



# Dubai International Private School - Br

*DIPS, in partnership with parents and community, strives to ensure all students are digitally literate, lifelong learners, productive citizens and nurture their well-being in an inclusive learning environment.*



## Computer Department

Semester: 1

2024 – 2025

<b>Grade Level</b>	4	<b>Subject: Computer</b>		
<b>Teacher(s) Name</b>	Duaa Abu Khalaf			
<b>Textbook</b>	Digi Champs -DigiPro			
Week #	Dates		Lesson Title / Pages	CCSS / NGSS Code
1	26 Aug	30 Aug	<b>Unit : Digital World</b> Control System and Data  learn: 1.About the range of data recorded by input devices. 2. About the range of information communicated by output devices. 3. How the control systems function in everyday devices.	<b>1B-DA-06:</b> Organize and present collected data visually to highlight relationships and support a claim.
			<b>Unit :Getting Started</b>  Scratch and its Interface	
2	2 Sept	6 Sept	<b>Unit : Digital World</b> Control System and Data learn: 1.About the range of data recorded by input devices. 2. About the range of information communicated by output devices. 3. How the control systems function in everyday devices.	<b>1B-DA-06:</b> Organize and present collected data visually to highlight relationships and support a claim.
			<b>Unit :Getting Started</b>  Scratch and its Interface	
3	9 Sept	13 Sept	<b>Unit : Computing Devices</b> Troubleshooting	1B-CS-03-Determine potential solutions to solve simple hardware and

			<p>1. Not to panic when ever you have a problem.</p> <p>2. Fix issues using some basic troubleshooting techniques</p> <p>3. Follow the process of trial and error.</p>	<p>software problems using common troubleshooting strategies.</p> <p>Practice: Testing and Refining Computational Artifacts</p>
			<p><b>Unit :Getting Started</b></p> <p>Save and Share</p>	
4	16 Sept	20 Sept	<p><b>Unit : Computing Devices</b> Troubleshooting</p> <p>1. Not to panic when ever you have a problem.</p> <p>2. Fix issues using some basic troubleshooting techniques</p> <p>3. Follow the process of trial and error.</p>	<p>1B-CS-03-Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.</p> <p>Practice: Testing and Refining Computational Artifacts</p>
			<p><b>Unit :Getting Started</b></p> <p>Save and Share</p>	
5	23 Sept	27 Sept	<p><b>Unit : Computing Devices</b> Next Generation Technology</p> <p>1. Understand newer age technologies.</p> <p>2. Explore how these developments are shaping the world.</p>	<p>1B-CS-03-Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.</p> <p>Practice: Testing and Refining Computational Artifacts</p>
			<p><b>Unit :Getting Started</b></p> <p>The Stage</p>	
6	30 Sept	4 Oct	<p><b>Unit : Computing Devices</b> Next Generation Technology</p> <p>1. Understand newer age technologies.</p> <p>2. Explore how these developments are shaping the world.</p>	<p>1B-CS-03-Determine potential solutions to solve simple hardware and software problems using common troubleshooting strategies.</p> <p>Practice: Testing and Refining Computational Artifacts</p>
			<p><b>Unit :Getting Started</b></p> <p>The Stage</p>	
7	7 Oct	11 Oct	<p><b>Unit : Computer Networks</b> Sending Data Using Internet</p> <p>1. Describe how data is transferred.</p> <p>2. Explain several key terms and concepts on networking.</p>	<p>1B-IC-18-Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.</p> <p>Practice: Recognizing and Defining Computational ProblemsChar(10)1B-NI-04-Model how information is broken down into smaller pieces, trans-</p>
			<p><b>Unit :Animate the sprite</b> Moving the Sprite</p>	

				mitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.  Practice: Developing and Using Abstractions
8	14 Oct	18 Oct	<b>Unit : Computer Networks</b> Cloud Service  1. Explain the advantages of cloud services. 2. Use Google Drive. 3. Understand the types of online files.	1B-IC-18-Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.  Practice: Recognizing and Defining Computational ProblemsChar(10)1B-NI-04-Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.
			<b>Unit :Animate the sprite</b>  Moving the Sprite	Practice: Developing and Using Abstractions
9	21 Oct	25 Oct	<b>Unit : Computer Networks</b> Responding to an Email 1. Reply to emails. 2. Reply to the sender and all the recipient(s) at the same time. 3. Forward emails to others.	1B-IC-18-Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.  Practice: Recognizing and Defining Computational ProblemsChar(10)1B-NI-04-Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.
			<b>Unit :Animate the sprite</b>  Loop the Actions	Practice: Developing and Using Abstractions
10	28 Oct	1 Nov	<b>Unit : Computer Networks</b> Sending Attachments with an Email 1. How to add attachments.	1B-IC-18-Discuss computing technologies that have changed the world, and express how those technologies influence, and are influenced by, cultural practices.
			<b>Unit :Animate the sprite</b>  Loop the Actions	Practice: Recognizing and Defining Computational ProblemsChar(10)1B-NI-04-Model how information is broken down into smaller pieces, transmitted as packets through multiple devices over networks and the Internet, and reassembled at the destination.  Practice: Developing and Using Abstractions
	4 Nov	8 Nov	<b>Unit : Digital World</b>	

11			<p>World of Computer Science And Robotics</p> <p>learn about:</p> <ol style="list-style-type: none"> <li>1.The roles of computer scientists in various industries.</li> <li>2.The uses of robots in service industries.</li> </ol> <p><b>Unit :Animate the sprite</b></p> <p>Bounce at the Edge</p>	<p><b>CCSS.ELA-LITERACY.RST.11-12.8:</b> Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text.</p>
12	11 Nov	15 Nov	<p><b>Unit : Digital World</b></p> <p>World of Computer Science And Robotics</p> <p>learn about:</p> <ol style="list-style-type: none"> <li>1.The roles of computer scientists in various industries.</li> <li>2.The uses of robots in service industries.</li> </ol> <p><b>Unit :Animate the sprite</b></p> <p>Bounce at the Edge</p>	<p><b>CCSS.ELA-LITERACY.RST.11-12.8:</b> Evaluate the hypotheses, data, analysis, and conclusions in a science or technical text.</p>
13	18 Nov	22 Nov	<p><b>Unit : Exploring Algorithms</b></p> <p>Repetition In Algorithms</p> <p>learn:</p> <ol style="list-style-type: none"> <li>1.To develop, edit, and correct algorithms that use repetition.</li> <li>2.About the types of loops.</li> </ol> <p>To predict the outcome of algorithms that use repetition.</p> <p><b>Unit :Animate the sprite</b></p> <p>Random Movement</p>	<p><b>2-AP-13:</b> Decompose problems and subproblems into parts to facilitate the design, implementation, and review of programs.</p> <ul style="list-style-type: none"> <li>•</li> </ul>
14	25 Nov	29 Nov	<p><b>Unit : Exploring Algorithms</b></p> <p>Comparing and Contrasting Algorithms</p> <ol style="list-style-type: none"> <li>1.understand and use selection statements in algorithms.</li> <li>2.Edit, correct, and predict the outcome of algorithms that contain a selection statement.</li> </ol> <p><b>Unit :Animate the sprite</b></p> <p>Random Movement</p>	<p><b>2-AP-12:</b> Design and iteratively develop programs that combine control structures, including nested loops and compound conditionals.</p>
15	2 Dec	6 Dec	<p><b>Unit : Exploring Algorithms</b></p> <p>Comparing and Contrasting Algorithms</p>	<p><b>2-AP-10:</b> Use flowcharts and/or pseudocode to address complex problems as algorithms.</p>

			<p>1.To develop algorithms where two objects interrelate. 2.To identify efficient algorithms.</p> <p><b>Unit :The Game</b></p> <p>The Game Plan</p>	
16	9 Dec	13 Dec	<p><b>Unit : Exploring Algorithms</b> Comparing and Contrasting Algorithms</p> <p>1.To use variables in algorithms and assign values to them. 2.About the arithmetic (+, -) and comparison (=) operators.</p> <p><b>Unit :The Game</b></p> <p>The Game Plan</p>	
17	6 Jan	10 Jan	<p><b>Unit : Exploring Algorithms</b> Decomposition and Sub-routines</p> <p>1.To understand and use selection statements in algorithms. 2.To edit, correct, and predict the outcome of algorithms that contain a selection statement.</p> <p><b>Unit :The Game</b></p> <p>If-Else Conditions</p>	
18	13 Jan	17 Jan	<p><b>Unit :The Game</b></p> <p>If-Else Conditions</p> <p><b>Final Exams</b></p>	
19	20 Jan	24 Jan	<p><b>Final Exams</b></p>	