Computer Science
CS Discoveries Alabama 7/8

A+ COLLEGE READY

1ST 6-WEEKS

PS Unit: Getting Started and Problem Solving

Problem Solving and Computing is a highly interactive and collaborative introduction to the field of computer science, as framed within the broader pursuit of solving problems. You'll practice using a problem solving process to address a series of puzzles, challenges, and real world scenarios. Next, you'll learn how computers input, output, store, and process information to help humans solve problems. The unit concludes with a project in which you design an application that helps solve a problem of your choosing.

2ND 6-WEEKS

IAG Unit: Interactive Animations and Games

In the Interactive Animations and Games unit, students create programmatic images, animations, interactive art, and games. Starting off with simple, primitive shapes and building up to more sophisticated sprite-based games, students become familiar with the programming concepts and the design process computer scientists use daily. They then learn how these simpler constructs can be combined to create more complex programs. In the final project, students develop a personalized, interactive program.

3RD 6-WEEKS

INT Unit: Internet and Web Development

Students will explore different aspects of the internet and discover networks will require components to join devices to one another. They will select the best format to share created content with others from varying locations: globally, not locally. In Web Development, students are empowered to create and share content on their own web pages. They begin by thinking about the role of the web and how it can be used as a medium for creative expression. As students develop their pages and begin to see themselves as programmers, they are encouraged to think critically about the impact of sharing information online and how to be more critical consumers of content. They are also introduced to problem solving as it relates to programming while they learn valuable skills such as debugging, using resources, and teamwork. At the conclusion of the unit, students will have created a personal website they can publish and share.

4TH 6-WEEKS

DAT Unit: Data

The Data and Society unit is about the importance of using data to solve problems and it highlights how computers can help in this process. The first chapter explores different systems used to represent information in a computer and the challenges and tradeoffs posed by using them. In the second chapter, students learn how collections of data are used to solve problems, and how computers help to automate the steps of this process. In the final project, students gather their own data and use it to develop an automated solution to a problem.

5TH 6-WEEKS

BIT Unit: Physical Computing

In the Creating Apps with Devices unit, students explore the role of physical devices in computing. Using App Lab and BBC micro:bit, students develop programs that utilize the same hardware inputs and outputs that you see in the smart devices, looking at how a simple rough prototype can lead to a finished product. Then, students explore how physical devices can be used to react to the world around them using a "maker" mindset to create prototypes with everyday materials. This unit uses the micro:bit to introduce physical computing and the "maker" mindset.

6TH 6-WEEKS

AI Unit : AI and Machine Learning

This unit is a hands-on introduction to developing a machine learning model with tabular data. Students explore how computers learn from data to make decisions, then develop machine learning projects around real-world data. The unit culminates in designing a machine learning app to solve a personally relevant problem.

CS Discoveries Alabama 7/8
Course Overview

STANDARDS CHECKLIST *minimum content; disciplines can add a column for unit designation if desired						
ALCOS	PA Unit 1ST 6 WEEKS	IAG Unit 2ND 6 WEEKS	INT Unit 3RD 6 WEEKS	DAT Unit 4TH 6 WEEKS	BIT Unit 5TH 6 WEEKS	AI Unit 6TH 6 WEEKS
7.R1	X					X
7.R2	X					
7.R3	X					
7.R4	X					X
7.R5	X					
7.R6	X		X			
7.1	X				X	
7.2		X			X	
7.3	X	X			X	X
7.4		X			X	X
7.5	X	X			X	X
7.6		X			X	
7.7		X			X	
7.8		X			X	X
7.9	X			X		
7.10	X		X			
7.11			X			X
7.12			X	X		
7.13			X			

STANDARDS CHECKLIST *minimum content; disciplines can add a column for unit designation if desired*						
ALCOS	PA Unit 1ST 6 WEEKS	IAG Unit 2ND 6 WEEKS	INT Unit 3RD 6 WEEKS	DAT Unit 4TH 6 WEEKS	BIT Unit 5TH 6 WEEKS	AI Unit 6TH 6 WEEKS
7.14					X	
7.15			X		X	
7.16			X		X	
7.17			X			
7.18	X					
7.19			X			X
7.20				X		
7.21			X			
7.22					X	
7.23	X					
7.24			X			
7.25			X			
7.26			X			X
7.27				X	X	X
7.28			X			
7.29			X			
7.30	X			X	X	X
8.R1	X			X		X
8.R2	X					
8.R3	X					X
8.R4	X					X
8.R5	X					

CS Discoveries Alabama 7/8
Course Overview

STANDARDS CHECKLIST *minimum content; disciplines can add a column for unit designation if desired*						
ALCOS	PA Unit 1ST 6 WEEKS	IAG Unit 2ND 6 WEEKS	INT Unit 3RD 6 WEEKS	DAT Unit 4TH 6 WEEKS	BIT Unit 5TH 6 WEEKS	AI Unit 6TH 6 WEEKS
8.R6	X		X			
8.1		X				X
8.2		X				
8.3	X	X			X	X
8.4					X	
8.5	X					
8.6					X	
8.7		X			X	X
8.8				X		
8.9			X	X		
8.10	X		X			
8.11	X		X			
8.12				X		
8.13			X			
8.14	X		X			X
8.15	X		X		X	
8.16			X			
8.17	X		X			
8.18	X					
8.19			X			
8.20				X		X
8.21				X	X	

STANDARDS CHECKLIST						
minimum content; disciplines can add a column for unit designation if desired						
ALCOS	**PA Unit 1ST 6 WEEKS**	**IAG Unit 2ND 6 WEEKS**	**INT Unit 3RD 6 WEEKS**	**DAT Unit 4TH 6 WEEKS**	**BIT Unit 5TH 6 WEEKS**	**AI Unit 6TH 6 WEEKS**
8.22				X		
8.23					X	
8.24			X	X		
8.25			X			
8.26			X			X
8.27			X	X		
8.28	X		X			X
8.29	X		X		X	X

UNIT NAME: Getting Started and Problem Solving Unit	RECOMMENDED TIME FRAME: 6 WEEKS

UNIT OVERVIEW

Problem Solving and Computing is a highly interactive and collaborative introduction to the field of computer science, as framed within the broader pursuit of solving problems. You'll practice using a problem solving process to address a series of puzzles, challenges, and real world scenarios. Next, you'll learn how computers input, output, store, and process information to help humans solve problems. The unit concludes with a project in which you design an application that helps solve a problem of your choosing.

- PS.1 - PS.4 Safety and Troubleshooting
- PS.5 Digital Tools and Skills
- PS.6 - PS.8 Digital Culture and Artifact Creation
- PS.9 - PS.12 Emerging Technologies, Accessibility, Curating Digital Info
- PS.9 - PS.12 Emerging Technologies, Accessibility, Curating Digital Info
- PS.13 Intro to Problem Solving
- PS.14 The Problem Solving Process
- PS.15 - PS.16 Exploring Problem Solving
- PS.15 - PS.16 Exploring Problem Solving
- PS.17 What is a Computer?
- PS.18 Input and Output
- PS.19 Processing
- PS.20 Apps and Storage
- PS.21 -PS.23 Propose an App
- PS.24 What is an algorithm?
- PS.25-PS.27 Sequence, Selection, and Iteration
- PS.25-PS.27 Sequence, Selection, and Iteration
- PS.28 - PS.30 Flowcharting and Pseudocode

STANDARDS

AL DLCS
7th Grade

    7.R1 Identify, demonstrate, and apply personal safe use of digital devices.

    7.R2 Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outlined in school/district rules.

    7.R3 Assess the validity and identify the purpose of digital content.

    7.R4 Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.

    7.R5 Locate and curate information from digital sources to answer research questions.

    7.R6 Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.

    7.1 Create a function to simplify a task.

    7.3 Create algorithms that demonstrate sequencing, selection or iteration.

    7.5 Solve a complex problem using computational thinking.

    7.9 Identify common methods of securing data.

    7.10 Explain social engineering, including countermeasures, and its impact on a digital society.

    7.16 Construct content designed for specific audiences through an appropriate medium.

    7.18 Type 35 words per minute with 95% accuracy using appropriate keyboarding techniques.

    7.23 Demonstrate the use of a variety of digital devices individually and collaboratively to collect, analyze, and present information for content-related problems.

    7.30 Apply the problem-solving process to solve real-world problems.

8th Grade

    8.R1 Identify, demonstrate, and apply personal safe use of digital devices.

    8.R2 Recognize and demonstrate age-appropriate responsible use of digital devices and resources as outlined in school/district rules.

    8.R3 Assess the validity and identify the purpose of digital content.

    8.R4 Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.

    8.R5 Locate and curate information from digital sources to answer research questions.

    8.R6 Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.

    8.3 Create an algorithm using a programming language that includes the use of sequencing, selections, or iterations.

    8.5 Discuss the efficiency of an algorithm or technology used to solve complex problems.

    8.10 Analyze different modes of social engineering and their effectiveness.

8.11 Advocate for positive, safe, legal, and ethical habits when creating and sharing digital content.

8.14 Analyze current events related to computing and their effects on education, the workplace, individuals, communities, and global society.

8.15 Critique computational artifacts, including options for accessibility for all users, with respect to the needs of a global culture.

8.17 Communicate and publish individually or collaboratively to persuade peers, experts, or community about issues and problems.

8.18 Type 40 words per minute with 95% accuracy using appropriate keyboarding techniques.

8.28 Develop a logical argument for and against artificial intelligence.

8.29   "Create an artifact to solve a problem using ideation and iteration in the problem-solving process.

RESOURCES

CSD Student Problem Solving Unit_Progress Monitoring Template

CS Discoveries Alabama 7/8
Unit Overview

UNIT NAME: Interactive Animations and Games Unit	RECOMMENDED TIME FRAME: 6 WEEKS

UNIT OVERVIEW

In the Interactive Animations and Games unit, students create programmatic images, animations, interactive art, and games. Starting off with simple, primitive shapes and building up to more sophisticated sprite-based games, students become familiar with the programming concepts and the design process computer scientists use daily. They then learn how these simpler constructs can be combined to create more complex programs. In the final project, students develop a personalized, interactive program.

- IAG.1 Hello World
- IAG.2 Introduce Yourself
- IAG.3 Drawing Practice
- IAG.4 Create a Drawing
- IAG.5 What is a Variable?
- IAG.6 Random Numbers
- IAG.7 Sprites
- IAG.8 Sprite Properties
- IAG.9 - Text
- IAG.10- IAG.11 Draw Loop
- IAG.12 - IAG.13 Sprite Movement
- IAG.12 - IAG.13 Sprite Movement
- IAG.14 - IAG.15 Project Caption Scene & Sprite Movement
- IAG.16 Conditionals
- IAG.17 Keyboard Input
- IAG.18 Mouse Input
- IAG.19-IAG.20 Interactive Card
- IAG.21 Velocity
- IAG.22 Collision Detection
- IAG.23 Mini Project Side Scroller
- IAG.24 Complex Sprite Movement
- IAG.25 Collisions
- IAG.26 Functions
- IAG.27 The Game Design Process
- IAG.28 Using the Game Design Process
- IAG.29 - IAG.31 - Design a Game

STANDARDS

AL DLCS

7th Grade

   7.2 Create complex pseudocode using conditionals and Boolean statements.

   7.3 Create algorithms that demonstrate sequencing, selection or iteration.

   7.4 Design a complex algorithm that contains sequencing, selection or iteration.

   7.5 Solve a complex problem using computational thinking.

   7.6 C for preparing a complete meal.

   7.7 C.

   7.8 Formulate a narrative for each step of a process and its intended result, given pseudocode or code.

   7.9 Identify common methods of securing data.

8th Grade

   8.1 Design a function using a programming language that demonstrates abstraction.

   8.2 Explain how abstraction is used in a given function.

   8.3 Create an algorithm using a programming language that includes the use of sequencing, selections, or iterations.

   8.7 Create a program that includes selection, iteration, or abstraction, and initializes, and updates, at least two variables.

RESOURCES

Student IAG Unit Progress Monitoring Document

UNIT NAME: The Internet and Web Development Unit	RECOMMENDED TIME FRAME: 6 WEEKS

UNIT OVERVIEW

Students will explore different aspects of the internet and discover networks will require components to join devices to one another. They will select the best format to share created content with others from varying locations: globally, not locally. In Web Development, students are empowered to create and share content on their own web pages. They begin by thinking about the role of the web and how it can be used as a medium for creative expression. As students develop their pages and begin to see themselves as programmers, they are encouraged to think critically about the impact of sharing information online and how to be more critical consumers of content. They are also introduced to problem solving as it relates to programming while they learn valuable skills such as debugging, using resources, and teamwork. At the conclusion of the unit, students will have created a personal website they can publish and share.

- INT.1 Intro to the World Wide Web and Internet
- INT.2 The Internet
- INT.3 Networks
- INT.4 Internet Censoring and Digital Globalization
- INT.5 Internet Fraud and Secure Websites
- INT.6 Cybersecurity - Simple Encryption
- INT.7 Artificial Intelligence and Machine Learning
- INT.8 Exploring Web Pages
- INT.9 Intro to HTML
- INT.10 - INT.11 Headings
- INT.12 - INT.16 Mini Project
- INT.17 Digital Footprint
- INT.18-INT.21 Basic Styling with CSS
- INT.22 Intellectual Property
- INT.23 Using Images
- INT.24 - INT.30 Project - Assistive Technology and App Proposal
- INT.24 - INT.30 Project - Assistive Technology and App Proposal

STANDARDS

AL DLCS

7th Grade

7.R6 Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.

7.10 Explain social engineering, including countermeasures, and its impact on a digital society.
Examples: Phishing, hoaxes, impersonation, baiting, spoofing."

7.11 Demonstrate positive, safe, legal, and ethical habits when creating and sharing digital content and identify the consequences of failing to act responsibly.

7.12 Discuss the impact of data permanence on digital identity including best practices to protect personal digital footprint.

7.13 Compare and contrast information available locally and globally.

7.15 Discuss unique perspectives and needs of a global culture when developing computational artifacts, including options for accessibility for all users.

7.16 Construct content designed for specific audiences through an appropriate medium.

7.17 Publish content to be available for external feedback.

7.19 Discuss the benefits and limitations of censorship.

7.21 Compare common transfer protocols.

7.24 Diagram a network given a specific setup or need.

7.25 List common methods of system cybersecurity.

7.26 Categorize models based on the most appropriate representation of various systems.

7.28 Classify types of assistive technologies.

7.29 Compare and contrast human intelligence and artificial intelligence.

8th Grade

8.R6 Produce, review, and revise authentic artifacts that include multimedia using appropriate digital tools.

8.9 Secu, password protect, encrypt.

8.10 Analyze different modes of social engineering and their effectiveness.

8.11 Advocate for positive, safe, legal, and ethical habits when creating and sharing digital content.

8.13 Evaluate the impact of digital globalization on public perception and ways Internet censorship can affect free and equitable access to information.

8.14 Analyze current events related to computing and their effects on education, the workplace, individuals, communities, and global society.

8.15 Critique computational artifacts, including options for accessibility for all users, with respect to the needs of a global culture.

8.16 Present content designed for specific audiences through an appropriate medium.

8.17 Communicate and publish individually or collaboratively to persuade peers, experts, or community about issues and problems.

8.19 Critique the impacts of censorship as it impacts global society.

8.24 Compare and contrast common methods of cybersecurity.

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8.25 Create a model that represents a system.

8.26 Create a simulation that tests a specific model.

8.27 Analyze assistive technologies and how they improve the quality of life for users.

8.28 Develop a logical argument for and against artificial intelligence.

8.29 Create an artifact to solve a problem using ideation and iteration in the problem-solving process.

RESOURCES

Student INT Unit Progress Monitoring Document

UNIT NAME: Data Unit	RECOMMENDED TIME FRAME: 6 WEEKS

UNIT OVERVIEW

The Data and Society unit is about the importance of using data to solve problems and it highlights how computers can help in this process. The first chapter explores different systems used to represent information in a computer and the challenges and tradeoffs posed by using them. In the second chapter, students learn how collections of data are used to solve problems, and how computers help to automate the steps of this process. In the final project, students gather their own data and use it to develop an automated solution to a problem.

- DAT.1 Representation Matters
- DAT.2 Patterns and Representation
- DAT.3 ASCII and Binary
- DAT.4 Representing Images
- DAT.5 Representing Numbers
- DAT.6 Keeping Data Secret
- DAT.7 Combining Representations
- DAT.8 Project - Create a Representation
- DAT.9 - DAT.10 Data Storage
- DAT.11 More Cybersecurity
- DAT.12 - DAT.13 Data Security
- DAT.14 - DAT.15 Problem Solving and Data
- DAT.16 Problem Solving with Big Data
- DAT.17-DAT.18 Structuring Data
- DAT.19 Making Decisions with Data
- DAT.20-DAT.21 Interpreting Data
- DAT.22-DAT.23 Automating Data Decisions
- DAT.24-25 Managing Time Efficiently with Spreadsheets
- DAT.26-DAT.30 Project - Make a Recommendation

STANDARDS

AL DLCS

7th Grade

7.9 Identify common methods of securing data.

7.12 Discuss the impact of data permanence on digital identity including best practices to protect personal digital footprint.

7.20 Evaluate the validity and accuracy of a data set.

7.27 Identify data needed to create a model or simulation of a given event.

7.30 Apply the problem-solving process to solve real-world problems.

8th Grade

8.R1 Identify, demonstrate, and apply personal safe use of digital devices.

8.8 Compare and contrast common methods of securing data.

8.9 Secure, password protect, encrypt.

8.12 Cite evidence of the positive and negative effects of data permanence on personal and professional digital identity.

8.19 Critique the impacts of censorship as it impacts global society.

8.20 Examine an artifact that demonstrates bias through distorting, exaggerating, or misrepresenting data and redesign it using factual, relevant, unbiased content to more accurately reflect the truth.

8.21 Differentiate types of data storage and apply most efficient structure.

8.22 Encrypt and decrypt various data.

Example: Create and decipher a message sent in a secret code. "

8.24 Compare and contrast common methods of cybersecurity.

8.27 Analyze assistive technologies and how they improve the quality of life for users.

RESOURCES

CSD Student DAT Unit Progress Monitoring Template

UNIT NAME: Physical Computing with Microbits Unit	RECOMMENDED TIME FRAME: 6 WEEKS

UNIT OVERVIEW

In the Creating Apps with Devices unit, students explore the role of physical devices in computing. Using App Lab and BBC micro:bit, students develop programs that utilize the same hardware inputs and outputs that you see in the smart devices, looking at how a simple rough prototype can lead to a finished product. Then, students explore how physical devices can be used to react to the world around them using a "maker" mindset to create prototypes with everyday materials. This unit uses the micro:bit to introduce physical computing and the "maker" mindset.

- BIT.1 - BIT.2 Introduction to Physical Computing
- BIT.3 - BIT.4 Introduction to Micro:bits and MakeCode
- BIT.5 A Micro:bit is a computer
- BIT.6 - BIT.7 Events and Event Handlers
- BIT.8- BIT.9 - Variables
- BIT.10 - BIT.12 Project: Using Inputs
- BIT.13- BIT.14 - Conditionals : Rock, Paper, Scissors
- BIT.15 - BIT.17 Project: Create a game
- BIT.18 - BIT.20 Iteration and Loops
- BIT.21-BIT.22 Coordinates: Animations and Patterns
- BIT.23 - BIT.24 Booleans and a Coin Flipper
- BIT.25 - BIT.27 - Arrays
- BIT.28-BIT.30 Project

STANDARDS
AL DLCS

7th Grade

       7.2 Create complex pseudocode using conditionals and Boolean statements.

       7.3 Create algorithms that demonstrate sequencing, selection or iteration.

       7.4 Design a complex algorithm that contains sequencing, selection or iteration.

       7.5 Solve a complex problem using computational thinking.

       7.6 C for preparing a complete meal.

       7.7 C.

       7.8 Formulate a narrative for each step of a process and its intended result, given pseudocode or code.

       7.9 Identify common methods of securing data.

8th Grade

       8.2 Explain how abstraction is used in a given function.

       8.3 Create an algorithm using a programming language that includes the use of sequencing, selections, or iterations.

       8.4 C used in a spreadsheet to average a given list of grades.

       8.6 Describe how algorithmic processes and automation increase efficiency.

       8.7 Create a program that includes selection, iteration, or abstraction, and initializes, and updates, at least two variables.

       8.15 Critique computational artifacts, including options for accessibility for all users, with respect to the needs of a global culture.

       8.21 Differentiate types of data storage and apply most efficient structure.

       8.23 Design a digital artifact to propose a solution for a content-related problem.

RESOURCES
CSD Student BIT Unit Progress Monitoring Template

UNIT NAME: AI and Machine Learning Unit	RECOMMENDED TIME FRAME: 6 WEEKS

UNIT OVERVIEW

This unit is a hands-on introduction to developing a machine learning model with tabular data. Students explore how computers learn from data to make decisions, then develop machine learning projects around real-world data. The unit culminates in designing a machine learning app to solve a personally relevant problem.

- AI.1: Intro to App Lab
- AI.2: Introduction to Machine Learning
- AI.3: Types of Machine Learning
- AI.4: Innovations in AI
- AI.5: Patterns in Data
- AI.6: Classification Models
- AI.7: Introduction to AI Lab
- AI.8: Importing Models in App Lab
- AI.10: Saving Models in AI Lab
- AI.11: Model Cards in App Lab
- AI.12: Numerical Models
- AI.13: Numerical Data in AI Lab
- AI.14: Customizing Apps
- AI.15: AI Code of Ethics
- AI.16: Project: Make a Machine Learning App
- AI.17: Issue Statements
- AI.18: Survey Planning
- AI.19: Survey Data in AI Lab
- AI.20: Troubleshooting Models
- AI.21: Creating an App
- AI.22-AI.25: Project - Design an AI App

STANDARDS

AL DLCS

7th Grade

7.R1 Identify, demonstrate, and apply personal safe use of digital devices.

7.R4 Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.

7.3 Create algorithms that demonstrate sequencing, selection or iteration.

7.4 Design a complex algorithm that contains sequencing, selection or iteration.

7.5 Solve a complex problem using computational thinking.

7.8 Formulate a narrative for each step of a process and its intended result, given pseudocode or code.

7.20 Evaluate the validity and accuracy of a data set.

7.26 Categorize models based on the most appropriate representation of various systems.

7.27 Identify data needed to create a model or simulation of a given event.

7.30 Apply the problem-solving process to solve real-world problems.

8th Grade

8.R1 Identify, demonstrate, and apply personal safe use of digital devices.

8.R3 Assess the validity and identify the purpose of digital content.

8.R4 Identify and employ appropriate troubleshooting techniques used to solve computing or connectivity issues.

8.1 Design a function using a programming language that demonstrates abstraction.

8.3 Create an algorithm using a programming language that includes the use of sequencing, selections, or iterations.

8.7 Create a program that includes selection, iteration, or abstraction, and initializes, and updates, at least two variables.

8.14 Analyze current events related to computing and their effects on education, the workplace, individuals, communities, and global society.

8.20 Examine an artifact that demonstrates bias through distorting, exaggerating, or misrepresenting data and redesign it using factual, relevant, unbiased content to more accurately reflect the truth.

8.26 Create a simulation that tests a specific model.

8.28 Develop a logical argument for and against artificial intelligence.

8.29 Create an artifact to solve a problem using ideation and iteration in the problem-solving process.

RESOURCES

CSD Student AI Unit Progress Monitoring Template

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CS Discoveries Alabama 7/8
Scope and Sequence

PS Unit Getting started and Problem Solving	IAG Unit Interactive Animations and Games	INT Unit The Internet and Web Development	DAT Unit Data	BIT Unit Physical Computing with Microbits	AI UNIT AI and Machine Learning

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
WEEK 1	PS.1 - PS.4 Safety and Troubleshooting				PS.5 Digital Tools and Skills
WEEK 2	PS.6 - PS.8 Digital Culture and Artifact Creation			PS.9 - PS.12 Emerging Technologies, Accessibility, Curating Digital Info	
WEEK 3	PS.9 - PS.12 Emerging Technologies, Accessibility, Curating Digital Info		PS.13 Intro to Problem Solving	PS.14 The Problem Solving Process	PS.15 - PS.16 Exploring Problem Solving
WEEK 4	PS.15 - PS.16 Exploring Problem Solving	PS.17 What is a Computer?	PS.18 Input and Output	PS.19 Processing	PS.20 Apps and Storage
WEEK 5	PS.21 -PS.23 Propose an App			PS.24 What is an algorithm?	PS.25-PS.27 Sequence, Selection, and Iteration
WEEK 6	PS.25-PS.27 Sequence, Selection, and Iteration		PS.28 - PS.30 Flowcharting and Pseudocode		
WEEK 7	IAG.1 Hello World	IAG.2 Introduce Yourself	IAG.3 Drawing Practice	IAG.4 Create a Drawing	IAG.5 What is a Variable?

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
WEEK 8	IAG.6 Random Numbers	IAG.7 Sprites	IAG.8 Sprite Properties	IAG.9 - Text	IAG.10- IAG.11 Draw Loop
WEEK 9	IAG.10- IAG.11 Draw Loop	IAG.12 - IAG.13 Sprite Movement		IAG.14 - IAG.15 Project Caption Scene & Sprite Movement	
WEEK 10	IAG.16 Conditionals	IAG.17 Keyboard Input	IAG.18 Mouse Input	IAG.19-IAG.20 Interactive Card	
WEEK 11	IAG.21 Velocity	IAG.22 Collision Detection	IAG.23 Mini Project Side Scroller	IAG.24 Complex Sprite Movement	IAG.25 Collisions
WEEK 12	IAG.26 Functions	IAG.27 The Game Design Process	IAG.28 Using the Game Design Process	IAG.29 - IAG.31 - Design a Game	
WEEK 13	IAG.29 - IAG.31 - Design a Game	INT.1 Intro to the World Wide Web and Internet	INT.2 The Internet	INT.3 Networks	INT.4 Internet Censoring and Digital Globalization
WEEK 14	INT.5 Internet Fraud and Secure Websites	INT.6 Cybersecurity - Simple Encryption	INT.7 Artificial Intelligence and Machine Learning	INT.8 Exploring Web Pages	INT.9 Intro to HTML
WEEK 15	INT.10 - INT.11 Headings		INT.12 - INT.16 Mini Project		
WEEK 16	INT.12 - INT.16 Mini Project		INT.17 Digital Footprint	INT.18-INT.21 Basic Styling with CSS	
WEEK 17	INT.18-INT.21 Basic Styling with CSS		INT.22 Intellectual Property	INT.23 Using Images	INT.24 - INT.30 Project - Assistive Technology

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
					and App Proposal
WEEK 18	INT.24 - INT.30 Project - Assistive Technology and App Proposal		INT.24 - INT.30 Project - Assistive Technology and App Proposal		
WEEK 19	INT.24 - INT.30 Project - Assistive Technology and App Proposal	DAT.1 Representation Matters	DAT.2 Patterns and Representation	DAT.3 ASCII and Binary	DAT.4 Representing Images
WEEK 20	DAT.5 Representing Numbers	DAT.6 Keeping Data Secret	DAT.7 Combining Representations	DAT.8 Project - Create a Representation	DAT.9 - DAT.10 Data Storage
WEEK 21	DAT.9 - DAT.10 Data Storage	DAT.11 More Cybersecurity	DAT.12 - DAT.13 Data Security		DAT.14 - DAT.15 Problem Solving and Data
WEEK 22	DAT.14 - DAT.15 Problem Solving and Data	DAT.16 Problem Solving with Big Data	DAT.17-DAT.18 Structuring Data		DAT.19 Making Decisions with Data
WEEK 23	DAT.20-DAT.21 Interpreting Data		DAT.22-DAT.23 Automating Data Decisions		DAT.24-25 Managing Time Efficiently with Spreadsheets
WEEK 24	DAT.24-25 Managing Time Efficiently with Spreadsheets	DAT.26-DAT.30 Project - Make a Recommendation			
WEEK 25	DAT.26-DAT.30 Project - Make a Recommendation	BIT.1 - BIT.2 Introduction to Physical Computing		BIT.3 - BIT.4 Introduction to Micro:bits and MakeCode	
WEEK 26	BIT.5 A Micro:bit is a computer	BIT.6 - BIT.7 Events and Event Handlers		BIT.8- BIT.9 - Variables	

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
WEEK 27	BIT.10 - BIT.12 Project: Using Inputs			BIT.13- BIT.14 - Conditionals : Rock, Paper, Scissors	
WEEK 28	BIT.15 - BIT.17 Project: Create a game			BIT.18 - BIT.20 Iteration and Loops	
WEEK 29	BIT.18 - BIT.20 Iteration and Loops	BIT.21-BIT.22 Coordinates: Animations and Patterns		BIT.23 - BIT.24 Booleans and a Coin Flipper	
WEEK 30	BIT.25 - BIT.27 - Arrays			BIT.28-BIT.30 Project	
WEEK 31	BIT.28-BIT.30 Project	AI.1: Intro to App Lab	AI.2: Introduction to Machine Learning	AI.3: Types of Machine Learning	AI.4: Innovations in AI
WEEK 32	AI.5: Patterns in Data	AI.6: Classification Models	AI.7: Introduction to AI Lab	AI.8: Importing Models in App Lab	AI.9: Model Cards
WEEK 33	AI.10: Saving Models in AI Lab	AI.11: Model Cards in App Lab	AI.12: Numerical Models	AI.13: Numerical Data in AI Lab	AI.14: Customizing Apps
WEEK 34	AI.15: AI Code of Ethics	AI.16: Project: Make a Machine Learning App	AI.17: Issue Statements	AI.18: Survey Planning	AI.19: Survey Data in AI Lab
WEEK 35	AI.20: Troubleshooting Models	AI.21: Creating an App	AI.22-AI.25: Project - Design an AI App		

	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5
WEEK 36	AI.22-AI.25: Project - Design an AI App				