Identifier	Poplar - Grade 8 - Computer and Technology	Introduced	Completed
8 CT 1	**PROBLEM SOLVING**		
8 CT 1.1	Differentiate design/problem-solving methods and components of technology using accurate terminology.		
8 CT 1.2	Select and evaluate appropriate designs requiring optimization and making trade-offs.		
8 CT 1.3	Select and apply a design/problem-solving method to reach a desired outcome.		
8 CT 2	**PRODUCTIVITY TOOLS**		
8 CT 2.1	Demonstrate proficiency and accuracy in keyboarding skills.		
8 CT 2.2	Create a document using advanced formatting techniques that demonstrate the ability to import a graphic, type, edit, and print.		
8 CT 2.3	Create a database, define fields, enter data for multiple records, and print reports based on sort and query.		
8 CT 2.4	Generate a spreadsheet including labels, values, formulas, and functions; create a chart to visually represent data. Print a spreadsheet showing formulas.		
8 CT 2.5	Create a multipage multimedia presentation using text, graphics, and sound to effectively communicate a concept.		
8 CT 2.6	Organize files on a computer disk, drive, server, or other storage device.		
8 CT 2.7	Explain the advantages of connectivity with various systems to share information and resources.		
8 CT 2.8	Employ the use of electronic communication.		
8 CT 3	**RESEARCH TOOLS**		
8 CT 3.1	Select a research topic or a statement of a problem identifying its elements, its scope, and the expected outcomes using technology tools.		
8 CT 3.2	Generate a list of keywords for a research topic or problem and conduct a search of electronic-based sources.		
8 CT 3.3	Select and evaluate information from a variety of remote resources for a research topic or problem exploring hyperlinks.		
8 CT 3.4	Use an organizational format to arrange information for presentation or decision making.		
8 CT 3.5	Check collected information for reliability, authenticity, and timeliness, citing sources of copyrighted materials in papers, projects, and multimedia presentations.		
8 CT 3.6	Generate a bibliography.		
8 CT 4	**TOOLS AND PROCESSES**		
8 CT 4.1	Explain how technology skills and tools enhance productivity in creating projects, building prototypes and modeling (e.g., measuring, shaping, forming, and fastening materials).		
8 CT 4.2	Use tools, instrumentation, equipment, materials, and processes to make designs, simulations, and prototypes.		
8 CT 4.3	Compare and contrast the safe use of technology tools, hand and power tools, processes, and materials in diverse computer and technology applications.		
8 CT 4.4	Demonstrate an understanding of the operation and maintenance of technology tools such as hand tools, power tools, lasers, hydraulics, pneumatics, electronics, hardware, software, CNC machines, computers, robotics, and fiber optics.		
8 CT 5	**SYSTEMS**		
8 CT 5.1	Interpret resources that are essential and those that must be used effectively to produce a desired outcome; an output from one system may be input to another system.		
8 CT 5.2	Differentiate among various systems, explain capabilities and limitations, and identify the ways in which they are controlled to produce a desired outcome (e.g., limitations of the components of a computer system).		
8 CT 5.3	Use a system to achieve a desired outcome in the areas of construction, communication, manufacturing, energy, power, transportation, and biotechnology.		
8 CT 6	**IMPLICATIONS ON SOCIETY**		
8 CT 6.1	Practice legal and ethical behaviors when using information and technology. Discuss the consequences of misuse on society and the environment.		
8 CT 6.2	Evaluate the effect technology has on society and the environment.		
8 CT 6.3	Examine the role of technology in the workplace and explore careers that use technology.		
8 CT 6.4	Explain how people can control the technologies they develop and use, and why people are responsible for the effects these have on society, the environment, and careers.		