

**SUPPLEMENTAL SUPPORT PLANS**

**Subject: Technology and Computer Science Grade: 6 Period: 4 Year: 2024**

**RECOMMENDATIONS**

*Each period the teacher formulates a problematic question or problem situation related to the learning goals that help the student prepare to support their knowledge and competency levels from each area. This process is scheduled from Tuesday, october 15th through Thursday, October 24, 2024.. The student must review the concepts listed below with the help of the class notes, notebook and work guides, in order to present a presentation that shows the acquired competencies.*

**1. Problematizing Question**

How can spreadsheets and programming help to enhance my logical thinking?

**2. Learning Goals**

1. Recognize elements of the Microsoft Excel spreadsheet window and use its tools to solve numerical problems posed by the recognize elements of the Microsoft Excel spreadsheet window and use its tools to solve numerical problems posed
2. Understand introductory programming concepts to create simple algorithms and program them on the computer and program them on the computer.
3. Develop simple algorithms, both qualitative and quantitative, and program them using Scratch Using Scratch.
4. Identify the fundamental concepts and generalities of software, its importance and how the future is shaping up with the use of Scratch and how the future is shaping up thanks to the evolution of software.
5. Apply concepts of variables, conditionals, (yes, yes-no), sensors and movements in the elaboration of projects.
6. Proposes, creates and socializes a technological project using their knowledge in

programming in Scratch

**Academic concepts developed during the period:**

-Introduction to programming. Types of programs and their characteristics.

-Emergence of programs, programming languages.

Scratch: Visual object-oriented programming language.

-Algorithms, instructions, sequences and variables.

-Conditionals using Scratch (Yes, Yes - no).

Loops using Scratch.

-Event oriented programming, sensor handling in Scratch.

- Design and programming of a video game in Scratch.

(Technological Project).

**4. Guiding questions**

1. What is software?
2. How is software classified?
3. What is programming?
4. What is an algorithm?
5. What are the types of algorithms?
6. How can algorithms be written?
7. What is Scratch?
8. What is a programming language?
9. What are loops in programming?
10. What are conditionals in programming?

**5. Bibliographic references**

- Programming: 134 and 135 pages of the computer science guide, definition of operating system, software and programming, page 136 (types of software).

- Scratch: Reading of pages 134 of the computer science guide.

- Algorithms: pages 140, 141 and 142 of the guide

- Conditional: pages 147 and 148 of the guide

- Loop: pages 162-163

- Technology project: page 164

-Apa rules 89-94

-Digital presentations 115-118