## **Topic 1: Computer - A Machine**

A Computer is a machine made by humans that carries out computations and functions according to inputs/instructions given. Computers provide the opportunity to perform different functions like playing games/music, ticket reservation etc. Children develop an awareness on the art of computing as they learn about the different types of computers like desktop, laptop, etc. and their functions

### **Learning Outcomes:**

#### Children will be able to:

relate that a machine made by humans;

infer that a computer is a machine;

differentiate between a desktop and a laptop;

list objects in their surroundings;

classify objects into natural things and man-made things.

Computer - A Machine		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul> <li>Human made and natural objects.</li> <li>Computer - a machine and its characteristics</li> <li>Types of computers</li> </ul>	<ul> <li>Discussing the concept of machine and its characteristics.</li> <li>Demonstrating how a computer can perform different tasks.</li> <li>Demonstrating how a machine having many parts work together to perform tasks.</li> <li>Classifying objects into natural things and objects and those made by humans.</li> <li>Involving children in group discussions based on the places they have observed computers being operated.</li> </ul>	<ul> <li>Natural and human made objects</li> <li>Flash cards depicting objects (man-made &amp; natural)</li> <li>Animated programs and videos</li> <li>Videos/pictures of human made machines i.e. Juicer, mixer,</li> <li>Projector etc.</li> <li>Visit to the Computer laboratory to identify and observe laptops/Desktops</li> </ul>

**Integration:** EVS, Languages



# **Topic 2: Uses of a Computer**

Computers have multiple uses and have become an integral part of our daily lives. Computers can be used for various purposes such as-source of information, playing games, listening to music, preparing presentations and documents, storing data etc.

### **Learning Outcomes:**

#### Children will be able to:

identify places where computers are used;

list the various uses of computers in daily life.

Uses of a Computer		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
Uses of computers in daily	Sharing children's experiences	Computer/ IWB with
lives:	related to computers.	presentation software and
typing a document.	Encouraging children to	internet facility
listening to music and playing	identify / suggest places to visit	Interactive White Board
games.	where computers are used.	Classroom discussion on how
using the Internet.	Discussing the use of	to identify the uses of
sending e-mails.	computers in their daily lives:	computers.
chatting with friends	•	Audio and video programmes.
Ŭ		Trips to various places from
		school/home.

**Integration:** EVS, Languages

**Life Skills**: Self-awareness



## **Topic 3: Parts of a Computer**

The main parts of a computer are the monitor, keyboard, mouse and central processing unit (CPU) that function together to perform a task. The keyboard/mouse is used for data input, CPU to process the data and monitor to display the output. Additional devices like printer, scanner, microphone, speaker etc. are used for specific purposes.

### **Learning Outcomes:**

#### Children will be able to:

recognise and identify the main parts of a computer;

describe the functions of the main parts of a computer;

list additional devices of the computer;

illustrate the inter-connectivity of different parts of a computer.

Parts of a Computer		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul> <li>Main parts of a computer-meaning and functions: (CPU keyboard, mouse, and monitor)</li> <li>Additional devices connected to a computer: (printer, scanner, speaker etc.).</li> </ul>	<ul> <li>Helping children to identify the main parts of a computer</li> <li>Demonstrating the functions of the main parts through active class participation.</li> <li>Explaining the need for additional devices like printer, scanner, speaker etc.</li> <li>Involving children in role play activities to identify and state the functions of the main parts of the computer.</li> </ul>	<ul> <li>Computer/ IWB with presentation software and internet facility</li> <li>Interactive class discussions.</li> <li>Animated programmes and videos.</li> <li>Projector.</li> <li>Flash card on parts of a computer</li> </ul>

Life Skills: Awareness



## **Topic 4: Using Computers - Do's and Don'ts**

A computer operates on electricity hence it entails certain safety precautions that must be undertaken to develop an awareness among children on the Do's and Don'ts while operating computers.

### **Learning Outcomes:**

#### Children will be able to:

maintain correct posture/ distance while using a computer;

show ways of taking care of computers;

practice safety rules while using a computer;

develop habits of sharing computer resources.

Using Computers - Do's and Don'ts		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul> <li>Guidelines while working on the computer:</li> <li>Do's</li> <li>Keeping it neat and clean</li> <li>Using it gently.</li> <li>Maintaining the correct posture</li> <li>Being sensitive towards others.</li> </ul>	<ul> <li>Emphasising the need of Do's and Don'ts while working on a computer</li> <li>Sensitising children towards good practices of taking care of the computer and strictly following the Do's and Don'ts.</li> <li>Providing Hands-on experience by assigning the responsibility</li> </ul>	<ul> <li>Computer/ IWB with presentation software and internet facility</li> <li>Flash cards on Do's and Don'ts.</li> <li>Interactive class resources</li> <li>Animated programs and videos</li> <li>Projector etc.</li> </ul>
<ul> <li>Taking turns while sharing the computer</li> <li>Don'ts</li> <li>Touch connecting cords/wires.</li> <li>bang the computer or its parts.</li> <li>Keep the volume high snatch the mouse/keyboard from classmates.</li> </ul>	<ul> <li>of ensuring proper closure of computers to children (turn by turn).</li> <li>Active discussion on the Do's and Don'ts.</li> </ul>	

Life Skills: General Awareness, Collaborative learning



# **Topic 5: Computer Mouse**

A computer mouse is a pointing device used to input data. There are two buttons namely the left and right buttons and a scroll wheel. A mouse pad must be used for a smooth functioning of a mouse.

### **Learning Outcomes:**

#### Children will be able to:

identify the buttons and the scroll wheel on a mouse;

perform appropriate actions using the left/right buttons and scroll wheel; recognise the need for a mouse pad while using a mouse.

Computer Mouse		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul> <li>Mouse buttons</li> <li>Scroll wheel</li> <li>Skills to be practiced while using a mouse</li> </ul>	<ul> <li>Showing children how to identify the left and right buttons along with the scroll wheel on the mouse.</li> <li>Demonstrating the use of the scroll wheel, left and right click actions on a mouse.</li> <li>Inculcating the habit to use the mouse pad while using a mouse.</li> <li>Providing Hands- on experience through group activity of children using the different parts of the computer— mouse buttons, scroll wheel.</li> </ul>	<ul> <li>Computers/ IWB with presentation software and internet facility</li> <li>Animated programs and videos, projector etc.</li> <li>Flash cards</li> </ul>

**Skills:** Fine motor skills



# Topic 6: Computer Keyboard

A computer keyboard is an input device that consists of alphanumeric, numbers and special keys. It is primarily used to enter text.

## **Learning Outcomes:**

#### Children will be able to:

identify and locate alphanumeric and arrow keys on a keyboard;

demonstrate the uses of different keys.

Computer Keyboard		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
<ul> <li>Alphanumeric keys: alphabet (a-z), number (0-9)</li> <li>Arrow keys</li> </ul>	<ul> <li>Helping children to identify and locate keys i.e. alphabet (a-z), number (0-9) and arrow keys.</li> <li>Providing hands on experience (individual/in groups of 4/6) through computer games to use keys on a keyboard</li> </ul>	<ul> <li>Computer/ IWB with presentation software and internet facility</li> <li>Animated programmes and videos, projector etc.</li> <li>Keyboard</li> </ul>



# **Topic 7: Storage Devices**

A storage device is a hardware that is used to store data and other information either temporarily or permanently.

## **Learning Outcomes:**

#### Children will be able to:

describe data in simple terms;

identify storage devices and their usage.

Storage Devices		
Key Concepts	Suggested Transactional Processes	Suggested Learning Resources
Storage devices	<ul> <li>Showing devices for storing data - pen drive, data card etc.</li> <li>Organising activities to identify storage devices through visuals</li> </ul>	<ul> <li>Computer/ IWB with presentation software and internet facility.</li> <li>Observation of various storage devices, such as CD, DVD, Pen drive, data card etc.</li> </ul>

