AR CS Standards 3rd Grade

3rd Grade	Strand: Computational Thinking and Problem Solving	Content Cluster 1: Students will analyze problem-solving strategies.	CT.1.3.1 Solve problems using a defined process
3rd Grade	Strand: Computational Thinking and Problem Solving	Content Cluster 2: Students will analyze connections between elements of mathematics and computer science.	CT.2.3.1 Apply fractional rotations within a program (e.g., quarter turns and half turns)
3rd Grade	Strand: Computational Thinking and Problem Solving	Content Cluster 3: Students will solve problems cooperatively and collaboratively.	CT.3.3.1 Construct innovative solutions to problems collaboratively
3rd Grade	Strand: Data and Information	Content Cluster 4: Students will analyze various ways in which data is represented.	D.4.3.1 Describe how representation of data can exist in multiple formats
3rd Grade	Strand: Data and Information	Content Cluster 4: Students will analyze various ways in which data is represented.	D.4.3.2 Describe how 0's and 1's can be used to represent data
3rd Grade	Strand: Data and Information	Content Cluster 5: Students will collect, arrange, and represent data.	D.5.3.1 Select and use appropriate tools to collect data in teams and individually
3rd Grade	Strand: Data and Information	Content Cluster 5: Students will collect, arrange, and represent data.	D.5.3.2 Collect and arrange data logically based on multiple characteristics as a class and in teams
3rd Grade	Strand: Data and Information	Content Cluster 5: Students will collect, arrange, and represent data.	D.5.3.3 Organize and draw visual representations of data with pictographs and bar graphs
3rd Grade	Strand: Data and Information	Content Cluster 6: Students will interpret and analyze data and information.	D.6.3.1 Interpret and analyze graphs individually
3rd Grade	Strand: Algorithms and Programs	Content Cluster 7: Students will create, evaluate, and modify algorithms	A.7.3.1 Create and follow algorithms to accomplish a simple task or solve a simple problem
3rd Grade	Strand: Algorithms and Programs	Content Cluster 7: Students will create, evaluate, and modify algorithms	A.7.3.2 Compare and contrast algorithms of appropriate complexity

3rd Grade	Strand: Algorithms and Programs	Content Cluster 7: Students will create, evaluate, and modify algorithms	A.7.3.3 Identify and correct multiple errors within an algorithm that accomplishes a simple task or solves a simple problem
3rd Grade	Strand: Algorithms and Programs	Content Cluster 7: Students will create, evaluate, and modify algorithms	A.7.3.4 Design and test algorithms of appropriate complexity collaboratively using technology
3rd Grade	Strand: Algorithms and Programs	Content Cluster 8: Students will create programs to solve problems.	A.8.3.1 Use a visual block-based programming language individually and collaboratively to solve problems of increasing complexity
3rd Grade	Strand: Computers and Communications	Content Cluster 9: Students will analyze the utilization of computers.	CC.9.3.1 Discuss a variety of careers that require computing and technology
3rd Grade	Strand: Computers and Communications	Content Cluster 9: Students will analyze the utilization of computers.	CC.9.3.2 Discuss as a class that computers perform actions or outputs based on inputs by humans (e.g., using a video game controller, typing and using a mouse)
3rd Grade	Strand: Computers and Communications	Content Cluster 10: Students will utilize appropriate digital tools for various applications.	CC.10.3.1 Demonstrate an appropriate level of proficiency with keyboards and other input/output devices.
3rd Grade	Strand: Computers and Communications	Content Cluster 10: Students will utilize appropriate digital tools for various applications.	CC.10.3.2 Recognize the expense of the equipment and how care and protection of the computers can prolong use and save the cost of purchasing new equipment, therefore benefiting all students
3rd Grade	Strand: Computers and Communications	Content Cluster 10: Students will utilize appropriate digital tools for various applications.	CC.10.3.3 Use correctly on the keyboard: - fingers on home row keys - thumb on space bar - enter key - shift key for capital letters punctuation appropriate to writing level
3rd Grade	Strand: Computers and Communications	Content Cluster 10: Students will utilize appropriate digital tools for various applications.	CC.10.3.4 Demonstrate proper keyboarding technique: - posture - elbows down - body centered in front of keyboard
3rd Grade	Strand: Computers and Communications	Content Cluster 11: Students will analyze various components and	CC.11.3.1 Identify and use productivity technology tools for writing, communicating,

		functions of computers	and publishing activities
3rd Grade	Strand: Computers and Communications	Content Cluster 11: Students will analyze various components and functions of computers	CC.11.3.2 Identify as a class that information can be transmitted using computing devices via a network
3rd Grade	Strand: Computers and Communications	Content Cluster 11: Students will analyze various components and functions of computers	CC.11.3.3 Recognize that computing devices execute programs using processors
3rd Grade	Strand: Computers and Communications	Content Cluster 11: Students will analyze various components and functions of computers	CC.11.3.4 Apply strategies for solving simple hardware and software problems that may occur during use
3rd Grade	Strand: Community, Global, and Ethical Impacts	Content Cluster 12: Students will analyze appropriate uses of technology.	CGE.12.3.1 Identify and discuss positive and negative impacts of technology on the daily life of individuals and society
3rd Grade	Strand: Community, Global, and Ethical Impacts	Content Cluster 12: Students will analyze appropriate uses of technology.	CGE.12.3.2 Identify and discuss positive and negative uses of technology and information and their impact
3rd Grade	Strand: Community, Global, and Ethical Impacts	Content Cluster 12: Students will analyze appropriate uses of technology.	CGE.12.3.3 Identify attributes of credible electronic information sources
3rd Grade	Strand: Community, Global, and Ethical Impacts	Content Cluster 12: Students will analyze appropriate uses of technology.	CGE.12.3.4 Identify and name resources used in the process of gathering information.