

	or&rdquo , &ldquo and&rdquo).					Practices and Programming	
SC.35.CS-CP.1.2	Identify and describe examples of databases from everyday life (e.g., library catalogs, school records, telephone directories, and contact lists).		Data analysis	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.1.3	Identify, research, and collect a data set on a topic, issue, problem, or question using age-appropriate technologies.		Data analysis	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.1.4	Collect, organize, graph, and analyze data to answer a question using a database or spreadsheet.		Data analysis	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.2.1	Perform keyboarding skills for communication and the input of data and information.		Computer programming basics	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.2.2	Create, test, and modify a program in a graphical environment (e.g., block-based visual programming language), individually and collaboratively.		Computer programming basics	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.2.3	Create a program using arithmetic operators, conditionals, and repetition in programs.		Computer programming basics	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.2.4	Explain that programs need known initial conditions (e.g., set initial score to zero in a		Computer programming basics	Science	35	Computer Science - Computer	Click Here

	game, initialize variables, or initial values set by hardware input).					Practices and Programming	
SC.35.CS-CP.2.5	Detect and correct program errors, including those involving arithmetic operators, conditionals, and repetition, using interactive debugging.		Computer programming basics	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.3.1	Write, communicate and publish activities using technology tools.		Programming applications	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CP.3.2	Present digitally created products, either individually and collaboratively, where a topic, concept, or skill is carefully analyzed or thoughtfully explored.		Programming applications	Science	35	Computer Science - Computer Practices and Programming	Click Here
SC.35.CS-CS.1.1	Identify the concepts illustrated by a simulation (e.g., ecosystem, predator/prey, and invasive species).		Modeling and simulations	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.1.2	Describe how models and simulations can be used to solve real-world issues in science and engineering.		Modeling and simulations	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.1.3	Answer a question, individually and collaboratively, using data from a simulation.		Modeling and simulations	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.1.4	Create a simple model of a system (e.g., flower or solar		Modeling and simulations	Science	35	Computer Science -	Click Here

	system) and explain what the model shows and does not show.					Communication Systems and Computing	
SC.35.CS-CS.2.1	Solve age-appropriate problems using information organized using digital graphic organizers (e.g., concept maps and Venn-diagrams).		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.2	Describe how computational thinking can be used to solve real life issues in science and engineering.		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.3	Explain the process of arranging or sorting information into useful order as well as the purpose for doing so.		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.4	Solve real-world problems in science and engineering using computational thinking skills.		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.5	Explain that there are several possible algorithms for searching within a dataset (such as finding a specific word in a word list or card in a deck of cards).		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.6	Write an algorithm to solve a grade-level appropriate problem (e.g., move a character through a maze, instruct a character to draw a specific shape, have a character start, repeat or end activity as required or upon a		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here

	specific event), individually or collaboratively.						
SC.35.CS-CS.2.7	Identify and correct logical errors in algorithms; written, mapped, live action, or digital.		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.8	Systematically test and identify logical errors in algorithms.		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.2.9	Explain how to correct logical errors in algorithms; written, mapped, live action, or digital.		Problem solving and algorithms	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.3.1	Manipulate and publish multimedia artifacts using digital tools (local and online).		Digital tools	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.3.2	Create an artifact (independently and collaboratively) that answers a research question clearly communicating thoughts and ideas.		Digital tools	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.4.1	Identify the basic components of a computer (e.g., monitor, keyboard, mouse, controller, speakers).		Hardware and software	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.4.2	Describe the function and purpose of various input/output devices and peripherals (e.g., monitor,		Hardware and software	Science	35	Computer Science - Communication	Click Here

	screen, keyboard, controller, speakers).					Systems and Computing	
SC.35.CS-CS.4.3	Compare and contrast hardware and software.		Hardware and software	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.4.4	Identify and solve simple hardware and software problems that may occur during everyday use (e.g., power, connections, application window or toolbar).		Hardware and software	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.6.1	Describe how hardware applications (e.g., Global Positioning System (GPS) navigation for driving directions, text-to-speech translation, and language translation) can enable everyone to do things they could not do otherwise.		Human – Computer interactions and Artificial Intelligence	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.6.2	Compare and contrast human and computer performance on similar tasks (e.g., sorting alphabetically or finding a path across a cluttered room) to understand which is best suited to the task.		Human – Computer interactions and Artificial Intelligence	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-CS.6.3	Explain that computers model intelligent behavior (as found in robotics, speech and language recognition, and computer animation).		Human – Computer interactions and Artificial Intelligence	Science	35	Computer Science - Communication Systems and Computing	Click Here
SC.35.CS-PC.1.1	Identify appropriate and inappropriate uses of technology when posting to		Responsible use of technology and information	Science	35	Computer Science - Personal,	Click Here

	social media, sending e-mail, and browsing the Internet.					Community, Global, and Ethical Impact	
SC.35.CS-PC.1.2	Describe responsible uses of modern communication media and devices.		Responsible use of technology and information	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.1.3	Explain the proper use and operation of security technologies (e.g., passwords, virus protection software, spam filters, pop-up blockers, and cookies).		Responsible use of technology and information	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.1.4	Define plagiarism and understand the impacts of plagiarized materials.		Responsible use of technology and information	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.2.1	Explain how computers and computing devices are used to communicate with others on a daily basis.		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.2.2	Describe types of cyberbullying and explain what actions should be taken if students are either victims or witnesses of these behaviors.		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.2.3	Identify the legal and social consequences of cyberbullying/harassment in social media.		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community,	Click Here

						Global, and Ethical Impact	
SC.35.CS-PC.2.4	Explain how access to technology helps empower individuals and groups (e.g., gives them access to information, the ability to communicate with others around the world, and allows them to buy and sell things).		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.2.5	Identify ways in which people with special needs access and use adaptive technology.		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.2.6	Communicate about technology using appropriate terminology.		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.2.7	Identify and describe how computing knowledge is essential to performing important tasks and functions.		The impact of computing resources on local and global society	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.3.1	Identify digital information resources used to answer research questions (e.g., online library catalog, online encyclopedias, databases, and websites).		Evaluation of digital information resources	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.3.2	Gather, organize, and analyze information from digital resources.		Evaluation of digital information resources	Science	35	Computer Science - Personal, Community,	Click Here

						Global, and Ethical Impact	
SC.35.CS-PC.3.3	Compare digital resources for accuracy, relevancy, and appropriateness.		Evaluation of digital information resources	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.4.1	Describe the difference between digital artifacts that are open or free and those that are protected by copyright.		Security, privacy, information sharing, ownership, licensure and copyright	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.4.2	Explain fair use for using copyrighted materials (e.g., images, music, video, and text).		Security, privacy, information sharing, ownership, licensure and copyright	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.4.3	Describe the purpose of copyright and the possible consequences for inappropriate use of digital materials that are protected by copyright.		Security, privacy, information sharing, ownership, licensure and copyright	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.35.CS-PC.4.4	Describe the threats to safe and efficient use of devices (e.g., SPAM, spyware, phishing, and viruses) associated with various forms of technology use (e.g., downloading and executing software programs, following hyperlinks, and opening files).		Security, privacy, information sharing, ownership, licensure and copyright	Science	35	Computer Science - Personal, Community, Global, and Ethical Impact	Click Here
SC.5.E.5.1	Recognize that a galaxy consists of gas, dust, and many stars, including any	Annually assessed on Grade 5 Science FCAT 2.0. Also	Earth in Space and Time	Science	5	Earth and Space Science	Click Here

	objects orbiting the stars. Identify our home galaxy as the Milky Way.	assesses SC.3.E.5.1, SC.3.E.5.2, and SC.3.E.5.3.					
SC.5.E.5.2	Recognize the major common characteristics of all planets and compare/contrast the properties of inner and outer planets.		Earth in Space and Time	Science	5	Earth and Space Science	Click Here
SC.5.E.5.3	Distinguish among the following objects of the Solar System Sun, planets, moons, asteroids, comets and identify Earth's position in it.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.5.E.5.2.	Earth in Space and Time	Science	5	Earth and Space Science	Click Here
SC.5.E.7.1	Create a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.5.E.7.2. Florida Standards Connections: MAFS.K12.MP.4: Model with mathematics.	Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here
SC.5.E.7.2	Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation processes.		Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here
SC.5.E.7.3	Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.5.E.7.4, SC.5.E.7.5, and SC.5.E.7.6.	Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here
SC.5.E.7.4	Distinguish among the various forms of precipitation (rain,		Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here

	snow, sleet, and hail), making connections to the weather in a particular place and time.						
SC.5.E.7.5	Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains.		Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here
SC.5.E.7.6	Describe characteristics (temperature and precipitation) of different climate zones as they relate to latitude, elevation, and proximity to bodies of water.		Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here
SC.5.E.7.7	Design a family preparedness plan for natural disasters and identify the reasons for having such a plan.		Earth Systems and Patterns	Science	5	Earth and Space Science	Click Here
SC.5.L.14.1	Identify the organs in the human body and describe their functions, including the skin, brain, heart, lungs, stomach, liver, intestines, pancreas, muscles and skeleton, reproductive organs, kidneys, bladder, and sensory organs.	Muscles and skeleton are not organs in the human body and should be referred to as the muscular and skeletal systems and the function of the muscles and skeleton. Integrate HE.5.C.1.6.Explain how human body parts and organs work together in healthy body systems, including the endocrine and reproductive systems. Annually assessed on	Organization and Development of Living Organisms	Science	5	Life Science	Click Here

		Grade 5 Science FCAT 2.0 (human body systems are not assessed through this benchmark).					
SC.5.L.14.2	Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support some with internal skeletons others with exoskeletons while some plants have stems for support.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.L.15.1 and SC.3.L.15.2.	Organization and Development of Living Organisms	Science	5	Life Science	Click Here
SC.5.L.15.1	Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations.		Diversity and Evolution of Living Organisms	Science	5	Life Science	Click Here
SC.5.L.17.1	Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.L.17.1, SC.4.L.16.2, SC.4.L.16.3, SC.4.L.17.1, SC.4.L.17.4, and SC.5.L.15.1.	Interdependence	Science	5	Life Science	Click Here
SC.5.N.1.1	Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations,	Design and evaluate a written procedure or experimental setup. Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.N.1.1,	The Practice of Science	Science	5	Nature of Science	Click Here

	<p>experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions.</p>	<p>SC.4.N.1.1, SC.4.N.1.6, SC.5.N.1.2, and SC.5.N.1.4.</p> <p>Florida Standards Connections: LAFS.5.RI.1.3. Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text. LAFS.5.W.3.8. Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. MAFS.5.MD.2.2. Represent and interpret data. MAFS.5.G.1. Graph points on the coordinate plane to solve real-world and mathematical problems.</p>					
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		Florida Standards Connections: MAFS.K12.MP.1: Make sense of problems and persevere in solving them; and, MAFS.K12.MP.2: Reason abstractly and quantitatively.					
SC.5.N.1.2	Explain the difference between an experiment and other types of scientific investigation.	Explain that an investigation is observing the natural world, without interference, and an experiment involves variables (independent/test and dependent/ outcome) and establishes cause-effect relationships (Schwartz, 2007).	The Practice of Science	Science	5	Nature of Science	Click Here
SC.5.N.1.3	Recognize and explain the need for repeated experimental trials.	Florida Standards Connections: MAFS.K12.MP.5: Use appropriate tools strategically; and, MAFS.K12.MP.6: Attend to precision.	The Practice of Science	Science	5	Nature of Science	Click Here
SC.5.N.1.4	Identify a control group and explain its importance in an experiment.	Florida Standards Connections: MAFS.K12.MP.6: Attend to precision.	The Practice of Science	Science	5	Nature of Science	Click Here
SC.5.N.1.5	Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method."	Florida Standards Connections: MAFS.K12.MP.1: Make sense of problems and	The Practice of Science	Science	5	Nature of Science	Click Here

		persevere in solving them; and, MAFS.K12.MP.2: Reason abstractly and quantitatively.					
SC.5.N.1.6	Recognize and explain the difference between personal opinion/interpretation and verified observation.		The Practice of Science	Science	5	Nature of Science	Click Here
SC.5.N.2.1	Recognize and explain that science is grounded in empirical observations that are testable explanation must always be linked with evidence.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.N.1.7, SC.4.N.1.3, SC.4.N.1.7, SC.5.N.1.5, and SC.5.N.1.6. Florida Standards Connections: LAFS.5.W.3.9. Draw evidence from literary or informational texts to support analysis, reflection, and research. Florida Standards Connections: MAFS.K12.MP.1: Make sense of problems and persevere in solving them; and, MAFS.K12.MP.2: Reason abstractly and quantitatively; and, MAFS.K12.MP.3: Construct viable	The Characteristics of Scientific Knowledge	Science	5	Nature of Science	Click Here

		arguments and critique the reasoning of others.					
SC.5.N.2.2	Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.	<p>Remarks/Examples: Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.N.1.2, SC.3.N.1.5, SC.4.N.1.2, SC.4.N.1.5, and SC.5.N.1.3.</p> <p>Florida Standards Connections: LAFS.5.SL.1.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly.</p> <p>Florida Standards Connections: MAFS.K12.MP.6: Attend to precision.</p>	The Characteristics of Scientific Knowledge	Science	5	Nature of Science	Click Here
SC.5.P.10.1	Investigate and describe some basic forms of energy, including light, heat, sound, electrical, chemical, and mechanical.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.P.10.1, SC.3.P.10.3, SC.3.P.10.4,	Forms of Energy	Science	5	Physical Science	Click Here

		SC.3.P.11.1, SC.3.P.11.2, SC.4.P.10.1, and SC.4.P.10.3.					
SC.5.P.10.2	Investigate and explain that energy has the ability to cause motion or create change.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.P.10.2, SC.4.P.10.2, and SC.4.P.10.4.	Forms of Energy	Science	5	Physical Science	Click Here
SC.5.P.10.3	Investigate and explain that an electrically-charged object can attract an uncharged object and can either attract or repel another charged object without any contact between the objects.		Forms of Energy	Science	5	Physical Science	Click Here
SC.5.P.10.4	Investigate and explain that electrical energy can be transformed into heat, light, and sound energy, as well as the energy of motion.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.E.6.1, SC.4.P.11.1, SC.4.P.11.2, SC.5.P.10.3, SC.5.P.11.1, and SC.5.P.11.2.	Forms of Energy	Science	5	Physical Science	Click Here
SC.5.P.11.1	Investigate and illustrate the fact that the flow of electricity requires a closed circuit (a complete loop).		Energy Transfer and Transformations	Science	5	Physical Science	Click Here
SC.5.P.11.2	Identify and classify materials that conduct electricity and materials that do not.		Energy Transfer and Transformations	Science	5	Physical Science	Click Here
SC.5.P.13.1	Identify familiar forces that cause objects to move, such as pushes or pulls, including gravity acting on falling objects.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.E.5.4 and SC.4.P.8.4.	Forces and Changes in Motion	Science	5	Physical Science	Click Here

SC.5.P.13.2	Investigate and describe that the greater the force applied to it, the greater the change in motion of a given object.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.4.P.12.1, SC.4.P.12.2, SC.5.P.13.3, and SC.5.P.13.4.	Forces and Changes in Motion	Science	5	Physical Science	Click Here
SC.5.P.13.3	Investigate and describe that the more mass an object has, the less effect a given force will have on the object's motion.		Forces and Changes in Motion	Science	5	Physical Science	Click Here
SC.5.P.13.4	Investigate and explain that when a force is applied to an object but it does not move, it is because another opposing force is being applied by something in the environment so that the forces are balanced.		Forces and Changes in Motion	Science	5	Physical Science	Click Here
SC.5.P.8.1	Compare and contrast the basic properties of solids, liquids, and gases, such as mass, volume, color, texture, and temperature.	Investigate the concept of weight versus mass of an object. Discuss why mass (not weight) is used to compare properties of solids, liquids and gases. Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.P.8.1, SC.3.P.8.2, SC.3.P.8.3, and SC.4.P.8.1. MAFS.K12.MP.5: Use appropriate tools strategically; and,	Properties of Matter	Science	5	Physical Science	Click Here

		MAFS.K12.MP.6: Attend to precision.					
SC.5.P.8.2	Investigate and identify materials that will dissolve in water and those that will not and identify the conditions that will speed up or slow down the dissolving process.		Properties of Matter	Science	5	Physical Science	Click Here
SC.5.P.8.3	Demonstrate and explain that mixtures of solids can be separated based on observable properties of their parts such as particle size, shape, color, and magnetic attraction.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.5.P.8.2.	Properties of Matter	Science	5	Physical Science	Click Here
SC.5.P.8.4	Explore the scientific theory of atoms (also called atomic theory) by recognizing that all matter is composed of parts that are too small to be seen without magnification.	Recognize that matter is composed of atoms.	Properties of Matter	Science	5	Physical Science	Click Here
SC.5.P.9.1	Investigate and describe that many physical and chemical changes are affected by temperature.	Annually assessed on Grade 5 Science FCAT 2.0. Also assesses SC.3.P.9.1 and SC.4.P.9.1.	Changes in Matter	Science	5	Physical Science	Click Here