

	<h2>F.18 Computer Science - Grades 6-8</h2>		
PROVIDER/PUBLISHER / MATERIAL INFORMATION (TO BE COMPLETED BY PROVIDER/PUBLISHER)			
Provider/Publisher / Imprint:		Grade(s):	
Title of Student Edition:		Student Edition ISBN:	
Title of Teacher Edition:		Teacher Edition ISBN:	
Title of SE Workbook:		SE Workbook ISBN:	
PUBLISHER CITATION VIDEO: Must be viewed before starting the review of this set of materials.			
Citation Video Link:			
Citation video certification:	I certify that I have viewed the citation video for this specific publisher and set of materials.		
Digital Material Log In (if applicable):	Website:	Username:	Password:
SCORING (TO BE COMPLETED BY REVIEWER AND FACILITATOR)			
Reviewer Number:		Date:	

Section 1: Standards Review: Computer Science

PROVIDER/PUBLISHER INSTRUCTIONS:

- Provider/Publisher citations for this section will refer to the **Teacher Edition (teacher-facing core material)** and/or **Student Edition/Student Workbook (student-facing core material)**. The cited Teacher Edition, Student Edition, and/or Student Workbook should correspond with titles and ISBNs entered on the Form F cover page, whether in print, online, or both. The review set submitted to the summer review institute should also correspond with what is cited on the Form F. If the review set is an online platform only, then that is what should be cited on the Form F and submitted for review by the review teams.
- For this section, the provider/publisher will enter two citations per standard (Columns C and G). Each citation should direct the reviewer to a specific location in the materials that best meets the standard. The citations should be concise and should allow the reviewer to easily determine that all components of the standard have been met. **Each citation should cover no more than 3 pages within the materials.**
 - **Columns D and H:** Enter one citation in Column D and one citation in Column H from either the **Teacher Edition (teacher-facing core material)** OR **Student Edition/Student Workbook (student-facing core material)**. Each citation should direct the reviewer to a specific location in the materials that best meets the standard.
- The material will be scored for alignment with each standard as “Meets expectations,” “Partially meets expectations,” or “Does not meet expectations” based on the citations provided.
 - **NOTE: You may not use a citation more than once across ALL sections of the rubric.**

Reviewer directions for Computer Science Standards Review:	<p>Columns D-G: The provider/publisher will provide a citation from the Teacher Edition (teacher-facing core material) OR Student Edition/Student Workbook (student-facing core material) (print and/or digital) for each standard. Review the cited material and score the material by determining the degree to which it meets the standard:</p> <ul style="list-style-type: none"> ◦ M = Meets the standard ◦ P = Partially meets the standard ◦ D = Does not meet the standard <p>Evidence for the publisher citations is required <i>only</i> if you score the materials with a D. For your evidence for each standard that scores a D, choose one of the options from the dropdown menu in Column G. If the reason for scoring the materials with a D is not one of the dropdown options, enter your own evidence statement in the cell in Column G.</p> <p>◦ Each score cell (column E) will turn green as you score the materials.</p>	<p>Columns H-K: The provider/publisher will provide a citation from the Teacher Edition (teacher-facing core material) OR Student Edition/Student Workbook (student-facing core material) (print and/or digital) for each standard. Review the cited material, score the material by determining the degree to which it meets the standard, and provide evidence from the material to support your determination:</p> <ul style="list-style-type: none"> ◦ M = Meets the standard ◦ P = Partially meets the standard ◦ D = Does not meet the standard <p>◦ Each score cell (column I) and evidence cell (column K) will turn green as you score the materials.</p>	
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Criteria #	Identifier	F.19 Computer Science Grades 6-8	Provider/Publisher Citation	Score	If Scored D: Reviewer's Evidence for Publisher Citation	Provider/Publisher Citation	Score	Required: Reviewer's Evidence for Publisher Citation	Comments, other citations, notes
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LEVEL 2: GRADES 6-8 COMPUTER SCIENCE STANDARDS

COMPUTING SYSTEMS

1	2-CS-01	Recommend improvements to the design of computing devices, based on an analysis of how users interact with the devices.							
2	2-CS-02	Design projects that combine hardware and software components to collect and exchange data.							
3	2-CS-03	Systematically identify and fix problems with computing devices and their components.							

NETWORKS AND THE INTERNET

4	2-NI-04	Model the role of protocols in transmitting data across networks and the Internet.							
5	2-NI-05	Explain how physical and digital security measures protect electronic information.							
6	2-NI-06	Apply multiple methods of encryption to model the secure transmission of information.							

DATA AND ANALYSIS

7	2-DA-07	Represent data using multiple encoding schemes.							
8	2-DA-08	Collect data using computational tools and transform the data to make it more useful and reliable.							
9	2-DA-09	Refine computational models based on the data they have generated.							
ALGORITHMS AND PROGRAMMING									
10	2-AP-10	Use flowcharts and/or pseudocode to address complex problems as algorithms.							
11	2-AP-11	Create clearly named variables that represent different data types and perform operations on their values.							
12	2-AP-12	Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.							
13	2-AP-13	Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.							
14	2-AP-14	Create procedures with parameters to organize code and make it easier to reuse.							
15	2-AP-15	Seek and incorporate feedback from team members and users to refine a solution that meets user needs.							
16	2-AP-16	Incorporate existing code, media, and libraries into original programs, and give attribution.							
17	2-AP-17	Systematically test and refine programs using a range of test cases.							
18	2-AP-18	Distribute tasks and maintain a project timeline when collaboratively developing computational artifacts.							
19	2-AP-19	Document programs in order to make them easier to follow, test, and debug.							
IMPACTS OF COMPUTING									
20	2-IC-20	Compare tradeoffs associated with computing technologies that affect people's everyday activities and career options.							
21	2-IC-21	Discuss issues of bias and accessibility in the design of existing technologies.							
22	2-IC-22	Collaborate with many contributors through strategies such as crowdsourcing or surveys when creating a computational artifact.							

23	2-IC-23	Describe tradeoffs between allowing information to be public and keeping information private and secure.							
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Section 2: Computer Science Content Review

PROVIDER/PUBLISHER INSTRUCTIONS:

- Provider/Publisher citations for this section will refer to the **Teacher Edition (teacher-facing core material)** and/or **Student Edition/Student Workbook (student-facing core material)**. The cited Teacher Edition, Student Edition, and/or Student Workbook should correspond with titles and ISBNs entered on the Form F cover page, whether in print, online, or both. The review set submitted to the summer review institute should also correspond with what is cited on the Form F. If the review set is an online platform only, then that is what should be cited on the Form F and submitted for review by the review teams. If the review set is in print only, then that is what should be cited on the Form F and submitted for review by the review teams.
- For this section, the provider/publisher will enter two citations per criterion (Columns C and G). Each citation should direct the reviewer to a specific location in the materials that best meets the criterion. The citations should be concise and should allow the reviewer to easily determine that all components of the criterion have been met. **Each citation should cover no more than 3 pages within the materials.**
 - o **Columns C and G:** Enter one citation in Column C and one citation in Column G from either the **Teacher Edition (teacher-facing core material)** OR **Student Edition/Student Workbook (student-facing core material)**. Each citation should direct the reviewer to a specific location in the materials that best meets the criterion.
- The material will be scored for alignment with each criterion as “Meets expectations,” “Partially meets expectations,” or “Does not meet expectations” based on the citations provided.
 - o **NOTE: You may not use a citation more than once across ALL sections of the rubric.**

Reviewer directions for Computer Science Content Review:

Columns C-F: The provider/publisher will provide a citation from the **Teacher Edition (teacher-facing core material)** OR **Student Edition/Student Workbook (student-facing core material) (print and/or digital)** for each criterion. Review the cited material and score the material by determining the degree to which it meets the criterion:

- o M = Meets the criterion
- o P = Partially meets the criterion
- o D = Does not meet the criterion

Evidence for the publisher citations is required *only* if you score the materials with a D. For your evidence for each criterion that scores a D, choose one of the options from the dropdown menu in Column F. If the reason for scoring the materials with a D is not one of the dropdown options, enter your own evidence statement in the cell in Column F.

o Each score cell (column D) will turn green as you score the materials.

Columns G-J: The provider/publisher will provide a citation from the **Teacher Edition (teacher-facing core material)** OR **Student Edition/Student Workbook (student-facing core material) (print and/or digital)** for each criterion. Review the cited material, score the material by determining the degree to which it meets the criterion, and **provide evidence from the material to support your determination:**

- o M = Meets the criterion
- o P = Partially meets the criterion
- o D = Does not meet the criterion

o Each score cell (column H) and evidence cell (column J) will turn green as you score the materials.

Criteria #	Grades 3-8 Computer Science Content Criteria	Provider/Publisher Citation	Score	If Scored D: Reviewer's Evidence for Publisher Citation	Provider/Publisher Citation	Score	Required: Reviewer's Evidence for Publisher Citation	Comments, other citations, notes
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FOCUS AREA 1 COMPUTATIONAL CONCEPTS
Instructional materials provide strategies to develop students' skills that are crucial to understanding computational concepts, including sequencing, looping, parallelism, events, conditionals, operators, and data.

1	Instructional materials provide block programmed sequence activities that direct action of on-screen agents in virtual worlds and that sense and respond to the physical world.							
2	Instructional materials provide block programmed loop activities that direct action of on-screen agents in virtual worlds and that sense and respond to the physical world.							
3	Instructional materials provide block programmed math/logic activities that direct action of on-screen agents in virtual worlds and that sense and respond to the physical world.							
4	Instructional materials provide block programmed data activities that direct action of on-screen agents in virtual worlds and that sense and respond to the physical world.							

FOCUS AREA 2 COMPUTATIONAL PRACTICES:
Instructional materials provide strategies to develop students' skills that are crucial to understanding computational practices, including experimenting and iterating; testing and debugging; and reusing and remixing.

5	Instructional materials provide frequent guided opportunities for students to overcome problems stemming from incomplete programs, incorrect syntax, missing sensor/actuator libraries, or misfits between hardware and software.							
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FOCUS AREA 3 COMPUTATIONAL PERSPECTIVES:
Instructional materials provide strategies to develop students' skills that are crucial to understanding computational perspectives, including expressing, connecting, and questioning.

6	Instructional materials provide frequent guided opportunities for students to create and construct designs for their physical computing devices that allows users to enjoy its programmed capabilities.							
7	Instructional materials provide frequent guided opportunities for students to co-create and co-construct designs for their physical computing devices that allows users to enjoy its programmed capabilities.							

FOCUS AREA 4 ACCESSIBILITY AND EQUITY:

8	Instructional materials provide all students (e.g. those who read below grade level, students with special needs, gifted students, and ELL) with extensive opportunities to encounter and comprehend grade-level and complex concepts within the scope of computer science.							
9	Instructional materials help students to develop an understanding and appreciation for ethical behaviors and digital citizenship.							

FOCUS AREA 5 TEACHER SUPPORT:

10	Instructional materials provide a detailed list of requisite software, libraries, hardware and tools.							
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Section 2: All Content Review				
PROVIDERS/PUBLISHERS: <ul style="list-style-type: none"> The All Content tab will be completed solely by the reviewers. They will score each criterion and provide evidence for their score from the material based on their overall review of the material. You will not provide any citations for this tab. The material will be scored for alignment with each criterion as “Meets expectations,” “Partially meets expectations,” or “Does not meet expectations”. 				
Reviewer directions for All Content Review:		Columns C-F: The criteria presented on this tab will be scored and evidence provided based on your overall review of the materials. Review the material, score the material by determining the degree to which it meets each criterion, and provide evidence from the material to support your determination: <ul style="list-style-type: none"> M = Meets the criterion P = Partially meets the criterion D = Does not meet the criterion Your evidence should speak to where in the materials you have found the evidence as well as what is in the materials that supports the score given. <ul style="list-style-type: none"> Each score cell (column C) and evidence cell (column E) will turn green as you score the materials. Any cells grayed out do not require a score or evidence. 		
Criteria #	All Content Criteria	Score	Required: Reviewer’s Evidence from Material	Comments, citations, notes
FOCUS AREA 1 RESOURCES AND SUPPORTS FOR TEACHERS AND STUDENTS: Instructional materials provide teacher resources to support planning and supports for all students.				
1	Instructional materials provide a list of lessons in the Teacher Edition or teacher-facing core material (in print or clearly distinguished/accessible as a teacher-facing core material in digital materials), cross-referencing the standards addressed and providing an estimated instructional time for each lesson, chapter, and unit.			
2	Instructional materials integrate opportunities for digital learning, including interactive digital components, and digital assessment.			
3	Instructional materials incorporate features that aid students and teachers in making meaning of the text.			
4	Instructional materials provide appropriate linguistic support for English Learners and Culturally and Linguistically Diverse students, and accommodations and modifications for other special populations that will support their regular and active participation in learning content.			
FOCUS AREA 2 ASSESSMENT: Instructional materials offer teachers a variety of assessment resources and tools to collect ongoing data about student progress related to the standards.				

5	Instructional materials provide a variety of assessments that measure student progress in all strands of the standards for the content under review. <i>(Adopted New Mexico Content Standards for 2023: 7-12 Career and Technical Education Standards; CSTA K-12 Computer Science Standards; K-12 Health Education Standards; K-12 Physical Education Standards)</i>			
6	Instructional materials provide multiple formative and summative assessments, clearly defining which standards are being assessed through content and language objectives.			
7	Instructional materials provide appropriate assessment alternatives for English Learners, Culturally and Linguistically Diverse students, advanced students, and special needs students.			
FOCUS AREA 3 CULTURAL AND LINGUISTIC PERSPECTIVES AND RESPONSIVENESS: Instructional materials represent a variety of cultural and linguistic perspectives and highlight diversity in culture and language through multiple perspectives.				
8	Instructional materials inform culturally and linguistically responsive pedagogy by affirming students' backgrounds in the materials themselves and in the student discussions.			
9	Instructional materials include tools and resources to relate the content area appropriately to diversity in culture and language.			
10	Instructional materials include tools and resources that demonstrate multiple perspectives in a specific concept.			
11	Instructional materials engage students in critical reflection about their own lives and societies, including cultures past and present in New Mexico.			
12	Instructional materials address multiple ethnic descriptions, interpretations, or perspectives of events and experiences.			