Strand	Knowledge and Skill	Student Expectation
Creativity and Innovation	**1. The student uses creative thinking and innovative processes to construct knowledge and develop digital products. The student is expected to:**	(A) create original products using a variety of resources; (B) analyze trends and forecast possibilities, developing steps for the creation of an innovative process or product; and (C) use virtual environments to explore systems and issues.
Communication and Collaboration	**2. The student collaborates and communicates both locally and globally using digital tools and resources to reinforce and promote learning. The student is expected to:**	(A) draft, edit, and publish products in different media individually and collaboratively; (B) use font attributes, color, white space, and graphics to ensure that products are appropriate for multiple communication media, including monitor display, web, and print; (C) collaborate effectively through personal learning communities and social environments; (D) select and use appropriate collaboration tools; (E) evaluate the product for relevance to the assignment or task; and (F) perform basic software application functions, including opening applications and creating, modifying, printing, and saving files.
Research and Information Fluency	**3. The student acquires and evaluates digital content. The student is expected to:**	(A) use various search strategies such as keyword (s); the Boolean identifiers and, or, and not; and other strategies appropriate to specific search engines; (B) collect and organize information from a variety of formats, including text, audio, video, and graphics; (C) validate and evaluate the relevance and appropriateness of information; and (D) acquire information appropriate to specific tasks.
Critical Thinking, Problem Solving and Decision Making	**4. The student researches and evaluates projects using digital tools and resources. The student is expected to:**	(A) identify information regarding a problem and explain the steps toward the solution; (B) collect, analyze, and represent data to solve problems using tools such as word processing, databases, spreadsheets, graphic organizers, charts, multimedia, simulations, models, and programming languages; (C) evaluate student-created products through self and peer review for relevance to the assignment or task; and (D) evaluate technology tools applicable for solving problems.
Digital Citizenship	**5. The student practices safe, responsible, legal, and ethical behavior while using digital tools and resources. The student is expected to:**	(A) adhere to acceptable use policies reflecting positive social behavior in the digital environment; (B) respect the intellectual property of others; (C) abide by copyright law and the Fair Use Guidelines for Educational Multimedia; (D) protect and honor the individual privacy of oneself and others; (E) follow the rules of digital etiquette; (F) practice safe, legal, and responsible use of information and technology; and (G) comply with fair use guidelines and digital safety rules.
Technology Operations and Concepts	**6. The student demonstrates knowledge and appropriate use of technology systems, concepts, and operations. The student is expected to:**	(A) demonstrate an understanding of technology concepts, including terminology for the use of operating systems, network systems, virtual systems, and learning systems appropriate for Grades 3-5 learning; (B) manipulate files using appropriate naming conventions; file management, including folder structures and tagging; and file conversions; (C) navigate systems and applications accessing peripherals both locally and remotely; (D) troubleshoot minor technical problems with hardware and software using available resources such as online help and knowledge bases; and (E) use proper touch keyboarding techniques and ergonomic strategies such as correct hand and body positions and smooth and rhythmic keystrokes.

3-5 Tech Apps