

TECHNOLOGY				
PK3 & PK4				
DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Devices	Investigate and manipulate mechanical devices	<input checked="" type="checkbox"/>		
	Successfully operate mechanical devices and use them to advance learning	<input checked="" type="checkbox"/>		
	Investigate and manipulate electronic devices	<input checked="" type="checkbox"/>		
	Successfully operate electronic devices and use them to advance learning	<input checked="" type="checkbox"/>		
Kindergarten				
DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	Identify computing devices and with guidance, follow directions and make appropriate choices to use computing devices to perform a variety of tasks			
	Use appropriate terminology in naming and describing the function of common computing devices and components (i.e. mouse is used to control the cursor, desktop computer, laptop computer, tablet device, monitor, keyboard, mouse, printer)	<input checked="" type="checkbox"/>		
	With guidance, choose appropriate software to perform a variety of tasks			
	Recognize that computing systems might not work as expected and learn to use accurate terminology to identify simple hardware or software problems (i.e. volume turned down on headphones, monitor turned off, keyboard not working, mouse not working)			
Networks & Internet	Discuss that computing devices can be connected together (i.e. printers connect to devices, phone/tablet share information)			
	Discuss what passwords are and why we do not share them with others; with guidance, use passwords to access technological devices, apps, etc.			
Data & Analysis	With guidance, locate, open, modify, and save an existing file with a computing device			
	With guidance, collect information and present it	<input checked="" type="checkbox"/>		
	With guidance, draw conclusions and make predictions based on picture graphs or patterns (i.e. make predictions based on weather data presented in a picture graph or complete a pattern)			
Algorithms & Programming	With guidance, model daily processes and follow algorithms (sets of step-by-step instructions) to complete tasks verbally, kinesthetically, with robot devices, or a programming language			
	With guidance, recognize that computers represent different types of data using numbers or other symbols			
	With guidance, independently or collaboratively create programs to accomplish tasks using a programming language, robot device, or unplugged activity that includes sequencing (i.e. emphasizing the beginning, middle, and end)			
	With guidance, create a grade-level appropriate artifact to illustrate thoughts, ideas or sequence of events (step-by-step) manner (i.e. story map, storyboard, sequential graphic organizer)			
	Independently or with guidance give credit to ideas, creations, and solutions of others while developing algorithms			
Digital Citizenship	With guidance, independently or collaboratively debug algorithms using a programming language and/or unplugged activity that includes sequencing			
	Use correct terminology (beginning, middle, end) in the development of an algorithm to solve a simple problem			
	Discuss different ways in which types of technologies are used in daily life	<input checked="" type="checkbox"/>		
Digital Citizenship	With guidance, identify appropriate manners and behaviors while participating in an online environment	<input checked="" type="checkbox"/>		
	Exhibit good digital citizenship using technology safely, responsibly, and ethically	<input checked="" type="checkbox"/>		

Innovative designer	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	<input checked="" type="checkbox"/>		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	<input checked="" type="checkbox"/>		
	Develop, test, and refine prototypes as part of a cyclical design process	<input checked="" type="checkbox"/>		
	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	<input checked="" type="checkbox"/>		

1st Grade

DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	With guidance, select and use a computing device to perform a variety of tasks for an intended outcome			
	Use appropriate terminology to locate and identify common computing devices and components in a variety of environments (i.e. desktop computer, laptop computer, tablet device, monitor, keyboard, mouse, printer)	<input checked="" type="checkbox"/>		
	With little support, choose appropriate software to perform a variety of tasks			
	Identify, using accurate terminology, simple hardware and software problems that may occur during use (i.e. app or program is not working as expected, no sound is coming from the device, caps lock turned on)			
Networks & Internet	Recognize that by connecting computing devices together one can share information (i.e. remote storage, printing, the internet)	<input checked="" type="checkbox"/>		
	Identify what passwords are and explain why they are not shared. Discuss what makes a password strong. Independently use passwords to access technological devices, apps, etc.			
Data & Analysis	With guidance, locate, open, modify, and save an existing file, use appropriate file-naming conventions, and recognize that the file exists within an organizational structure (i.e. drive, folder, file)			
	With guidance, collect information and present it in different ways	<input checked="" type="checkbox"/>		
	With guidance, identify and interpret data from a chart or graph (visualization) in order to make a prediction, with or without a computing device			
Algorithms & Programming	With guidance, model daily processes and follow algorithms (sets of step-by-step instructions) to complete tasks verbally, kinesthetically, with robot devices, or a programming language			
	With guidance, model the way that a program accesses stored data using a variable name			
	With guidance, independently or collaboratively create programs to accomplish tasks using a programming language, robot device, or unplugged activity that includes sequencing and repetition	<input checked="" type="checkbox"/>		
	Independently or with guidance, create a grade level appropriate document of the plan, ideas, and sequence of events (step-by-step) manner (e.g., story map, storyboard, sequential graphic organizer) to illustrate what the program will do	<input checked="" type="checkbox"/>		
	Independently or with guidance give credit to ideas, creations, and solutions of others while writing and/or developing programs			
	With guidance, independently or collaboratively debug programs using a programming language and/or unplugged activity that includes sequencing and simple loops			
	Use correct terminology (first, second, third) and explain the choices made in the development of an algorithm to solve a simple problem			
Digital Citizenship	Identify how people use different types of technologies in their daily work and personal lives	<input checked="" type="checkbox"/>		
	With guidance, identify appropriate and inappropriate behavior. Act responsibly while participating in an online community and know how to report concerns of cyberbullying	<input checked="" type="checkbox"/>		
	Work respectfully and responsibly with others online. Learn what information that is put online is appropriate and contribute to a digital footprint	<input checked="" type="checkbox"/>		
Innovative designer	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	<input checked="" type="checkbox"/>		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	<input checked="" type="checkbox"/>		
	Develop, test, and refine prototypes as part of a cyclical design process	<input checked="" type="checkbox"/>		

	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	<input checked="" type="checkbox"/>		
	2nd Grade			
DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	Select and use a computing device to perform a variety of tasks for an intended outcome	<input checked="" type="checkbox"/>		
	Identify the components of a computer system and what the basic functions are (i.e. hard drive and memory) as well as peripherals (i.e. printers, scanners, external hard drives) and external storage features and their uses (i.e. cloud storage)			
	Independently choose appropriate software to perform a variety of tasks			
	Identify using accurate terminology, simple hardware and software problems that may occur during use (i.e. app or program is not working as expected, no sound is coming from the device, caps lock turned on) and discuss problems with peers and adults			
Networks & Internet	Recognize that computing devices can be connected at various scales (i.e. Bluetooth, Wi-Fi, hotspot, LAN, WAN, peer-to-peer)			
	Recognize what passwords are and why we do not share them. Explain why we use them and why we use strong passwords to protect devices and information from unauthorized access	<input checked="" type="checkbox"/>		
Data & Analysis	With guidance, create, copy, locate, modify, and delete a file on a computing device, use appropriate file-naming conventions, and recognize that the file exists within an organizational structure (i.e. drive, folder, file) - define the information stored as data			
	With guidance, collect and present the same information in various formats	<input checked="" type="checkbox"/>		
	With guidance, construct and interpret data and present it in a chart or graph (visualization) in order to make a prediction, with or without a computing device			
Algorithms & Programming	With guidance, model daily processes by creating and following algorithms (sets of step-by-step instructions) to complete tasks verbally, kinesthetically, with robot devices, or a programming language			
	Model the way a computer program manipulates grade level appropriate data (i.e. print, numbers, kinesthetic movement, symbols, robot manipulatives)			
	With guidance, create programs using a programming language, robot device, or unplugged activity that utilize sequencing and simple looping to solve a problem or express ideas both independently and collaboratively	<input checked="" type="checkbox"/>		
	Independently or with guidance, create a grade level appropriate document of the plan, ideas, and sequence of events (step-by- step) manner (i.e. story map, storyboard, sequential graphic organizer) to illustrate what the program will do	<input checked="" type="checkbox"/>		
	Give credit to ideas, information, creations, and solutions of others while writing and developing programs			
	Independently and collaboratively debug programs, which include sequencing and simple loops, to accomplish tasks as a means of creative expression or problem solving using a programming language and/or unplugged activities			
	Use correct terminology (i.e. debug, program input/output, code) to explain the development of an algorithm to solve a problem in an unplugged activity, hands on manipulatives, or a programming language			
Digital Citizenship	Identify and describe how people use many types of technologies in their daily work and personal lives	<input checked="" type="checkbox"/>		
	Develop a code of conduct and explain and practice grade-level appropriate behavior and responsibilities while participating in an online community. Identify and report inappropriate behavior and know how to report concerns of cyberbullying	<input checked="" type="checkbox"/>		
	Identify safe and unsafe examples of online communications. Learn that the information put online leaves a digital footprint	<input checked="" type="checkbox"/>		
Innovative designer	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	<input checked="" type="checkbox"/>		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	<input checked="" type="checkbox"/>		
	Develop, test, and refine prototypes as part of a cyclical design process	<input checked="" type="checkbox"/>		

	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	<input checked="" type="checkbox"/>		
	3rd Grade			
DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	Model how information flows through hardware and software to accomplish tasks	<input checked="" type="checkbox"/>		
	Identify, using accurate terminology, simple hardware and software problems that may occur during everyday use, discuss problems with peers and adults, and apply troubleshooting strategies for solving these problems (i.e. refresh the screen, closing and reopening an application or file, unmuting or adjusting the volume on headphones)	<input checked="" type="checkbox"/>		
Networks & Internet	Recognize how information changes when sent and received over physical or wireless paths (Information is broken into smaller parts, sent to the destination, and then reassembled into a whole)			
	Identify problems that relate to inappropriate use of computing devices and networks			
Data & Analysis	Recognize that different types of information are stored in different formats that have associated programs (i.e. documents open in a word processor) and varied storage requirements	<input checked="" type="checkbox"/>		
	Collect data using various programs and formats (i.e. surveys, forms) and organize the data in various visual formats (i.e. charts, graphs, tables)	<input checked="" type="checkbox"/>		
	With guidance, utilize data to make predictions and discuss whether there is adequate data to be useful and to make reliable predictions			
Algorithms & Programming	Compare multiple algorithms for the same task	<input checked="" type="checkbox"/>		
	Create programs that use variables to store and modify grade level appropriate data	<input checked="" type="checkbox"/>		
	Collaboratively create a program using control structures (i.e. sequence, conditionals, interactive-looping) to make decisions within a program	<input checked="" type="checkbox"/>		
	Decompose (break down) the steps needed to solve a problem into precise sequence of instructions			
	With grade appropriate complexity, modify, remix, or incorporate portions of an existing program into one's own work to develop something new or add more advanced features			
	Use an iterative and collaborative process to plan the development of a program while solving simple problems			
	Observe intellectual property rights and give appropriate credit when creating or remixing programs			
	Analyze and debug a program that includes sequencing, repetition, and variables in a programming language			
	Communicate and explain your program development using comments, presentations, and interactive demonstrations			
Digital Citizenship	Identify computing technologies that have changed the world and express how those technologies influence, and are influenced by, cultural practices			
	Identify possible problems and how computing devices have built in features for increasing accessibility to all users			
	Develop a code of conduct, explain and practice grade-level appropriate behavior and responsibilities while participating in an online community (e.g., responsibilities of being a good digital citizen, private and personal information, showing respect for other people's work). Identify and report inappropriate behavior and know how to report cyberbullying	<input checked="" type="checkbox"/>		
	Identify how computational products may be (or have been) improved to incorporate diverse perspectives			
	Identify types of digital data that may have intellectual property rights that prevent copying or require attribution			
Innovative designer	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	<input checked="" type="checkbox"/>		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	<input checked="" type="checkbox"/>		
	Develop, test, and refine prototypes as part of a cyclical design process	<input checked="" type="checkbox"/>		
	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	<input checked="" type="checkbox"/>		

4th Grade				
DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	Model that information is translated, transmitted, and processed in order to flow through hardware and software			
	Identify, using accurate terminology, simple hardware and software problems that may occur during everyday use, discuss problems with peers and adults, and apply strategies for solving these problems (i.e. rebooting the computing device, checking the power, force shut down of an application)			
Networks & Internet	Model how information is transmitted through multiple computing devices over networks and the internet			
	Discuss real-world cybersecurity problems and identify strategies for how personal information can be protected	<input checked="" type="checkbox"/>		
Data & Analysis	Choose different storage locations (i.e. physical, shared, cloud) based on the type of file, storage requirements (i.e. file size, availability, available memory), and sharing requirements	<input checked="" type="checkbox"/>		
	Organize and present collected information visually to highlight comparisons	<input checked="" type="checkbox"/>		
	Determine how the accuracy of conclusions are influenced by the amount of useful and reliable data collected	<input checked="" type="checkbox"/>		
Algorithms & Programming	Compare and refine multiple algorithms for the same task	<input checked="" type="checkbox"/>		
	Create programs that use variables to store and modify grade level appropriate data	<input checked="" type="checkbox"/>		
	Create programs, using a programming language, that utilize sequencing, repetition, conditionals, and variables. Using math operations, manipulate values to solve a problem or express ideas both independently and collaboratively	<input checked="" type="checkbox"/>		
	Decompose (break down) large problems into smaller, manageable sub problems to facilitate the program development process	<input checked="" type="checkbox"/>		
	With grade appropriate complexity, modify, remix or incorporate portions of an existing program into one's own work to develop something new or add more advanced features	<input checked="" type="checkbox"/>		
	Use an iterative and collaborative process to plan the development of a program that includes user preferences while solving simple problems			
	Observe intellectual property rights and give appropriate credit when creating or remixing programs	<input checked="" type="checkbox"/>		
	Analyze, create, and debug a program that includes sequencing, repetition, conditionals and variables in a programming language (i.e. Java, java Script, Python, Blockly, etc.)			
	Communicate and explain your program development using comments, presentations, and interactive demonstrations			
Digital Citizenship	Give examples of computing technologies that have changed the world and express how those technologies influence, and are influenced by, cultural practices			
	Brainstorm problems and ways to improve computing devices to increase accessibility to all users			
	Develop a code of conduct, explain and practice grade-level appropriate behavior and responsibilities while participating in an online community (i.e. using strong passwords, creating a positive online community, recognizing spam and what to do about it, citing online sources). Identify and report inappropriate behavior and know how to report cyberbullying			
	As a team, consider each others' perspectives on improving a computational product	<input checked="" type="checkbox"/>		
	Discuss the social impact of violating intellectual property rights	<input checked="" type="checkbox"/>		
Innovative designer	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	<input checked="" type="checkbox"/>		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	<input checked="" type="checkbox"/>		
	Develop, test, and refine prototypes as part of a cyclical design process	<input checked="" type="checkbox"/>		
	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	<input checked="" type="checkbox"/>		
5th Grade				

DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	Model that information is translated into bits in order to transmit and process between software to accomplish tasks			
	Identify, using accurate terminology, simple hardware and software problems that may occur during everyday use. Discuss problems with peers and adults, apply strategies for solving these problems, and explain why the strategy should work	☑		
Networks & Internet	Model how information is transmitted through multiple computing devices over networks and the internet			
	Analyze the credibility of digital information (i.e. comparing multiple accounts and sources, the author's point of view)	☑		
	Discuss cybersecurity problems caused by information that is published for different reasons (i.e. inform, advertise, persuade, harm)	☑		
Data & Analysis	Evaluate trade-offs, including availability and quality, based on the type of file, storage requirements (i.e. file size, availability, available memory) and sharing requirements			
	Organize and present collected information to highlight comparisons and support a claim			
	Use reliable data to highlight or propose cause and effect relationships, predict outcomes, or communicate an idea	☑		
Algorithms & Programming	Compare and simplify multiple algorithms (sets of step-by-step instructions) for accomplishing the same task verbally and kinesthetically, with robot devices or a programming language, then determine which is the most efficient	☑		
	Create programs that use variables to store and modify grade level appropriate data			
	Create a program using control structures (i.e. sequence, conditionals, interactive-looping), event handlers, and variables to solve a problem or express ideas both independently and collaboratively	☑		
	Decompose (break down) large problems into smaller, manageable sub problems and then into a precise sequence of instructions	☑		
	With grade appropriate complexity, modify, remix, or incorporate portions of an existing program into one's own work to develop something new or add more advanced features	☑		
	Use an iterative and collaborative process to plan the development of a program that includes other perspectives and user preferences while solving simple problems			
	Observe intellectual property rights and give appropriate credit when creating or remixing programs			
	Analyze, examine, create, and debug a program that includes sequencing, repetition, conditionals, and variables in a programming language			
Digital Citizenship	Communicate and explain your program development using comments, presentations, and interactive demonstrations			
	Give examples and explain how computing technologies have changed the world and express how computing technologies influence, and are influenced by, cultural practices			
	Develop, test, and refine digital artifacts to improve accessibility and usability	☑		
	Develop a code of conduct, explain and practice grade-level appropriate behavior and responsibilities while participating in an online community (e.g., talking safely online, promoting good digital citizens, privacy settings, cyberbullying). Identify and report inappropriate behavior			
	Observe intellectual property rights and give appropriate credit when using resources	☑		
Innovative designer	As a team, collaborate using outside resources, online collaborative spaces, and with students in other grade levels to include diverse perspectives to improve computational products	☑		
	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	☑		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	☑		
	Develop, test, and refine prototypes as part of a cyclical design process	☑		
	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	☑		
6-8 Grade				

DOMAIN	ARCHDIOCESAN EXPECTATIONS	PRIORITY EXPECTATION	CURRENTLY TAUGHT IN THIS GRADE LEVEL (yes or no)?	LIST ADDITIONAL RESOURCES (IF NEEDED) FOR STUDENTS TO MASTER THIS EXPECTATION
Computing Systems	Evaluate the design of computing devices, based on the characteristics of each device and how users interact with it, to improve the overall user experience			
	Design projects that combine hardware and software to collect and exchange data			
Networks & Internet	Develop a systematic troubleshooting routine to identify the problem, research solutions, and fix problems with computing devices, components, and software	☑		
	Model the different ways that data is transferred across a network and the protocols used to transmit the data			
Data & Analysis	Recognize and determine computer threats and be able to identify programs and methods to protect electronic information	☑		
	Demonstrate how data is transmitted through multiple methods of encryption			
	Represent data using multiple encoding schemes			
Algorithms & Programming	Collect data using computational tools and display it for the end user in an easy to understand way	☑		
Algorithms & Programming	Analyze methods to refine computational models based on received data			
	Design algorithms with flow charts and/or pseudocode to show solutions to complex problems			
	Create clearly named variables to store and manipulate information			
	Design and develop combinations of control structures, nested loops, and compound conditionals	☑		
	Decompose problems and sub problems into parts to facilitate the design, implementation, and review of programs			
	Create procedures with parameters to organize code and make it easier to reuse			
	Use feedback from team members and users to refine solutions to meet user needs			
	Use flowcharts and/or pseudocode to solve problems using algorithms	☑		
	Test and refine programs using a range of test cases			
	Manage project tasks and timelines when collaboratively developing computational artifacts			
Digital Citizenship	Compare tradeoffs associated with computing technologies that have impacted people's activities, careers, and lives when solving global problems using the power of computing	☑		
	Give proper attribution to code, media, etc. that are used in projects	☑		
	Discuss issues of bias and accessibility in the design of existing technologies			
	Collaborate through strategies such as crowdsourcing or surveys when creating a computational artifact			
	Describe tradeoffs between allowing information to be public and keeping information private and secure	☑		
Innovative designer	Know and use a deliberate design process for generating ideas, testing theories, creating innovative artifacts, or solving authentic problems	☑		
	Select and use digital tools to plan and manage a design process that considers design constraints and calculated risk	☑		
	Develop, test, and refine prototypes as part of a cyclical design process	☑		
	Exhibit a tolerance for ambiguity, perseverance, and the capacity to work with open-ended problems	☑		