifies the producers primary consumers and secondary consumers in food chains.
Uses a matching game to find what foods humans can obtain from plants.
States the energy transfer that occurs between plants to animals and animals to animals in food chains.</i></p> <p>2 Identify physical features of plants and animals that help them live in different environments (e.g., specialized teeth for eating certain foods, thorns for protection, insulation for cold temperature).
<i>Uses a matching game to find what foods humans can obtain from plants.
Discovers the characteristics of animals that allow them to survive in their natural habitats.
Discovers the habitats of different animals.
Describes different forms of climate control used to grow plants.
Uses a matching game to find what foods humans can obtain from animals.
Observes the growth of a plant when grown under different watering conditions.
Observes the growth of a plant when grown under different temperature conditions.
Discovers the effects that sunlight and water have on the growth of plants.
Discovers that plants require carbon dioxide and produce oxygen as a waste product.
Recognizes the purpose of photosynthesis in plants.</i></p> |

- | | | |
|--|-----------------|---|
| <p>3 Know and apply concepts that describe properties of matter and energy and the interactions between them.</p> | <p>1</p> | <p>Describe and compare types of energy including light, heat, sound, electrical and mechanical.
 <i>Observes the change from kinetic energy into heat and sound energy when rubbing hands together.</i>
 <i>Identifies renewable and non-renewable energy sources.</i>
 <i>Recognizes different forms of energy.</i>
 <i>Uses components, like lamps and buzzers, to discover that electrical energy can be changed into different energies.</i>
 <i>Discovers that a dynamo can be used to convert kinetic energy into electrical energy.</i></p> |
| | <p>2</p> | <p>Describe and explain the properties of solids, liquids and gases.
 <i>Describes the changes that occur in different materials when they are heated.</i>
 <i>Determines which materials stick to a magnet.</i>
 <i>Determines if materials are electrical conductors or electrical insulators using a simple lamp circuit.</i>
 <i>Identifies how different materials can be recycled.</i>
 <i>Identifies where different natural materials come from.</i>
 <i>Identifies what natural materials have been used to make a series of sample objects.</i>
 <i>Identifies if materials come from the Earth, from plants or from animals.</i>
 <i>Measures and compares the heat insulation properties of different materials.</i>
 <i>States if changes in different materials, caused by heating and cooling, can be reversed.</i>
 <i>Compares the heat loss in different materials using graphs.</i>
 <i>Describes the changes that occur in different materials when they are cooled.</i></p> |
| | <p>1</p> | <p>Describe and compare types of energy including light, heat, sound, electrical and mechanical.
 <i>Finds the effects of giving a crawler more energy.</i>
 <i>States the energy transfer that occurs between plants to animals and animals to animals in food chains.</i>
 <i>Modifies a crawler so that it can store enough energy to reach the top of a slope.</i>
 <i>Explores the effects of global warming and alternative energy sources.</i>
 <i>Discovers where kinetic, potential, chemical, light, heat and sound energy can occur.</i>
 <i>Uses a model car on a track to find when the car has enough energy to travel over a hill.</i>
 <i>Identifies different types of energy.</i>
 <i>Uses flow diagrams to track the conversion of energy.</i></p> |
| | <p>2</p> | <p>Describe and explain the properties of solids, liquids and gases.
 <i>Tests if materials are soluble or insoluble.</i>
 <i>Identifies that sound travels as a vibration and so can travel through solids.</i>
 <i>Compares the force of friction between different materials.</i>
 <i>Separates solids and liquids using filter paper.</i></p> |

- | | | |
|--|-----------------|---|
| <p>4 Know and apply concepts that describe force and motion and the principles that explain them.</p> | <p>1</p> | <p>Explain constant, variable and periodic motions.
 <i>States if illustrated movements are pushes or pulls.
 Squashes a ball and stretches a spring to observe the effects of pushing and pulling forces.
 Constructs a pendulum to observe the relationship between pendulum weight and length with its swing time.
 Observes the effect of changing the length of a pendulum on the time of its swing.
 Observes the effect of the changing the weight of a pendulum on the time of its swing.
 Measures pulling forces using a Newton meter.
 Measures the effect that the force of gravity has on a mass placed on an inclined plane.
 Observes how a varying incline effects the speed of a model car.</i></p> |
| | <p>2</p> | <p>Demonstrate and explain ways that forces cause actions and reactions (e.g., magnets attracting and repelling; objects falling, rolling and bouncing).
 <i>Compares the force of friction between different materials.
 Observes how a varying incline effects the speed of a model car.
 Observes the force of friction.
 Uses a model car on a track to find when the car has enough energy to travel over a hill.
 Discovers where kinetic, potential, chemical, light, heat and sound energy can occur.
 Measures the effect that the force of gravity has on a mass placed on an inclined plane.
 Measures pulling forces using a Newton meter.
 Squashes a ball and stretches a spring to observe the effects of pushing and pulling forces.
 Identifies that sound travels as a vibration by speaking into a balloon.
 Determines which materials stick to a magnet.
 States if illustrated movements are pushes or pulls.
 Discovers that materials containing iron stick to magnets.
 Observes the magnetic attraction and repulsion forces between the poles of magnets.</i></p> |
| <p>5 Know and apply concepts that describe the features and processes of the Earth and its resources.</p> | <p>1</p> | <p>Identify and explain natural cycles of the Earth's land, water and atmospheric systems (e.g., rock cycle, water cycle, weather patterns).
 <i>Sorts rocks into sedimentary, metamorphic and igneous rock types.
 Discovers symbols that are used to represent the weather.
 States the necessary conditions for the formation of clouds and precipitation.
 Replicates and observes the stages of the water cycle.
 Uses a virtual weather station to record temperature and rainfall.
 Describes the different conditions for the formation of various rocks.
 States the different forms of water in the water cycle.</i></p> |
| | <p>2</p> | <p>Describe and explain short-term and long-term interactions of the Earth's components (e.g., earthquakes, types of erosion).
 <i>Tests if materials are soluble or insoluble.
 Observes the effect of adding an insoluble material to a liquid.
 Separates solids and liquids using filter paper.
 Separates mixtures using a sieve.
 Sorts rocks into sedimentary, metamorphic and igneous rock types.
 Describes the different conditions for the formation of various rocks.</i></p> |

<p>6 Know and apply concepts that explain the composition and structure of the universe and Earth's place in it.</p>	<p>3</p>	<p>Identify and classify recyclable materials. <i>Identifies how different materials can be recycled.</i> <i>Identifies processes by which different materials can be recycled.</i></p>
	<p>1</p>	<p>Identify and explain natural cycles and patterns in the solar system (e.g., order of the planets; moon phases; seasons as related to Earth's tilt, one's latitude, and where Earth is in its yearly orbit around the sun). <i>Observes the weather during different seasons in a virtual representation of New York.</i> <i>Uses a software simulation to find out how seasons are linked to the position of the Earth in relation to the Sun.</i> <i>States the position of the planets in the solar system.</i> <i>Uses software to find out why there is day and night.</i> <i>Uses a shadow trainer to find out why shadows change shape during the day.</i> <i>Uses software to discover the different phases of the Moon.</i> <i>Observes the effect that distance has on light levels.</i> <i>Uses software to discover facts about the Moon and its relation to the Earth.</i> <i>Recognizes planets in the solar system.</i> <i>States the effects that the Sun has on the light levels on the planets of the solar system.</i></p>
	<p>2</p>	<p>Explain the apparent motion of the sun and stars. <i>States the effects that the Sun has on the light levels on the planets of the solar system.</i> <i>Observes the effect that distance has on light levels.</i></p>
	<p>3</p>	<p>Identify easily recognizable star patterns (e.g., the Big Dipper, constellations). <i>N/A</i></p>

Illinois LE Science Standard Goal 13

- | | | |
|--|-----------------|--|
| <p>1 Know and apply the accepted practices of science.</p> | <p>1</p> | <p>Demonstrate ways to avoid injury when conducting science activities (e.g., wearing goggles, fire extinguisher use).
 <i>Determines the effect of exercise on heart rate.</i>
 <i>Modifies a crawler so that it can store enough energy to reach the top of a slope.</i>
 <i>Separates solids and liquids using filter paper.</i>
 <i>Replicates and observes the stages of the water cycle.</i>
 <i>Uses litmus paper to find out if samples are acidic, basic or neutral.</i>
 <i>Discovers how electricity flows in series and parallel circuits.</i>
 <i>Uses components, like lamps and buzzers, to discover that electrical energy can be changed into different energies.</i>
 <i>Discovers the elastic properties of metal springs.</i></p> |
| | <p>2</p> | <p>Explain why similar investigations may not produce similar results.
 <i>N/A</i></p> |
| | <p>3</p> | <p>Explain why keeping accurate and detailed records is important.
 <i>N/A</i></p> |
| <p>2 Know and apply concepts that describe the interaction between science, technology and society.</p> | <p>1</p> | <p>Explain how technology is used in science for a variety of purposes (e.g., sample collection, storage and treatment; measurement; data collection, storage and retrieval; communication of information).
 <i>N/A</i></p> |
| | <p>2</p> | <p>Describe the effects on society of scientific and technological innovations (e.g., antibiotics, steam engine, digital computer).
 <i>N/A</i></p> |
| | <p>3</p> | <p>Identify and explain ways that science and technology influence the lives and careers of people.
 <i>N/A</i></p> |
| | <p>4</p> | <p>Compare the relative effectiveness of reducing, reusing and recycling in actual situations.
 <i>N/A</i></p> |
| | <p>5</p> | <p>Identify and explain ways that technology changes ecosystems (e.g., dams, highways, buildings, communication networks, power plants).
 <i>N/A</i></p> |
| | <p>6</p> | <p>Analyze how specific personal and societal choices that humans make affect local, regional and global ecosystems (e.g., lawn and garden care, mass transit).
 <i>N/A</i></p> |

Section 6.

LWS Objective Lists

ST20-1 Living with Physical Science Level-1

1 Pushes and Pulls

- 1 States if illustrated movements are pushes or pulls.
- 2 Measures pulling forces using a Newton meter.

2 Magnets

- 1 Determines which materials stick to a magnet.
- 2 Discovers that materials containing iron stick to magnets.
- 3 Observes the magnetic attraction and repulsion forces between the poles of magnets.

3 Sound Travel

- 1 Identifies that sound travels as a vibration by speaking into a balloon.
- 2 Identifies that sound travels through string as a vibration by using a string telephone.

4 Light Sources

- 1 Identifies objects around the classroom that are light sources.
- 2 Determines if objects are transparent or opaque using a light ray box.

5 Effects of Force

- 1 Squashes a ball and stretches a spring to observe the effects of pushing and pulling forces.
- 2 Observes how a varying incline effects the speed of a model car.
- 3 Measures the effect that the force of gravity has on a mass placed on an inclined plane.

6 Electrical Conductors

- 1 Determines if materials are electrical conductors or electrical insulators using a simple lamp circuit.
- 2 Discovers that electricity cannot flow unless a circuit is complete.

7 Types of Energy

- 1 Discovers where kinetic, potential, chemical, light, heat and sound energy can occur.
- 2 Uses a model car on a track to find when the car has enough energy to travel over a hill.

8 Reflections and Shadows

- 1 Observes that images are reversed when reflected in a mirror.
- 2 Identifies how shadows are formed and how they change depending on their distance from a light source.

11 Pre Test Quiz 1

- 1 Identifies that pushes and pulls are forces that can be measured in Newton's.
- 2 Identifies the attraction and repulsion between magnets and other objects.
- 3 Identifies that sound travels as a vibration and so can travel through solids.
- 4 Identifies if objects are light sources and if they are transparent or opaque.

12 Post Test Quiz 1

- 1 Identifies that pushes and pulls are forces that can be measured in Newton's.
- 2 Identifies the attraction and repulsion between magnets and other objects.
- 3 Identifies that sound travels as a vibration and so can travel through solids.
- 4 Identifies if objects are light sources and if they are transparent or opaque.

13 Pre Test Quiz 2

- 1 Describes the effect of pushing and pulling forces.
- 2 Identifies if objects are electrical conductors or electrical insulators.
- 3 Identifies different types of energy.
- 4 Describes the appearance of reflections and shadows.

14 Post Test Quiz 2

- 1 Describes the effect of pushing and pulling forces.
- 2 Identifies if objects are electrical conductors or electrical insulators.
- 3 Identifies different types of energy.
- 4 Describes the appearance of reflections and shadows.

ST20-2 Living with Physical Science Level-2

1 Friction

- 1 Observes the force of friction.
- 2 Compares the force of friction between different materials.

2 Series Circuits

- 1 Uses components, like lamps and buzzers, to discover that electrical energy can be changed into different energies.
- 2 Interprets electrical diagrams to predict the behavior of electrical components connected in series.

3 Musical Sounds

- 1 Observes the relationship between length of rubber band and pitch of sound made by a stringed instrument.
- 2 Observes the relationship between length of tube and pitch of sound made by a wind instrument.
- 3 Observes the relationship between volume of air and pitch of sound made by a percussion instrument.

4 Light Rays

- 1 Uses lenses to bend light rays.
- 2 Observes the mixing of colored light to make other colors, including the making of white light.

5 Springs

- 1 Discovers the elastic properties of metal springs.
- 2 Discovers that the stretch of spring is proportional to the weight placed on it.

6 Parallel Circuits

- 1 Discovers how electricity flows in series and parallel circuits.
- 2 Interprets electrical diagrams to predict the behavior of electrical components connected in parallel.
- 3 States the use of parallel and series electrical circuits in the home.

7 Energy Conversion

- 1 Uses flow diagrams to track the conversion of energy.
- 2 Observes the change from kinetic energy into heat and sound energy when rubbing hands together.
- 3 Discovers that a dynamo can be used to convert kinetic energy into electrical energy.

8 Cooling

- 1 Compares the heat loss in different materials using graphs.
- 2 Measures and compares the heat insulation properties of different materials.
- 3 Identifies the use of insulating domestic water pipes against cold.

11 Pre Test Quiz 3

- 1 Describes the friction force that occurs between two surfaces.
- 2 Describes how electrical components work in series circuits.
- 3 Predicts how the pitch of sound produced by a vibrating object changes with object size.
- 4 Recognizes the lenses that bend light rays.

12 Post Test Quiz 3

- 1 Describes the friction force that occurs between two surfaces.
- 2 Predicts how the pitch of sound produced by a vibrating object changes with object size.
- 3 Describes how electrical components work in series circuits.
- 4 Describes the behavior of light.

13 Pre Test Quiz 4

- 1 Predicts that the stretch of a spring is proportional to the weight placed on it.
- 2 Describes how electrical components work in parallel circuits.
- 3 Recognizes different forms of energy.
- 4 Describes how heat insulators and heat conductors lose heat.

14 Post Test Quiz 4

- 1 Predicts that the stretch of a spring is proportional to the weight placed on it.
- 2 Describes how electrical components work in parallel circuits.
- 3 Recognizes different forms of energy.
- 4 Describes how heat insulators and heat conductors lose heat.

ST21-1 Living with Life Science Level-1

1 Bones

- 1 Investigates the bones of the human body.
- 2 Investigates the joints of the human body.

2 Plant Life Cycles

- 1 Uses a board-game to discover the stages in the life cycle of a plant.
- 2 Uses software to discover methods of seeds dispersal from different plants.

3 Animal Life Cycles

- 1 Using software, discovers the different stages of the human life cycle.
- 2 Using software, discovers the different stages in the life cycle of butterflies and frogs.

4 Food Providers

- 1 Uses a matching game to find what foods humans can obtain from animals.
- 2 Uses a matching game to find what foods humans can obtain from plants.

5 The Body

- 1 Investigates the lungs of the human body.
- 2 Investigates the stomach of the human body.
- 3 Investigates the heart of the human body.

6 Using a Microscope

- 1 Identifies the parts and controls of a microscope.
- 2 Uses a microscope to view the cells of plants.

7 Senses

- 1 Uses software to find what parts of the human body give each of the five senses.
- 2 Specifies what senses can be used to identify different things.

8 Acids and Bases

- 1 Uses litmus paper to find out if samples are acidic, basic or neutral.
- 2 Investigates the pH levels of virtual fields to find which field is most suitable to grow crops.

11 Pre Test Quiz 1

- 1 Identifies bones and joints of the human body.
- 2 Identifies the stages in the life cycle of a plant.
- 3 Identifies stages in the life cycle of animals.
- 4 Identifies foods that come from plants and animals.

12 Post Test Quiz 1

- 1 Identifies bones and joints of the human body.
- 2 Identifies the stages in the life cycle of a plant.
- 3 Identifies stages in the life cycle of animals.
- 4 Identifies foods that come from plants and animals.

13 Pre Test Quiz 2

- 1 Identifies characteristics of the lungs, stomach and heart of the human body.
- 2 States the uses of a microscope.
- 3 Identifies senses of the human body.
- 4 Identifies the pH levels of acids and bases.

14 Post Test Quiz 2

- 1 Identifies characteristics of the lungs, stomach and heart of the human body.
- 2 States the uses of a microscope.
- 3 Identifies senses of the human body.
- 4 Identifies the pH levels of acids and bases.

ST21-2 Living with Life Science Level-2

1 Exercise

- 1 Discovers the relationship between heartbeat and pulse.
- 2 Determines the effect of exercise on heart rate.

2 Pollination

- 1 Observes flower pollen magnified by a microscope.
- 2 Discovers how insects aid pollination in the life cycle of a plant.

3 Sorting Animals

- 1 Uses classification keys to sort animals.
- 2 Creates questions in a classification key to sort a group of farmyard animals.

4 Climate Control

- 1 Observes the growth of a plant when grown under different watering conditions.
- 2 Observes the growth of a plant when grown under different temperature conditions.
- 3 Describes different forms of climate control used to grow plants.

5 Diet

- 1 Identifies the nutrients contained in different foods.
- 2 Discovers the food groups necessary for a healthy balanced diet.

6 Plant Food

- 1 Recognizes the purpose of photosynthesis in plants.
- 2 Discovers the effects that sunlight and water have on the growth of plants.
- 3 Discovers that plants require carbon dioxide and produce oxygen as a waste product.

7 Food Chains

- 1 States the energy transfer that occurs between plants to animals and animals to animals in food chains.
- 2 Identifies the producers primary consumers and secondary consumers in food chains.
- 3 Classifies animals as carnivores, herbivores or omnivores.

8 Nutrients

- 1 Determines the nutrients that plants need to grow.
- 2 Observes the effects of tap water, salt water and fertilizer on the growth of plants in a nine day period.

11 Pre Test Quiz 3

- 1 Describes the pulse as a method of detecting blood flow around the body.
- 2 Describes the relationship between a honeybee and a flower for pollination to occur.
- 3 Identifies questions that can be asked to sort different animals.
- 4 Relates plant growth with climate.

12 Post Test Quiz 3

- 1 Identifies questions that can be asked to sort different animals.
- 2 Describes the relationship between a honeybee and a flower for pollination to occur.
- 3 States the appropriate climate to grow different plants.
- 4 Describes the pulse as a method of detecting blood flow around the body.

13 Pre Test Quiz 4

- 1 Associates various nutrients with food groups.
- 2 Identifies the parts of plants that help them to make their own food.
- 3 Determines the placement of animals and plants in food chains.
- 4 Identifies the nutrients plants use for growth.

14 Post Test Quiz 4

- 1 Associates various nutrients with food groups.
- 2 Identifies the parts of plants that help them to make their own food.
- 3 Identifies the various nutrients plants use for growth.
- 4 Distinguishes between a herbivore and a carnivore.

ST22-1 Living with Earth Science Level-1

1 Rivers and Ponds

- 1 Uses a checklist of the seven life processes to identify if things are living or not living.
- 2 Identifies what effect pollution can have on rivers and ponds.

2 Day and Night

- 1 Uses software to find out why there is day and night.
- 2 Uses a shadow trainer to find out why shadows change shape during the day.

3 The Seasons

- 1 Observes the weather during different seasons in a virtual representation of New York.
- 2 Uses a software simulation to find out how seasons are linked to the position of the Earth in relation to the Sun.

4 Fossil Fuels

- 1 Identifies how fossil fuels are made and where they come from.
- 2 Identifies what fossil fuels can be used for.

5 Recycling

- 1 Identifies how different materials can be recycled.
- 2 Uses a simple classification key to sort three different types of metal.

6 The Moon

- 1 Uses software to discover facts about the Moon and its relation to the Earth.
- 2 Uses software to discover the different phases of the Moon.

7 Weather Records

- 1 Discovers symbols that are used to represent the weather.
- 2 Uses a virtual weather station to record temperature and rainfall.

8 Fossils

- 1 Uses a virtual excavation to find different fossils.
- 2 Uses software to find out how different types of fossils are formed.

11 Pre Test Quiz 1

- 1 Identifies if things are alive or not alive and how they can be affected by pollution.
- 2 Describes what causes day and night and what happens to shadows during the day.
- 3 Identifies the seasons at different places on the Earth.
- 4 Identifies fossil fuels and how they are made.

12 Post Test Quiz 1

- 1 Identifies if things are alive or not alive and how they can be affected by pollution.
- 2 Describes what causes day and night and what happens to shadows during the day.
- 3 Identifies the seasons at different places on the Earth.
- 4 Identifies fossil fuels and how they are made.

13 Pre Test Quiz 2

- 1 Identifies processes by which different materials can be recycled.
- 2 Identifies characteristics of the Moon and its phases.
- 3 Identifies symbols and instruments which can be used to represent and measure the weather.
- 4 Describes how fossils are formed.

14 Post Test Quiz 2

- 1 Identifies processes by which different materials can be recycled.
- 2 Identifies characteristics of the Moon and its phases.
- 3 Identifies symbols and instruments which can be used to represent and measure the weather.
- 4 Describes how fossils are formed.

ST22-2 Living with Earth Science Level-2

1 Habitats

- 1 Discovers the characteristics of animals that allow them to survive in their natural habitats.
- 2 Discovers the habitats of different animals.

2 The Planets

- 1 States the position of the planets in the solar system.
- 2 Recognizes planets in the solar system.

3 Rain and Clouds

- 1 States the necessary conditions for the formation of clouds and precipitation.
- 2 Replicates and observes the stages of the water cycle.
- 3 States the different forms of water in the water cycle.

4 Rocks

- 1 Describes the different conditions for the formation of various rocks.
- 2 Sorts rocks into sedimentary, metamorphic and igneous rock types.

5 Global Warming

- 1 Discovers some of the causes of global warming.
- 2 Explores the effects of global warming and alternative energy sources.

6 The Sun

- 1 States the effects that the Sun has on the light levels on the planets of the solar system.
- 2 Observes the effect that distance has on light levels.

7 Separating Mixtures

- 1 Separates mixtures using a sieve.
- 2 Separates solids and liquids using filter paper.

8 Solubility

- 1 Tests if materials are soluble or insoluble.
- 2 Observes the effect of adding an insoluble material to a liquid.

11 Pre Test Quiz 3

- 1 Describes characteristics of animals habitats.
- 2 Identifies planets in the solar system.
- 3 Describes the states and processes of the water cycle.
- 4 States how different rocks are formed.

12 Post Test Quiz 3

- 1 Describes characteristics of animals habitats.
- 2 States how different rocks are formed.
- 3 Identifies planets in the solar system.
- 4 Describes the states and processes of the water cycle.

13 Pre Test Quiz 4

- 1 Identifies some causes and effects of global warming.
- 2 Relates the position of a planet in the solar system to the amount of light it receives.
- 3 Identifies how mixtures can be separated using different filters.
- 4 Describes what happens to soluble and insoluble materials when they are added to a liquid.

14 Post Test Quiz 4

- 1 Describes what happens to soluble and insoluble materials when they are added to a liquid.
- 2 Identifies how mixtures can be separated using filters.
- 3 Relates the position of a planet in the solar system to the amount of light it receives.
- 4 Identifies some causes and effects of global warming.

ST23-1 Living with Scientific Reasoning Level-1

1 Measuring Distance

- 1 Uses a motion sensor to measure distances.
- 2 Uses a ruler and a motion sensor to measure height.

2 Alternative Energy

- 1 Identifies renewable and non-renewable energy sources.
- 2 Uses a solar panel to generate electricity in a circuit.

3 Elasticity

- 1 Tests a series of different objects to find if they are flexible, inflexible or elastic.
- 2 Identifies if different objects should be flexible, inflexible or elastic in order to do their jobs.

4 Balance

- 1 Discovers the effect of forces on a lever.
- 2 Uses a lever to balance weights.

5 Light Levels

- 1 Uses an analogue light meter to measure light levels in a room.
- 2 Uses a digital light meter to measure light levels in a room.

6 Electromagnets

- 1 Uses a bar magnet and an electromagnet to find the differences and similarities between them.
- 2 Increases the strength of an electromagnet.

7 Natural Materials

- 1 Identifies where different natural materials come from.
- 2 Identifies what natural materials have been used to make a series of sample objects.

8 Crawler

- 1 Finds the effects of giving a crawler more energy.
- 2 Modifies a crawler so that it can store enough energy to reach the top of a slope.
- 3 Modifies a crawler to change the direction it moves in.

11 Pre Test Quiz 1

- 1 Identifies different ways to measure things.
- 2 Identifies renewable and non-renewable energy sources.
- 3 Identifies flexible, inflexible and elastic material properties.
- 4 Indicates how levers can be used to balance weights.

12 Post Test Quiz 1

- 1 Identifies different ways to measure things.
- 2 Identifies renewable and non-renewable energy sources.
- 3 Identifies flexible, inflexible and elastic material properties.
- 4 Indicates how levers can be used to balance weights.

13 Pre Test Quiz 2

- 1 Identifies how the level of light can be measured.
- 2 Identifies the behavior of temporary and permanent magnets.
- 3 Identifies if materials come from the Earth, from plants or from animals.
- 4 Identifies how a device called a crawler works on different surfaces when given varying amounts of energy.

14 Post Test Quiz 2

- 1 Identifies how the level of light can be measured.
- 2 Identifies the behavior of temporary and permanent magnets.
- 3 Identifies if materials come from the Earth, from plants or from animals.
- 4 Identifies how a device called a crawler works on different surfaces when given varying amounts of energy.

ST23-2 Living with Scientific Reasoning Level-2

1 Temperature

- 1 Measures temperature using thermometers.
- 2 Uses graphs to plot the change of temperature over periods of time.

2 Flight

- 1 Uses wing flaps and rudders to control the direction of airplanes in the air.
- 2 Changes the size and shape of a wing of a model airplane to see the effect in the lift given.
- 3 Changes the balance of a model airplane to see the effect on flight.

3 Changes

- 1 Describes the changes that occur in different materials when they are heated.
- 2 Describes the changes that occur in different materials when they are cooled.
- 3 States if changes in different materials, caused by heating and cooling, can be reversed.

4 Lifting Machines

- 1 Discovers the uses of a windlass.
- 2 Constructs a windlass to observe that a gear will increase the amount of lift for each turn of its handle.

5 Pendulum

- 1 Observes the effect of the changing the weight of a pendulum on the time of its swing.
- 2 Observes the effect of changing the length of a pendulum on the time of its swing.
- 3 Constructs a pendulum to observe the relationship between pendulum weight and length with its swing time.

6 Sending Signals

- 1 Sends messages using radio waves.
- 2 Sends messages using light signals.
- 3 Sends messages using coded signals.

7 Density

- 1 Describes how density of an object can effect if it floats or sinks in water.
- 2 Relates the weight, shape and size of a material to its density.

8 Bridges

- 1 Uses different supports to make a bridge stronger.
- 2 Constructs a bridge to span a gap.
- 3 Observes the weakness of a beam bridge.

11 Pre Test Quiz 3

- 1 States how temperature can be measured and identifies the temperature of the human body.
- 2 States how wings can be used in flight.
- 3 Identifies the changes that happen to materials when they are heated and cooled.
- 4 Describes the function of lifting machines.

12 Post Test Quiz 3

- 1 States how temperature can be measured and states the temperature of the human body.
- 2 Identifies the change that happens to materials when they are heated and cooled.
- 3 States how wings can be used in flight.
- 4 Describes the function of a lifting machine.

13 Pre Test Quiz 4

- 1 Relates the swing time of a pendulum with its length.
- 2 States different ways that signals can be sent.
- 3 States the relationship between weight, size and density of a material.
- 4 Identifies different types of bridges.

14 Post Test Quiz 4

- 1 States the relationship between weight, size and density of a material.
- 2 States different ways that signals can be sent.
- 3 Identifies different types of bridges.
- 4 Relates the swing time of a pendulum with its length.