Topic 1: Computer – An Electronic Device

A computer is an electronic device that works on IPO cycle (Input-Process-Output). It is primarily used to input data, process it to produce the required final output.

Learning Outcomes:

Children will be able to:

- ☑ List out how computers are an electronic device;
- ☑ compare a human and a computer in their ways of working;
- ☑ list the advantages and disadvantages of using computer.

Computer – An Electronic Device		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▸ Computer, an electronic device ▸ Functions / working of a computer ▸ Advantages (Speed, storage capacity, electronic presentation, automation, calculation, teaching, learning etc.) and disadvantages (impact on environment, health, virus attacks, computer /cybercrimes) of a computer	▸ Discussing how a computer is an electronic device which processes information based on given instructions. ▸ Explaining the working of computer and comparing it with the way humans work. ▸ Discussing the advantages and disadvantages of a computer.	▸ Computers/ IWB with presentation software and internet facility ▸ Videos/pictures to explain input, process and output. ▸ Posters/charts on healthy practices while working on the computer.

Integration: Languages, EVS
Life Skills: General awareness

Topic 2: Role of Computers

A computer is a multitasking device that performs various tasks. It plays a vital role in the learning and teaching process.

Learning Outcomes:

Children will be able to:

- ☑ recall the uses of computer;
- ☑ specify computer's integration in classroom activities;
- ☑ correlate computer use with topics they study in other subjects.

Role of Computers		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
❯ Role of computers in enhancing the learning and teaching process. ❯ Impact of computers	❯ Discussing and identifying uses of computers at various places i.e. classroom, office, home etc. ❯ Interacting with and explaining to the children about the effectiveness of using computers in the classroom, office, home etc.	❯ Computers/ IWB with internet facility ❯ Animated stories, videos, etc.

Integration: EVS
Life Skills: General Awareness

Topic 3: Input and Output Devices

Input devices are used to enter text/data whereas output devices are used to display desired result. In some cases, output devices may function as storage devices. For example – CD, pen drive.

Learning Outcomes:

Children will be able to:

☑ identify the input and output devices;
☑ state the functions of each device.

Input and Output Devices		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▶ Input and output devices and their functions ▶ Output devices as storage devices	▶ Identifying that keyboard and mouse are input devices whereas printer, monitor are output devices. ▶ Showing physically the input/output devices and explaining their functions. ▶ Explaining how certain output devices function as storage devices. Ex – CD, pen drives etc. ▶ Hands-on activity through worksheets, quiz etc., to identify input/output devices and their functions. ▶ Helping children in drawing of devices and naming them. ▶ Providing hands-on experience through group work (4/6 children in each group) working with one computer. Each child will explain the different devices and the functions to others in the team.	▶ Computer system along with other peripheral devices. ▶ Visuals/videos on Input and Output devices. ▶ Classroom discussions. ▶ Children's drawings on devices.

Life Skills: Technical awareness, handling/sharing resources

Topic 4: Keyboard – Special Keys

The keyboard has special keys to perform specific tasks, along with alphanumeric keys. Children will identify the uses of key combinations when using the keyboard.

Learning Outcomes:

Children will be able to:

- ☑ identify and use the special and punctuation keys;
- ☑ recall that certain keys are used in combinations;
- ☑ describe the functions of the different types of keys.

Keyboard – Special Keys		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▶ Special keys and punctuation keys. ▶ Key combinations on a keyboard.	▶ Discussing uses of alphanumeric keys in performing task. ▶ Explaining the various types of special and punctuation keys on the keyboard and their functions. ▶ Hands-on experience through worksheets and quiz on the computer. ▶ Explaining and demonstrating and show that certain keys work in combinations. ▶ E.g. 1. shift + alphabets/symbols 2. Ctrl+alt+del	▶ Computer system/IWB with keyboard, software like Tux-type/ Typing Tutor ▶ Visual charts ▶ Group discussions ▶ Worksheets

Topic 5: Mouse – an Input Device

A Mouse serves as an input device to type text, play games, draw pictures, watch videos etc.

Learning Outcomes:

Children will be able to:

- identify different activities performed on a mouse;
- use the mouse to perform drag and drop activities.

Mouse – an Input Device		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
▶ Application of a mouse for dragging and dropping objects.	▶ Identifying and listing out activities done through the use of mouse buttons. ▶ Demonstrating the use of a mouse for dragging and dropping objects. ▶ Flipping the right and left button of the mouse as per requirement. ▶ Conducting hands on activity through individual usage of the mouse.	▶ Computer system, ▶ Educational games integrated with the curriculum of Computer studies.

Skills: fine motor skills

Topic 6: Introduction to Paint

Paint software is a utility software used to transform ideas into picture using various tools.
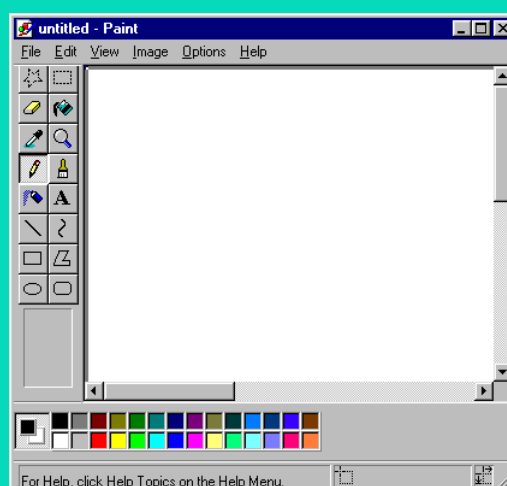
Learning Outcomes:

Children will be able to:

- use shape tools to draw pictures;
- open, minimize, maximize and close the paint window;
- open and save a file.

Introduction to Paint

Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
- Introduction to Paint software - Opening, minimising, maximising and closing Paint window - Saving the file at the desired location - Opening/editing the existing file - Paint window - Open and save a file - Shape tools	- Explaining the purpose and usage of a paint software. - Demonstrating the activities related to - Opening, minimising, maximising and closing Paint window - Saving the file at the desired location - Opening/editing the existing file - Showing of shape tools to draw pictures - Demonstrating some examples of paint activities on the computer such as: ☛ Birthday cards ☛ Pictures to illustrate Children's Day, Environment Day, Sports Day, Fancy dress etc. ☛ Topic based posters etc. - Providing Hands-on experience in groups to children on the computer.	- Computer / IWB with any Paint software. - show demo / pictures on the Internet.

Life Skills: Creative Thinking
Integration: Arts Education

Topic 7: File Management – An Introduction

Files are pictures, documents, presentations etc. created using a software. File management helps us to organise files in the computer.

Learning Outcomes:

Children will be able to:

- ☑ Develop an awareness on the importance of file management;
- ☑ save a file in the specified path.

File Management – An Introduction		
Key Concepts	**Suggested Transactional Processes**	**Suggested Learning Resources**
❯ Introduction to the concept of saving a file and its purpose ❯ Saving a file in the specified path.	❯ Explaining the concept of a file and the need for saving it. ❯ Hands-on activities (individual or group) on the Computer.	❯ Computers/ IWB ❯ File making activities. ❯ Worksheet activities

Life Skills: Organisational skills, Working together